RESEARCH ARTICLE

DOCUMENTATION OF THE INTERNATIONAL INCENSE ROUTE THROUGH JORDAN, SOUTHERN LEVANT

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ABSTRACT. The international incense route, or the caravan trade road in the past, crossed the east and west regions, starting from the coast of Yemen on the Arabian Sea to the north of the Mediterranean. Passing through Yemen and the Arabian Peninsula, it is divided into two routes. One of which leads to Najd, then Iraq and Persia. The other goes to the north of the Arabian Peninsula reaching Jordan, where it is considered one of the main major stations on the route. The caravan continues to Petra through several stations, and sites among them, water installations, trade markets (Suq) and caravan stations. The caravans passed through Jordan carrying incense, spices, cosmetics, precious stones, and many other products from its eastern sources to the countries of Europe. This research will focus on previous studies of incense routes and documenting the existing remains, as well as analyze their importance. Tourism is expected to have economic and social impacts on the areas through which the routes cross. It should be mentioned that the stations of this route, which were established in Palestine, were included on the World Heritage List/ UNESCO in 2000. Accordingly, the current fieldwork and investigations in Jordan will push the file to be listed or nominated on the national list in Jordan for one year. It will be inscribed on the World Heritage List.

KEYWORDS. Incense route, archaeology, documentation, architecture, tourism, Jordan, southern Levant.

INTRODUCTION1

Many researchers and scientists have argued that the reason for naming this trail or route (the Incense Trail) is because the goods that were transported along this route from southern Arabia to Mecca, Bilad al-Sham,



Figure 1. A map showing the ancient incense route from Yemen to Jordan through the Arabian Peninsula (www.marefa.org).

or Najd, Al-Ahsa, and Bahrain were characterized by abundant and luxurious incense of renowned quality during the Nabataean Period (Figure 1).

STUDY OBJECTIVES

This study aims to document the international Incense Route or Trail from its main entry station in Jordan to all the stations and countries reached by the caravans

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that used this route, including the specific areas indicated on the approved maps from north to south and from east to west. It also aims to identify and establish the historical routes and stations documented throughout time by various successive civilizations along the routes and adjacent areas.

The study seeks to document all the discovered and previously known heritage and archaeological sites, as they are not well documented and some remain unregistered. These Incense Route stations contain materials of tangible and intangible heritage. It is also important to focus on both the natural and cultural aspects that served as the nurturing environment for the route. They must be documented to serve as a cultural source for researchers and historians. Additionally, this study enables the identification of strengths and weaknesses, working to enhance the strengths and transform weaknesses into strengths.

This study will serve as a reference for local communities, allowing them to follow a steady path for the development and preservation of the region's resources, supporting their continuity for future generations. Moreover, this study can be a focal point for investors interested in developing the Incense Route stations, as it will highlight the significance of various natural resources found along the route, detailing their economic value and how to preserve and develop them. Thus, it is not surprising that these stations nurture natural resources alongside their cultural distinctiveness, including fertile lands, rivers, springs, rocky areas, mosques, monasteries, and caves. The study also helps diagnose the natural problems that have affected the stations, take preventive measures, and protect them from various challenges through accurate and documented information provided by the research. In addition to the strategic location of the stations, which are far from imminent risks, they become safe havens for peace and security.

The direct objectives can be summarized as follows:
1) documenting the international Incense Route and its subsidiary routes in Jordan; 2) protecting the remaining roads and buildings associated with the main international route; 3) publishing the research findings; 4) encouraging and promoting tourism investment in related routes and roads.

LITERATURE REVIEW

Greek travelers wrote about the source of incense, myrrh, and frankincense, stating that they come from

the "Blessed Arabian Lands" (Arabia Eudemon). Herodotus, who lived in the 5th century BCE, mentioned, "The bushes that produce incense are guarded by flying poisonous snakes, and there are a large number of them around each bush." On the other hand, the Romans referred to the Arabian lands as "Arabia Felix" (Happy Arabia). When their campaign failed to seize it, they established trade routes across the Red Sea since the 1st century CE, depriving the Arabian kingdoms of revenue from transporting goods through their caravans.

Diodorus Siculus (the Greek historian) mentions that the Nabataeans lived in the desert in the 4th century BC and were a group of 10,000 Bedouins. They did not build houses, cultivate land, or drink wine (and this contradicts the condition of the Nabataeans throughout history), and they graze sheep and engage in trade. They are not ruled by a king, but rather by a ruler. Clan sheiks excelled in protecting themselves and their regions from foreign military campaigns (Diodorus Siculus 1933).

Hieronymus, a Greek traveler, also mentioned in his writings the first Greek military campaign to subdue the Nabataeans in 312 BC, at the time of the Greek commander Antikonus, who furnished the campaign and sent it equipped with about six thousand cavalry and about four thousand infantries. The campaign attacked the city of Petra at night, taking advantage of the darkness and the absence of men in Petra; they looted silver, money, myrrh, and incense. The Nabataeans were able to catch up with the Greek military campaign and defeat it, so thus the Greek campaign failed (Muhesein 2019).

The Greek geographer Strabo, when transmitting his information about a blind Greek named Athenador of Tarsus, said that the Nabataeans built their homes of stones and love peace; their capital was Petra, and they worked in trade and agriculture and do not care about their dead and put them in garbage heaps (and it is beyond doubt that this is contradictory indeed, where we can see the grandeur of the Nabataean tombs in the city of Petra, Madain Saleh, or Khirbet al-Dhurih near Wadi al-Laban) (Strabo 1930).

Josephus, in his book *Jewish Wars*, refers to the Nabataeans and their political history with other civilizations in the surrounding areas (Muhesein 2019). On the other hand, the Yemeni researcher Bafaqih pointed out the importance of studying the incense road that starts from Najran towards Mecca and Medina, highlighting that there is only one road used by caravans,

and it is of paramount importance in understanding the ancient history of the Arabs in terms of Yemen's connection with the Arabian Peninsula and the Levant (Bafqieh 1985). The German expert Muller goes to the difficulties that Darcy will face through the way of incense because of the obstacles of the routes (Muller 1990). Shihab went from Yemen to assess the importance of the incense route, especially in Yemen, and the inability to properly trace the ancient caravan routes, as these routes played an important role in the prosperity of the Yemeni civilization and the neighboring regions (Shihab 1977).

Incense, as an important commercial commodity throughout the ages, made the stations through which it crossed of great importance. Who were the authorities that managed this route and the method that established all these facilities for the crossing of convoys, and what are the factors, whether natural or cultural evidence, that controlled its route and direction? Caravans of incense move from its source to its end, as it is like a bridge of civilizations extending between east and west, north and south. Among the significant geographical sources that referred to the route of incense, especially those houses with stations and places that the caravan used during the course, was the book al-Haj Wa Malem al Jazeera, authored by Ishaq Al-Harbi (Al-Harbi 1969), in which he referred to the stations and houses of the way of incense between Mecca and Medina, and he also mentioned some stations in the south Levant.

In the book *Kitab al-Masalik wa'l-Mamalik*, dated 912 CE, Ibn Khordadbeh referred to a number of stations and caravans located in the south Levant (Ibn Khordadbeh 1889); as for Ibn Rustah's (1891), in his book *Kitab al-Alaq al-Nafisa*, referred to several stations located between Medina and the Nabataean capital, Petra. Ibn Jaafar, in his book *Kharaj wa Sina'at al-Kitabah*, referred to the caravan stations (Yamani-Makkah) (Ibn Jaafar 1981). Al-Tabari had a role in referring to the villages and places where the caravan of incense used to descend in his book *Tarikh al-Rusul wa al-Muluk* around the year 922 CE (Al-Tabari 1979).

In genealogical books and biographies, we find some information, such as the book *Jamharat nasab Quraysh wa'akhbariha*, *dar alkutub aleilmia* by Ibn Bakkar, in which she referred to the incense route and its economic impacts on the Arab tribe (Ibn Bakkar 2010). Likewise, the book *Al-Isabah fi Tamyiz al-Sahabah* by Ibn Hajar al-Asqalani (Al-Asqalani 1994). In other books of contemporary studies, we find *Al-Mufassal* by Jawad Ali, a

topical writer in which he referred to ancient Arab trade incense (Ali 2001).

Humans have been engaged in trade since ancient times, as it is considered one of the professions that the Arabs practiced, and they established several cities and villages on both sides of its routes, which formed an essential pillar in their lives.

Strabo referred to the Arabs' degradation of this work when he said, "The Arabs are merchants and brokers." The Arabs benefited from the ancient trade routes passing through their lands, such as the Silk Road, which connects India and China to the coasts of the Mediterranean Sea and the south of the Arabian Peninsula. To develop their ability to trade and raise their standard of living (Strabo 1930).

The Arab tribes also benefited from the route to protect the caravans passing through their lands, in addition to their work in trade. They also set up private markets in several of their cities to exchange goods from the international trade caravans passing through their lands. We find in the rich evidence at the stations of the ancient caravan routes many indications of the presence of goods imported from abroad. For example, you can find ornaments studded with pearls coming from Egypt and the Arabian Gulf in the regions of the Levant, and silk pieces and spices coming from India and the south of the Arabian Peninsula in Egypt, the Levant, and Iraq. While we find bitumen extracted from the Dead Sea used in Egyptian statues. In addition to their use of incense produced by the civilizations of southern Arabia in temples and funeral rites (Abbas 1987).

The trade convoys had an active role in establishing and constructing roads to facilitate the process of trade exchange. In addition to their contribution to identifying military roads, these roads were used for various purposes, such as the Roman Trajan Road (*Via Nova Trajana*) (Gilman 1908).

ANCIENT ROUTES AND INCENSE ROUTE

Before the emergence of the Incense Route, there were numerous ancient trade routes in the region in general and in Jordan in particular, both preceding and following the time of the Incense Route.

These routes were used for trade and the transportation of goods between countries. Along their paths, many rest stops, stations, and facilities were established to meet the needs of travelers, especially those journeying from Yemen to the Arabian Peninsula and onward

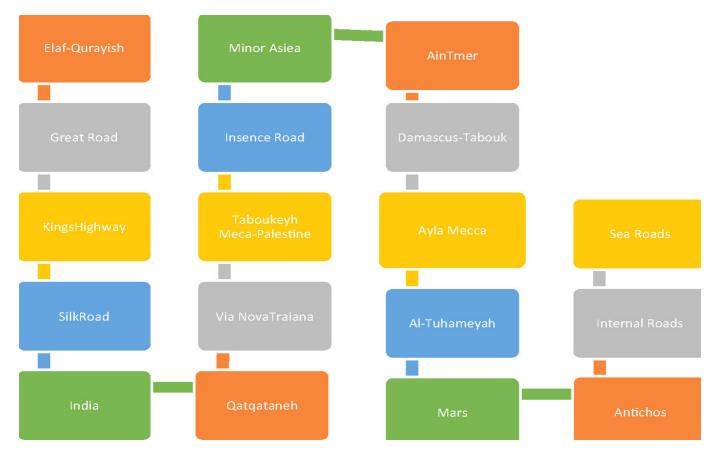


Figure 2. Ancient roads that existed in the southern Levant during the Nabataean Period (first century CE).

to the Levant, including Jordan. Above presents an overview of these routes.

First Incense Route: The Silk Road. It is a road that connects the ancient continents of Asia, Africa, and Europe. It is one of the most famous and important routes of all time, starting from the Chinese city of Luoyang to the ports of the Mediterranean Sea and the Black Sea, dating back to the 1st and 2nd centuries CE. The importance of this road lies in the cultural exchange that took place through the civilizations of India, China, Egypt, Persia, and Mesopotamia. The most significant commodity transported to Europe through this route was silk. The Silk Road began its journey from China, starting from the Huanggu Valley, branching out and intersecting through several countries, reaching Constantinople, then Manbij, Aleppo, and Antioch, which served as the final station on the Mediterranean coast (Al-Krabsheh & Alnemat 2011).

Second Incense Route. It extends from Yemen to the Levant and the eastern Mediterranean. Another route starts from Yanbu, passing through Mecca, Al-Ula, Madinah, Ayla, and Petra. From there, it branches out to Tadmur (Palmyra) and Palestine (Al-Krabsheh & Alnemat 2011).

Several routes were known as trade routes in the south Levant; among them are Tabokeyh Route, Trajan Route, Qatqatanah Route, connecting the Levant with Iraq, Al-Hirah, Azraq, then Damascus (Ali 2001); the Ayn Tamr Route, from southern Al-Hirah, Al-Anbar, Iraq, to Basra; the Damascus-Tayma Route to Mecca Route (Ali 2001); the Tihamiyyah Route and Mars Route (Al-Hamawi 1995; Al-Tabari 1979) (Figure 2).

TRANSPORTATION AND INCENSE ROUTE

The incense road is about 2,400 km long, and convoys pass through 56 main stations from Yemen to reach the Mediterranean Sea. It was built as a resting place for caravans that included thousands of people. The remains of these station buildings are still to be seen to this day.

Yemen Stations

The Yemeni civilization has produced a unique and diverse trade product, and the successive archaeological discoveries of historical sites affirm that this civilization left a pioneering imprint on the global economy.

It served as a link between ancient civilizations as an international trade route between the east and the west. The ancient Yemeni trade routes, such as the Incense Route and the Myrrh trade, still attract desert tourism, making exploring these routes an exciting and enjoyable adventure.

These routes extend from Marib, passing through the Sands of Seventy, ancient Shibam, and Say'un. The Incense Route, which extended to Najd, Hijaz, and the Levant, marked a prominent historical landmark in the development of trade between the east and the west through Yemen, highlighting the humanitarian role of Yemeni civilizations in this aspect.

Despite the fame of ancient Yemeni civilizations for their prosperity in sword and dagger manufacturing, gold and silver craftsmanship, and ironwork, as well as various handicrafts, textiles, and pottery industries, Yemen also became a major source of these goods. These are all northern ports.

On the African coast, there is the city of Adulis, where Abyssinian products, including ivory, leather, shells and slaves, were preserved. Here, these goods were exchanged with boats carrying Egyptian fabrics, Egyptian glass, oil, Syrian wine, swords, and various other tools from different directions. As for the Arabian coast, there is Al-Mukha, which is likely the most important port in the region. Outside the Red Sea, Aden was the largest known port before Hadramaut (Rostovtzeff 1927).

All the items traded on this route known as the Incense Route included oils, fabrics, pearls, jewelry, rice, spices, ivory, wine, perfumes, seashells, and elephants (Hammond 1959).

The route stations from Yemen could be summarized as follows: Dhu al-Maruwa, Al-Rahbiyah, Wadi Al-Qura (Dadan), Al-Hijr (Madain Salih), Jeneen, Al-Aqra', Al-Akhdar, Al-Muhaddithah, Tabuk, Sargh. When the caravans leave Tabuk to complete a stage on the Incense Road, they pass through a place called Dhillat Al-Hajj and then a place called Halat 'Ammar. After another stage of travel, they descend to Sargh, a village near Tabuk, which marks the end of the Hijaz region. The distance between Sargh and Al-Madinah is thirteen stages. Then the route crosses to Jordan through several stations and caravan resting places (Figure 3).

INCENSE ROUTE IN JORDAN

Archaeological discoveries and systematic field surveys revealed the presence of several stations in Jordan dur-

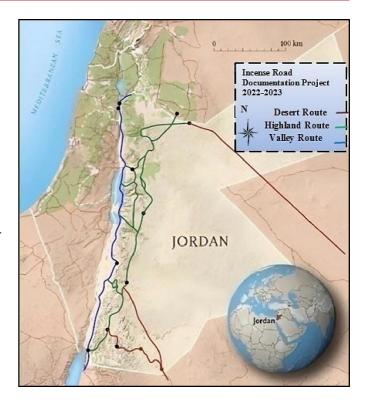


Figure 3. The Incense Route from North Hejaz to Jordan (drawn by Freihat 2023).

ing the past century; those are the Badeya Route, Jordan Valley Route, and the Highlands Route.

Badeya Route

The Badeya route begins within the Jordanian border from two places: the first for those coming from Dumat al-Jandal in North Hejaz through Wadi al-Sarhan to reach al-Safawi, then to Umm al-Qittayn, to Umm al-Jimal, where it meets and joins the route of the highlands towards Bosra al-Sham. The second route comes from the north of Hijaz, Kingdom of Saudi Arabia, towards Al-Mudawara. After leaving Al-Mudawara divided into two sub-routes: the first heads to Quweira via Quweirat Ghazi and Wadi Rum; the second goes from Al-Mudawara to Ma'an and then to Udrah (Figure 4).

Jordan Valley Route

The incense route of the Jordan Valley branch starts from the Ayla/Aqaba governorate, coming from the north of the Arabian Peninsula, ends in Ghor Irbid, and passes through all the (Ghor areas) kingdom's governorates except for Ma'an. After leaving the commercial convoys from the Aqaba station towards the northeast for approximately 58 km (passing through the site

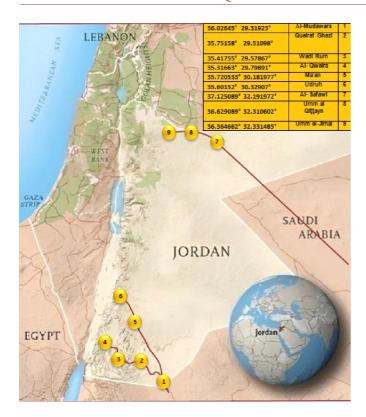


Figure 4. Badeya Incense Route and its major stations in Jordan (drawn by Freihat 2023).

of Rum Taba, which dates to the Nabataean era and includes buildings and fortifications that were reused in the Roman era and subsequent periods), the convoys continue their route to the Gharndel station, where Ain Gharndel and the abundant water resources are as well. It is strategically located not far away from the city of Petra.

Then the convoys continue their way to the Bir Madhkour station, passing through several significant sites, including Al-Thaghawi, Al-Kharj, then the Nabataean construction sites (which may have been a shelter for the merchant caravan during its transit), Wadi Hawar, Wadi Al-Taybeh, Khirbet Safsif, and Umm Qantara. From the Bir Madhkour station, the convoys head northeast for approximately 30 km to reach Feynan station, which is one of the historical stations famous for agriculture and the abundance of springs, and one of the most important sources of copper ores in the ancient world (Hauptmann & Weisgerber 1992).

The convoy continues its way for approximately 28 km, reaching Wadi Talah or Telah station and its well-known Nabataean resting place and vast agricultural fields. Then the commercial convoys cross several sites and valleys before arriving at Ghor Al-Safi station, including the Ghor Khneizira, Wadi Umruq, Ghor Fifa, and Samar sites. Then the convoys arrive at Ghor Al-



Figure 5. Jordan Valley Incense Route and associated stations coming from North Hejaz (drawn by Freihat 2023).

Safi station, after which they pass through a few sites, such as Tell Sheikh Issa and Deir Ain Abata (Politis 1992) (Figure 5).

The incense convoys continued their way in a north-eastern direction for a distance of 45 km to Umm Zuqib station and pass through the sites of Rujum Al-Numeira, a Nabataean tower east of the Dead Sea coast, Ghor Assal, which is connected with the highlands incense route by a branch of Roman Road, and Ghor Al-Mazraa, which is likely to have contained an ancient seaport.

The convoys also pass through the site of Ghor Haditha. Then the convoys arrive at Umm Zuqib station, which is one of the important stations on the caravan route, as it served as a fortified settlement during the Nabataean period and a large agricultural village. The commercial convoys continue their way towards Al-Zara station in the north for a distance of about 20 km, passing by the site of Makkawer Castle. The convoys depart from Al-Zara station in a north-east direction for a distance of approximately 31 km to reach Levias station (recently Tel Al-Rama).

Then the convoys continued their way for about 38 km towards the Zarqa River station, passing through the Nimrin site, then continued north for about 30 km to reach Tabqat Fahl station (Pella). At the site of Tel Al-Arbaeen and the site of Sawan then from Jisr al-Majama' station, they head northeast for about 25 km

towards the Sahem al-Kafarat station (Aqabat Feik), passing by the Umm Qais archaeological site overlooking the Yarmouk River, the Golan Heights and Lake Tiberias, then the site of al-Mukhaybah. These sites are considered the entry points, historical land of the Nabataean trade caravans towards Syria.

Highlands Route

The route begins within the borders of Jordan, coming from the north of the Hijaz, at the Aqaba-Ayla station, to reach the southern Levant/Bosra in Syria. The trade convoys of incense pass through several stations, and at its beginning, the Ayla station served as a link between the Levantine, Hijazi, and Egyptian lands by virtue of the presence of a seaport in it to supply commercial ships and its distinguished location by land, also as a land commercial station. After, the land convoys left from Ayla head 60 km northeast to the Al-Hamima station, in which some Nabataean facilities were discovered. There the convoys meet with the Badya desert convoys coming from Quweira.

Because of the long distance between the station of Aqaba and Al-Humaima, it was necessary for the convoys to stop during their travel to rest and to supply water in some of several locations, including Al-Kaythara, Ruwaish Al-Mahboub (Al-Mustard Tower), Al-Jurf; and towers were built in for the purposes of protecting and guarding the convoys, Khirbet Al-Khalidi, the observatory site, and Al-Quweira.

The convoys continue their march towards the northeast for a distance of approximately 38 km until they reach the station of Ayl, passing through Dibbet Hanout and the sites of Abu Nsour A, Ain al-Jamam 2, al-Hayyad and al-Hayyed, agriculturally fertile lands and abundant in water. Then the site of Abu al-Lusun to Khirbet al-Da'ouk, reaching Al-Mreigha, Al-Wahida; then the site of Khirbet Laika, after which the Nabataean trade convoys reached the station of Ayl, which is considered one of the main sites along the Incense Route (Bisheh *et al.* 1993).

The caravans could follow another route, which came directly from the borders of north Hejaz. They leave Sargh and pass through An-Naqib (a small area) known between Tabuk and Ma'an on the trade route. They also pass through a place called Batn Al-Ghul, which is midway between Sargh and Ma'an. After covering the travel distance, they descend to Ma'an (Heiss 2018). Ma'an is a city located at the edge of the Syrian Desert, towards the Hijaz, in the direction of Al-Balqa. Due to

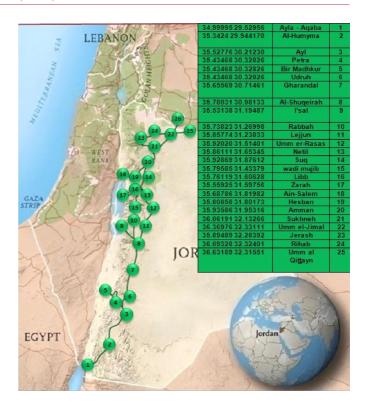


Figure 6. Highlands Incense Route with its associated stations and sites (drawn by Freihat 2023).

its historical affiliation with the ancient Yemeni kingdoms, some researchers believe that its name originated from the people of the southern regions. Musal mentions that Ma'an is not mentioned in Assyrian records by that name because it was under the influence of the Yemeni kingdoms, especially as it was located on the Incense Road. It was referred to as Saba, especially since the Sabaeans sometimes ruled it (Musil 1926) (Figure 6).

Petra: A Major Incense Route Caravan Station

Then caravans depart from Ma'an after a stage of travel. They descend to Petra, which was known to the ancient Arabs as *Sela*. The term in the Arabic language refers to a split in the mountain, resembling a crack or a narrow passage. Yaqut Al-Hamawi mentioned that the name refers to paths in the mountains, and each path is called *Sela*.

Sela is a fort in Wadi Musa, near Jerusalem. Petra had several characteristics that made it an important station on the Incense Road, especially due to its abundance of water from Ain Musa (the Spring of Moses) and its fertile land. It attracted the passing trade caravans in that barren region for rest and water supply (Murray 1939) and became a vital crossroad on the Incense Road

and other roads coming from the east and west. Due to its strategic location on the Incense Road, it represented the cross point of the Incense Road. It was indeed a major crossroads in that area, where some roads branched out. One of them ran parallel to the Dead Sea, passing through Damascus, and from there to the Phoenician coastal cities.

Another branch headed towards Mesopotamia, and the main branch extended toward the port of Gaza on the Mediterranean coast, where Arab goods were traded. It appears that Petra served as a great storehouse and market for incense and other Yemeni commodities. Later, it faced Roman invasions that led to the downfall of the Nabataean kingdom in 106 CE, and Petra was replaced by the city of Bosra. Nevertheless, Petra did not lose its commercial significance, as the Nabataeans continued to engage in trade and caravan leadership until the fourth century CE (Musil 1926) (Figure 7). The Highlands Route continues to north Jordan, including major Nabataean sites and stations through Kerak, Madaba, Amman, and Um-Al Jimal then to Bostra in Syria, Damascus, and the Mediterranean Sea.

UNIQUE GOODS OF INCENSE ROUTE

The important trade routes, such as the *Incense Route*, were mostly controlled by the Arabs, who brought frankincense and myrrh by camel caravan from southern Arabia. The road network also served as a conduit for the trade of Indian, Arab, Egyptian, and East Asian goods.

The incense trade flourished from southern Arabia to the Mediterranean Sea between approximately the third century BC and the second century CE. This trade was crucial to the economy of Yemen, as the ruler's viewed frankincense and myrrh trees as a source of wealth (Groom 1981). The demand for perfumes and incense by ancient empires such as Egypt, Rome, and Babylon made the Arabian Peninsula one of the oldest trading centers in the world. Among these important species are the following:

Perfumes

Perfumes, or the so-called (Alteeb) in Arabic, the Nabataeans have extracted the perfumes from various sources, including sandalwood, saffron sweat, amber, musk, henna sweat, jasmine, lemon blossom, rose, mint, geranium, and lavender, and from certain roots such as ginger and iris. Nabataean perfumes were used

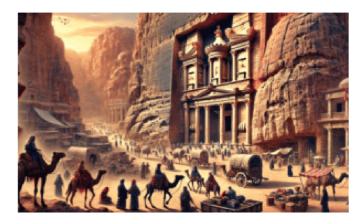


Figure 7. Petra, one of the major incense route stations in the east (nabdalarab.com).

in personal perfumery in addition to their use in funeral rites and temples. They were placed in jars, and a quiet fire was lit under them, and the Arabs used them in medicine as well (Al-Dalaeen 2010).

Frankincense

Frankincense was a commodity traded along the Incense Route. It is an aromatic resin obtained from trees of the *Boswellia* genus and used in incense and perfumes. While it is known as *frankincense* in the west, the resin is also known as *luban*, derived from Arabic (roughly translated as "what is produced by the tree"), referring to the milky sap obtained from the *Boswellia* tree (Muller 2003). It was cultivated in the areas of the southern coast of the Arabian Peninsula, where it is considered the most prominent product in the region (Miller 1969), due to their knowledge of its importance and uses, especially in religious aspects (Al-Ghassani 2008).

The civilizations of the south of the Arabian Peninsula also exported incense to the civilizations of the ancient world that needed this product and used it in their daily lives and religious occasions, which contributed to the spread of incense in civilizations far from the land of Yemen (Muller 2003). Indeed, ancient writers and historians from Greece and the Romans mentioned this type of commodity. And they wrote about it in particular and in detail, which increased the interest of the people of the Arabian Peninsula in this product (Strabo 1930).

Myrrh

Myrrh is a reddish-brown resinous material collected from dried sap of certain trees, and it was a commod-

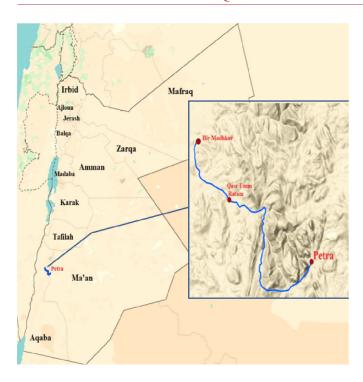


Figure 8. The Incense Route descending from major city Petra to Bir Madhkur in Wadi Araba (modified by Freihat 2025).

ity traded along the Incense Route. The original type of myrrh is *Commiphora myrrha*, native to Yemen, Somalia, and eastern parts of Ethiopia. The related species *Commiphora gileadensis*, found in Palestine and Jordan, is accepted as an alternative source of myrrh. Myrrh has long been used in many cultures as a perfume, incense, medicine, or embalming ointment. Besides its pleasant scent, it also possesses antimicrobial properties (Cleveland 1960; see also Groom 1981).

TOURISM DEVELOPMENT

The Incense Route still captivates many researchers and enthusiasts from around the world, whether archaeologists, explorers, amateur adventurers, or documentary filmmakers who race to discover the Incense Route from Yemen to the Mediterranean Sea.

The Yemeni civilization has produced a unique and diverse tourist product, and the successive archaeological discoveries of historical sites in Saudi Arabia, Jordan, Syria, and Palestine affirm that the Yemeni civilization left a pioneering imprint on the global economy. It served as a link between ancient civilizations as an international trade route between the east and the west. The ancient Yemeni trade routes, such as the Incense Route and the Myrrh trade, still attract desert tourism, making exploring these routes an exciting and enjoyable adventure.

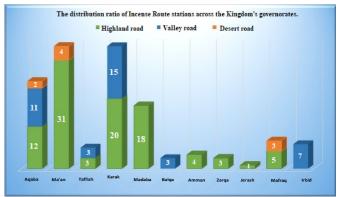


Figure 9. The distribution ratio of Incense Route stations across the Kingdom's governorates.

These routes extend from Ayla-Aqaba to Wadi Rum, Al-Qweira, Al-Humaymah, Ras Naqb, Ayl, Al-Rajef, Petra, branching off to Palestine through Petra to Bir Madhkur, Qasr um-Irtamm, the Nabataean Gardens, Ath-thaghwi, and Al-Khurj, reaching the stations of Palestine (Figure 8).

The Incense Route, carrying frankincense, spices, and eastern products all the way to Europe, represents a prominent historical landmark in the development of trade between the east and the west through Jordan. It highlights the humanitarian role of Arab civilizations in this aspect. Despite the fame of ancient Jordanian civilizations for their prosperity in sword and dagger manufacturing, copper work, various handicrafts, textiles, and pottery industries, as well as their transformation into a major source of goods for the region and the wider world, the historical dimension of the Incense Route and its connection to ancient human civilizations and the world makes the Incense Route in Jordan a subject of attention and interest for researchers and enthusiasts (Figure 9).

The ports of the eastern Mediterranean were the main final stop for the caravansaries coming through the incense, silk, and Elaf Quraysh roads, as they were considered a civilized, commercial, scientific, and cultural center because of the markets that resulted in the mixing of various cultures. It should be considered that the land routes were exposed to many dangers, especially Bedouin attacks.

The Nabataeans had a prominent role in trade across the seas, especially the Red Sea, the Arabian Gulf, and the Mediterranean Sea. Despite the danger of the sea routes represented in the sinking of ships due to winds and storms or collisions with coral reefs or marine animals, the Nabataeans were able to succeed in the sea routes with their goods.

CONCLUSION

Documentation of the ancient Incense Route in Jordan is considered one of the pioneer projects in Jordan and the south Levant. Tracing the routes of the incense road through its stations, from its starting point in Yemen through the Arabian Peninsula to Jordan to the rest of the places associated with it (including resting stations, houses, valleys, water installations, mountains, and plains), is considered one of the most prominent results. It was reached through researching sources and references because it is not possible at this stage to track the routes of the incense road outside the borders.

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