Kosseir, a phosphate-shipping town

La cité des mines de phosphates à Kosseir

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El Quseir, known as Kosseir in English, is an ancient harbor city on the Red Sea, and as such has been influenced by many different cultures. In the first half of the 20th century, its waterfront was transformed by an Italian phosphate-mining operation. The project was carried out by the Società Egiziana per l’Estrazione e il Commercio dei Fosfati (Egyptian Phosphate Mining and Trading Company). Despite its name, it was an Italian company founded by Banco di Roma in Egypt, with headquarters in Alexandria and Cairo, factories and mines in Kosseir, and a sales office in Rome.

The concession became a factory town adjacent to the old city. It covered an area of approximately 1,500 hectares (3,750 acres), enormous in comparison to the size of the city of Kosseir at the time. The compound, built on a sand bar, was separated from the old city by a wall, and was open to the sea to the south. Over the years, the company enriched the city with a new hospital, a radio station, residential districts (chiefly tracts of single-family dwellings), a street-lighting system, and much more. The intense construction process involved and changed even the surrounding lands. A new railway connected the city to the mines, where new villages were built, along with isolated shelters for prospecting expeditions.

The urbanization of Kosseir is highly complex. It began in the first years of the 20th century with Banco di Roma’s venture in Egypt, and gradually continued for fifty years, with continuous additions, occasional accelerations, profound ideological changes, and various protagonists. The company, which repeatedly risked bankruptcy, was purchased by the Italian
State Treasury in 1927. Starting in 1933, it was operated by the IRI (Industrial Reconstruction Institute). In 1958, it was nationalized by the Egyptian state, and the Kosseir plant was finally closed in 1964.

**Fosfati in Kosseir: A history of projects and managements**

Due to its strategic position, Kosseir played an important role in the political and commercial geography of Egypt for more than 4000 years. According to historians and archeologists, Kosseir is Egypt's most ancient port. It has an illustrious history, having been known as Tjau under Hatshepsut, as Myos Hormos under the Ptolemies, and as Leucus Limen under the Romans. Following the Arab conquest, it became a port for trade with the East and an embarkation point to Mecca. It is also mapped on 15th century Portuguese charts of routes to the East Indies. The city grew under Ottoman rule, dating from 1517. Selim I ordered the construction of a fortress and new port, located further to the south and therefore better protected from winds. In 1798, Napoleon's troops captured the fort, and added casements to it. In 1801, the English expelled the French and opened a new breach in the walls. Kosseir's strategic importance lasted until the opening of the Suez Canal (1869) and the construction of the Alexandria-Cairo-Suez railway line.

At the turn of the century, benefiting from new sea and rail trade routes, new mining companies were established on the Red Sea coast. In 1898, they were no longer attracted by Egyptian gold and emeralds, but oil, manganese, and phosphates, the latter coming from the region of Qena, Upper Egypt. The Scotsman Andrew White Crookston was the first to attempt mining these deposits, but he soon abandoned them in order to devote his time to exploring the new ore deposits discovered in Safaga.

The concessions were transferred to Banco di Roma, which was looking for new investment opportunities. However, the mines were in remote areas, and transportation was expensive, so the bank focused its attention on promoting new geological expeditions. The first one took place between 1910 and 1911 through the Wadi Hammamat, under the supervision of engineer Emilio Cortese. Wadi Hammamat is a rocky gorge halfway between Qena and Kosseir, with walls decorated with drawings and inscriptions dating back to 4 000 B.C., and mountains of aggregated
fossil shells. From ancient times, Wadi Hammamat had been the shortest natural path from the Nile to the sea. Ornamental green stone known as Bekheny was quarried in this valley. Ancient Egyptians considered the stone sacred, carving it into cups, statues, and sarcophagi. The valley, fortified by the Romans, still contains intact watchtowers, wells, English fortresses, old quarries, and mines.

Cortese, like the French writer Gustave Flaubert fifty years earlier, left Qena riding a camel. He made the same stops and described the same places, such as Bir Inglisi, Bir Hammamat, and, further north, the ruins of Bir Umm Fawakhir, 5th and 6th century Byzantine gold mines. Once he arrived in Kosseir, he described the city and its inhabitants, providing us with valuable information: “here, you can drink sea water distilled by a special plant, which is, to tell the truth, not very new, but very well maintained by the distillation technician, who is Italian, Mr. Scoccimarra. Besides him, there are only a few Europeans in Kosseir, such as the Governor of the Port and Town Square, who is Maltese, and a Greek doctor, who is responsible for the Maritime Health
Service [...] There are many wells along the beach, and wind engines could be used to pump water from them to irrigate gardens and orchards."

Cortese published the description of the trip and of his considerable findings a year later in *Bollettino della Società geografica*. In the same year (1912), the Banco di Roma founded the Società Egiziana per l'Estrazione e il Commercio dei Fosfati in Alexandria, and hired Cortese as the first technical director and buildings and facilities engineer. The factory transformed Kosseir. As we noted earlier, a hospital, several housing tracts, a radio station with its own group of homes, and the wind power plant described above were built. In 1914, a phosphate mine was opened at Gebel Nakheil, only 12 km away from Kosseir. Its phosphate deposits were as rich as those at Safaga, and from then on, phosphate from both mines was shipped from the port. Construction also started on a new loading dock and a narrow-gauge railway, supervised by technicians from Sardinia and Piedmont. When World War I broke out, Cortese was still busy with construction. In 1917, he left his post as director of mining operations, and although he was over sixty, returned to Italy to enlist as a volunteer. The direction of the mines was entrusted to an engineer named Rolfo, and direction of the city's plants to the expert Cagnati. After the war, Cortese returned to work at Fosfati as an advisor, between 1918 and 1920. This time, he was employed directly by Banco di Roma. War and other upheavals produced a very serious economic crisis, and Fosfati was
on the verge of collapse. The situation was solved only when the Società Finanziaria per l’Industria e il Commercio (Finance Corporation for Industry and Commerce) bought a large stake in the company. With fresh capital and a new board, the company sought a new director and new concessions. It purchased the rights for the ore deposits at Gebel Duwy, only 20 km away in the backcountry, from a British syndicate, and hired Riccardo Decima as director in early 1920.

Decima directed prospecting expeditions, surveyed land, and designed structures, sending frequent reports to Rome regarding possibilities for excavation. In 1923, the intensive excavation of the mines in Gebel Duwy began, while prospecting continued elsewhere. The earlier concessions, unfavorably located or offering poorer phosphate, were gradually abandoned. In 1926, Gebel Duwy was the company’s major asset, although it still lacked reliable technical equipment.

Thus far, two companies had extracted and traded Red Sea phosphates: the British Egyptian Phosphate Company and the Italian Società Egiziana per l’Estrazione e il Commercio dei Fosfati. The activity of the Italian company was directly related to Italian Government and finance, its holding company being controlled by Consorzio per Sovvenzioni sui Valori Industriali (Consortium for Subsidies on Industrial Values). Minister Giacomo Acerbo paid a visit to Kosseir’s mines in 1926, while traveling in Egypt. Meanwhile, the construction of the new port was started, as shown in the correspondence between its engineer, Luigi Luiggi, and Decima.209

In 1927, all Fosfati’s shares were transferred to the Italian State Treasury,210 in a sale arranged by the Istituto delle Liquidazioni.211 In the same year, SAFNI, the Società Anonima Fertilizzanti Naturali Italia (Italian Limited Company for Natural Fertilizers), was established with a capital of 38 million Italian lire. In the 1930s, the demand for phosphate-based fertilizers increased sharply in Italy, and Fosfati signed agreements to supply the Federazione Italiana dei Consorzi Agrari (Italian Federation of Agricultural Associations). The phosphorite produced, then ground by Raymond mills, was tested in special experimental government stations, mobile agricultural professorships managed in cooperation with the Research Institutes of the Faculty of Agriculture. The results of the agricultural applications of Kosseir Phosphorite – then called Italian Phosphorite – were disseminated by SAFNI’s press office.

These were the years of the greatest Italian colonial expansion and of a large number of achievements in terms of infrastructure, urban transformations, construction of new public buildings, and establishment of new settlements. Kosseir was no exception: it had a new port, public lighting, and a cable car for transporting ore to the port. While these projects were being carried out, blueprints for new buildings were arriving from Rome. At Gebel Duwy, a mining town was being built.

An inventory drawn up in 1932 lists the equipment and facilities at Gebel Duwy: drills, electrical cutters for the mechanical extraction of phosphates, and 90,000-ton silos. The port housed new silos, a plant for the low-cost production of 100 tons of fresh water daily, an ice factory, four 1,200-ton fuel-oil depots, various other depots, phosphate-processing mills, new locomotives and freight cars; a plant for the sorting and crushing of residues; and a plant for the natural and artificial drying of phosphate ore. The inventory also mentions: buildings in the old town; the Qena-Kosseir rail line, the works for which were started by the Egyptian Government in cooperation with Fosfati; a detailed list of the new mining prospects with related permits; and a schedule of ongoing mining and construction concessions.

In 1933, when IRI took control of the company, construction of housing and community facilities continued. A new men’s dormitory went up, along with a canteen, a recreational club, sports facilities, and a branch of the National Fascist Party. As described by Italian newspapers at the time, it was a "Little Italy," with pupils dressed in Balilla uniforms (the fascist party organization for children aged 8-14).

A photo lab in Kosseir printed postcards. The company commissioned Rizzoli212 to publish a leaflet on phosphates. A new mine opened at Hamadat, with a large town around it.
Settlements
Overall view of Kosseir mining town from an aerial ropeway
Port of Kosseir from the upper aerial ropeway platform
In 1939, mining engineer Adolfo Laurenti took over the company management. The port became a strategic point in Mussolini’s war plans. The company’s operations suffered a setback during the war. In 1942, the British interned all the Italians in a detention camp in Geneifa. The factory operated briefly under British control, but before the war was over, it returned to Italian hands thanks to patient diplomatic negotiations.

In the post-war period, operations resumed, with seven productive mines: Gebel Duwy, Hamadat, Atshan, Nakheil, Abu-Tundub (North and South), Faraa, and Hamarawein. Each mining center had its own village, with an emergency room, infirmary, and small mosque.

A report filed with IRI in 1952 states that the mines produced 400,000 tons of phosphates per year. The power station could generate 2870 Kw, and the silos could hold up to 150,000 tons. A new railway was built connecting the city to the mines. It had its own station and a small passenger train. Furthermore, the railway line connected the mines, and in order to speed up phosphate transport, tunnels were dug for...
the entire stretch of track between Nakheil and Gebel Duwy. The mining towns were provided with two schools for girls and three for boys. Three of the schools in Gebel Duwy were located next to the mines, and were run by the missionaries. Kosseir’s desalination plant produced 150 tons of water per day.

Nasser’s rise to power (1954) signaled the end of the period of Italian influence. With the introduction of new economic planning measures, in the form of state capitalism, the factory was nationalized, and then decommissioned in 1964.

How the phosphate town was organized

Inside the new town, buildings lined a broad, straight, north-south highway connecting the city to the factory. This road, built by the Italians, intersected the coastal road to the north. To the south, it vanished into the maze of streets in the old town. Midway, the road was widened out to form a long square, lined with offices and public buildings. The mine was visible on the northern side. The elementary school dominates the northern end of the square. It is a
The home of the director of Kosseir mine, in 1938

one-story, Fascist-style, cross-shaped building. The portico on the facade is graced with a Palladian window with a broken pediment. The project dates back to 1930, and was designed by Florestano Di Fausto, architect of the Ministry for Foreign Affairs of the Fascist Government, although he did not follow through with the construction. In the 1950s, there were 120 pupils enrolled at the school.215

The church is situated to the east, on the right side of the square.216 It is provided with three naves and an apse oriented to the east. Built in 1938, it was the last project Riccardo Decima carried out. The building belonged to the Coptic Church, which administered all of the Franciscan Missions along the coast of Upper Egypt after 1927. The central nave forms a vestibule with a Gothic arch surmounted by a rose window and Latin cross. The spire bears a Byzantine cross. Buildings dating back to the 1940s stood on either side of the church. The Franciscan mission was on the corner, between the school and church (to the north), while the girls’ boarding school was located to the south, beside the Franciscan Sisters’ convent, which opened in Kosseir in 1946. These buildings were similar in appearance. All are one-story buildings with roofed terraces, and volumes reflecting elementary geometric shapes. In other words, all are modern, rationalist variations of the colonial house style. The Administration House is on the same side. It is a very beautiful building, dating from 1931, and designed to be the director’s dwelling and a reception house. The white mansion overlooks the sea, turning its back on the square. It features four corner turrets connected by a double portico. There is a row of single-family dwellings along the beach and, next to them, several sports facilities. The rationalist-style Fascist Party headquarters (Casa del Fascio), which housed a canteen and a recreational club, dominates this part of town.

On the other side of the square there is a row of small one-story homes, each of which differs in character, though all feature a portico entrance. Those located closer to the factory have plainer façades, reflecting the poorer living conditions of the inhabitants.

Further along the road, at a suitable distance, are the laboratories and the imposing porticoed building housing Fosfati’s managerial offices. It faces a smaller square, where the power station (resembling a 19th century barracks), mills, silos, and an iron-and-brick locomotive roundhouse are also located. A large reservoir closes the opposite end of the square.

The succession of buildings, which are physically distant from each other and highly varied in style, gives the elongated square a static, petrified feeling, reinforced by the nearby sea. The view of the square looking towards the large reservoir is reminiscent of a sleepy, imaginary de Chirico cityscape, particularly the one in La Torre rossa (The Red Tower).

On the outskirts of the town, at the corner of the 19th century coastal road and the street leading to the port, is Kosseir’s telecommunications center, radio station, and two houses which once belonged to the Marconi company.

Continuing south towards the fort, we find the building that was once the Italian hospital. Built in 1914, it was designed in an eclectic, almost orientalist style. A 1930s renovation provided it with new X-ray facilities, a pharmacy, an obstetrics unit, and a day-care center. Recently renovated,217...
Kosseir Square, with the primary school (1930–1931, Florestano Di Fausto, arch.) and Saint Barbara Church (1938, Riccardo Decima, eng.)

the building now houses the headquarters of LDC (Learning Development Center), a community-education foundation. On the waterfront outside the complex, there are two rows of six small single-family dwellings, built in 1906 for the technical workers at Fosfati. Currently, they house the offices of the Kosseir Department of Mining. All of the homes are single-story with walls made of blocks of coral stone, which was quarried in the mountains nearby. This material produces a surprising harmony between the eclectic characteristics of the philanthropic architecture and traditional indigenous construction.

Kosseir is the only town on the Egyptian coast that offers tangible evidence of the ancient architecture typical of the Red Sea region. The houses of the historical town, built around interior courtyards, are made of the only material readily available in this area, coral stone. The construction technique, unchanged over the centuries, is the most suitable for the local climate. Stone walls provide excellent shelter from heat, absorbing moisture at night and cooling the home by exuding the moisture in the daytime. Coral stone walls are repeated in the building where food was stored and in the recreational club next to the port (beside the large Ottoman-era Governorate building) in a sober, interesting mixture of styles.

It would seem that the city of Kosseir is composed of three parts: the historical center, the Italian addition, and the contemporary Arabic extension. Actually, the situation is more complex. As illustrated above, the Italian presence modified the city’s historical fabric, sporadically but decisively. Furthermore, the planners’ conception of the relationship between living and working places and the cultural attitudes piloting each intervention changed radically over the course of the project’s completion. Generally speaking, we can distinguish two different land-management periods and policies. The first, probably based on the experience of the factory town, instituted a separation between the residential district and the factory and mine. The second, associated with the urban, expansionist, colonial policies of the Fascist regime and the establishment of numerous small towns, unifies everything as a whole. Most of the buildings went up between the 1920s and 1936, date of the proclamation of the Italian Colonial Empire; that is, at a time when the debate on modern colonial architecture was growing and maturing. The ideology of
urbanization and building type elaborated by this debate was based on an opposition between monumental classicism and the rediscovery of local traditions. Nevertheless, Kosseir presents a spatial continuity with the previous era, visible along the coast, in the succession between the waterfront, the port, and the new town. Its ideological continuity can be perceived in the fact that no worker housing was built, because the workers were indigenous. The structures along the main square of the small community are public buildings, workshops and mills, and the homes of managers and other high-ranking people. They are diverse in style, but they express a well-defined hierarchy of housing. The façade is the most immediate means of distinguishing between the dwellings which only the very skilled and better-paid individuals could afford, and the types of buildings in which laborers were housed.

The high status of a dwelling’s inhabitants was also reflected in the layout of the home: whether it included a vestibule, several bedrooms, a living room, and a separate dining room. In conformity with the guidelines on “building hygiene” fashionable at the turn of the century, architectural design had a duty to organize living space in a rational manner that would inspire ethical attitudes in the inhabitants. Architecture was supposed to be conducive to respect of the ethical code defined by the “healthy” part of society. This is the ethical model that gave rise to community structures and recreational spaces based on a social utopia, like the community canteen in Kosseir.

The main street of the mining town at Kosseir: the administrative offices are on the left.
Other workers’ settlements were established on the uplands, around the mines. Because they were far from Kosseir, new housing, places of worship, and recreational clubs had to be built for each social class. The structures follow the contours of the landscape, with the mine always present in the background. Residential tracts repeat the pattern of the homes in the main town, with minor variations, even in the apartment dwellings.

The Fascist city is brand-new, whether it is created or grafted onto an existing city. Kosseir is a rational construct which, as Alberto Moravia writes, “speaks not to reason but to the imagination.” Sabaudia harks back to Africa. Kosseir is also Africa, but a different Africa. The city asserts its dual nature: it is and wants to be two different types of city at the same time, rationalist and traditional, serving the community, and representing it.