

A GEOHISTORY OF AGRICULTURAL TRADE: THE LONG TIME SPAN THAT ENLIGHTENS THE PRESENT

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Trade in the Mediterranean is a powerful analytical prism of the great facts of history. It indeed reveals the demographical and political dynamics of a region whose history, at global level, is the one that plunges the furthest back in time.

Since they are directly related to basic needs, agricultural products are the special markers of the passing of time and the logic behind it. Unlike products whose use may devalue over time or even disappear, agricultural products are timeless due to their fundamental and irreplaceable nature. Analysing agricultural trade through different eras is therefore interesting in order to achieve a better understanding of the Mediterranean whose history is deeper than its geography is vast.

Of course, as soon as we get a deeper insight into distant history, trade statistics disappear very quickly. In order to identify old trends, we cannot rely on customs statistics as they are only consistently maintained since the 20th century. We must therefore resort to chronicles of observers even if archaeological evidence – including plenty of amphorae in some places – provides more quantitative tools. The history of agricultural trade is therefore necessarily incomplete and inevitably approximate.

By constantly combining data with well-established episodes of agricultural trade, this narrative shows the crucial significance of agricultural products in trade and strategies of power of geopolitical players who were or still are important in the Mediterranean. It also highlights the fact that trade has not always been as pleasant as Montesquieu wanted to believe as it has taken place in contexts of domination and violence. Lastly, if this historical perspective points out invariants, it primarily allows us to perceive an unprecedented contemporary Mediterranean through the prism of long periods.

From local to regional

The Neolithic revolution led to the emergence of agriculture. Linked to a change in climate, it first occurred in the Mediterranean. It was indeed due to a global climate warming and moistening taking place between 14000 and 11000 B.C. that flora started growing in the eastern Mediterranean. Archaeology shows that wild cereals were then consumed in the Middle East: cereal grains were crushed in a mortar to be eaten as gruel or already processed into flour (Albertini, 2009).

The gradual transition from hunting and gathering to agriculture took place at around 9000 B.C. when men started selecting species that made the fortune of the Mediterranean. It was precisely in the Fertile Crescent, the rich strip of arable land, that straw cereals (barley and wheat) and some legumes were gradually selected. Also helped by climate change, the population growth encouraged the domestication of wild species. A little later, between 8500 and 8000 B.C., sedentary men tamed wild animals to transform them into increasingly selective species such as the goat, the sheep and the donkey. It is also important to note that conservation techniques were developed in parallel, especially the underground storage silo.

Like a groundswell, agriculture and livestock farming spread across the Mediterranean with the waves of migration coming from the east of the basin. Enabled by the development of agriculture, it seems that population growth has led to this phenomenon. Even if agriculture provided more sources of livelihood, hazards did not fail to affect it. In addition, the competition for food resources sometimes required the departure of some peoples settled in the eastern Mediterranean to move and colonise new lands. Launched in the Middle East, this process of colonisation/Neolithisation actually took place according to several waterways. The Danubian waterway enabled the arrival of agriculture in northern Europe via the Danube. The Mediterranean waterway allowed the implementation of agriculture in the northern coastal lands of the basin. This took place mainly through the exchanges occurring in the Mediterranean Sea. This process emerged in Crete, in mainland Greece, in the Balkans and in southern Italy between 6800 and 6100 B.C. and then in Sicily, in Malta, in Cyprus, in Spain and in France between 6100 and 5700 B.C. As for North Africa and Egypt, agriculture was established through the so-called African distribution channel that was mainly terrestrial.

These processes of distribution announce the development of trade at a very local level, that is, between emerging cities and the surrounding countryside and then between distant households. The emergence of a city – or rather a big village – such as Jericho at around 8000 B.C. gives evidence of the early occurrence of local trade exchanges allowed by the development of agriculture. The development of agricultural trade then enabled urbanisation in southern Mesopotamia with the Sumerian civilisation and also in Syria at around 3000 B.C. Agriculture generated food surpluses indeed. Thus, it allowed some of the people to focus on other activities in order to meet their food needs indirectly. The use of the “recently” domesticated donkey and also the use of rivers like the Nile, made this trade possible.

During these ancient times, agricultural trade especially took place over short distances, as populations did not need to seek food resources far away. This was the

case of the city-state of Ebla, situated about 60 kilometres away from the current Aleppo, which reached its peak at around 2500 B.C. However, the beginnings of a large-scale agricultural trade seemed to emerge with the first empire founded by Sargon of Akkad (2334-2279), covering most of the area of modern Syria and Iraq. Almost situated in the same area between the two major wealth-providing Mesopotamian rivers, the Babylonian empire emerged between the 18th and 15th centuries B.C. At around 1500 B.C., trade distances stretch especially with the development of convoying. A new Mediterranean civilisation was then found in Crete where Minoans, coming from Anatolia, constructed unprecedented architectural ensembles. Described as such by Herodotus and Thucydides because it reigned over the Aegean Sea, this Minoan thalassocracy had to turn towards Egypt to stock up on grain. Figurines found in Crete indeed represented Minoan emissaries that went from the island to the Pharaoh's court to beg him for grain coming from the Nile Valley (Abulafia, 2011). Very early, this Egyptian civilisation had developed the cultivation of grain and bread making processes. After the unification of the country in the 4th millennium under the reign of King Narmer, irrigated agriculture was indeed highly developed. It benefited from flood management whose strength determined the width of agricultural land each year and hence its productive capacity. The use of the waters of the Nile has thus conditioned the early stability of Egypt and was a decisive factor contributing to its power. Besides, it was this nurturing dimension (Abulafia, 2011) that probably attracted some Jews from the land of Canaan to the north. The Bible recounts this episode. However, for a long time, Egypt still seemed little turned towards the Mediterranean. The first port of Alexandria was not founded before the 4th millennium (see below).

Box 1: How was food stocked in ancient times?

Long-term storage was developed since Antiquity, either for agricultural (seeds), domestic (family storehouses), social (stocks in anticipation of famine or conflict) or commercial (trade) purposes. It was necessary to protect crops from fire, mould and attacks from various predators (rodents, birds and insects). The most common storage process was the underground silo, which is a sort of pit with a narrow opening dug into the ground. In the absence of oxygen, grains enter a dormant phase that favours conservation while keeping their germination capacity. In Ancient Greece, jars were increasingly used to store oils and wines. In order to store grain, they used dug silos, granaries (the *horreos* in Galicia come from this period) with slits allowing ventilation and also stone vaulted cellars. The Romans also used these storage methods and developed coating techniques to protect cereals from snout beetle attacks. The *amurque* (solid material or resin¹) resulting from the pressurisation of the olive was then spread in the receptacles.

Long-distance trade was mainly developed as from 1000 B.C. with the Phoenician civilisation. Located on the coastal plains stretching from today's Israeli Galilee to Ugarit in Syria, the heart of this civilisation was mainly settled in the areas between Byblos and Tyre in Lebanon including Sidon. Backed by a very narrow hinterland

1 - Translator's note.

while the inland plains were usually controlled by different powers, this civilisation spread throughout the Mediterranean. The Mediterranean was perceived as an ensemble for the first time in history under the influence of the Phoenicians.

The issue of the supply of Phoenician cities arose very early. Thus, around 960 B.C., while King Hiram reigned in Tyre, the biggest among other cities, an agreement allowing the Phoenicians to receive wheat and oil produced by Hebrew farmers in exchange for wood mainly destined for the construction of the Temple was signed with King Solomon (Finkelstein and Siberman, 2002). However, “food, oil, wine and raw materials had to be brought by sailors” (Braudel, 1985b, p.108). The large quantities of wood in the forests of Mount Lebanon allowed them to form an effective fleet, sail across the Mediterranean and even reach the western shore where they established various trading posts. Carthage, Lixus and Utica in North Africa were among the first to be established between 1100 and 800 B.C. The foundation of Cadiz on the Atlantic Coast showed the ability of the Phoenicians to design very stable boats capable of crossing the Strait of Gibraltar, that is, the famous Pillars of Hercules. Phoenician technology enabled them to practice offshore sailing helping them to save time as well as to control the Mediterranean Sea currents. However, it is important to note that this trade was far from being only agricultural. Besides, the Phoenicians did not only trade wine, oil and grain for their own use; they also provided commercial services for the peoples settled along the Mediterranean basin and elsewhere.

Founded in 814 B.C., Carthage was by far the most famous Phoenician trading post. For those coming from the east of the Levant, the city was situated on the most advanced part of the African continent in the western Mediterranean. In turn, Carthage became a real city-state, gradually detached from the eastern cities under the pressure of their neighbours², but also a maritime power in the western Mediterranean basin. The presence of a rich agricultural hinterland, particularly the Cap Bon peninsula and the Meterdja valley allowed them to develop an agriculture whose practices were spread by the Carthaginian agronomist Magon between the 6th and 3rd centuries B.C. Thus, for several centuries, Carthage was able to source locally and to trade its agricultural products (wheat, fruit and wine) while consolidating its position as a leader of the other trading posts in the western Mediterranean. Carthage was “the new Phoenicia” (Braudel, 1985b, p.109).

Carthage dominated over the south of the western basin between the 6th and 3rd centuries. However, it was absent in the North of the Mediterranean where the Etruscans dominated northern Italy since the 8th Century. The Ionian and the Aegean regions were under the influence of the Greeks. Although the Myceneans seemed to be at a distance, there was an increase in population in Attica and in the Aegean Islands at the turn of the 8th century. The advances in agriculture and the development of terracotta granaries that facilitated food preservation undoubtedly enabled this

2 - Situated in the Eastern Mediterranean, these Phoenician city-states were jealous of the independence. They were subjected to the greed of people from the lands: first, in the eight century, the Assyrians even destroy Sidon and then Babylon that exercised its sovereignty in - 586 and the Persians who arrive on the eastern shore of the Mediterranean in the sixth century.

growth. Nevertheless, the increase in population seemed to be too important for the local supply to meet demands. Besides, the issue of the survival of the plethora of farmers settled in Greek territories and lacking lands arose. This lack of food and land led to the colonisation of the Aegean and Ionian region between the 8th and the 6th centuries. Other distant areas organised in cities were also colonised by the Greeks: this was the case in southern Cyrenaica, the shores of the Black Sea and the Gaul where the Phoceans – Greeks coming from Asia Minor – founded the port of Massalia (Marseilles) where they organised the trade of wine.

In the 5th century, Athens was the figurehead of these cities. It was under the leadership of Athens that the Greek city-states formed the Delian League to fight together during the Persian Wars (between – 490 and – 470 B.C.). The Persians arrived on the eastern coast of the Aegean under King Darius I. The food needs in Athens were not entirely met so the city had to get supplies of grapes, cucumbers, figs and honey from its immediate surroundings but grain arrived farther away at the great port of Piraeus. The Black Sea provided the product of its coastal plains but it was Sicily that supplied the largest amounts of agricultural products to Athens as well as other major Greek cities. Sicily's agricultural capacity and its geographic situation placing it at the crossroad of trade flows made it an important granary and garden for a very long time. Navigating the strait was certainly not easy as the myths of Scylla and Charybdis were even created in ancient times. However, being the largest island of the Mediterranean with a surface area of 25,708 kilometres squared, Sicily therefore provided extensive agricultural lands. It is also interesting to note that the island's eponym comes from the contraction of the Greek words *syke* (figs) and *elaia* (olive trees). The lands are abundant but the topography is not the most favourable. In fact, 61% of this land is hilly and 25% is mountainous. In the end, the island has few plains, the most important plain being that of Catania with its 430 kilometres squared, but the rolling hills facilitate the plantation of grain and olive trees.

Sicily is so essential for the supply of Greek cities that it even found itself in the middle of the Peloponnesian wars (between – 431 and – 404 B.C.) between Sparta and Athens that fought over the control of the granary-island. Supported by the Persians, Sparta finally won. Threatened by famine, Athens surrendered in – 404 B.C. Even though he was King of Macedonia, it was Alexander III the Great who avenged Athens and pushed the Persians out of the Mediterranean coasts before submitting them to a great empire. The empire did not last long but some of Alexander's imprints survived his death. Besides the Hellenisation of the eastern part of the basin, he founded Alexandria in – 331 B.C. thus opening Egypt to the Mediterranean and increasing its trade opportunities. Until then, Nilotic societies were all very little turned towards the Mediterranean basin even if some trade exchanges had been developed in a sporadic way.

It was under his successors the Ptolemies, that trade developed between Egypt and the Mediterranean via Alexandria. Many products, especially hazelnuts from the Black Sea, Chios cheese, olive oil, figs and honey, transited through the port of Alexandria. Grain was the most traded product as Egypt had continued to develop its production. During this Ptolemaic period (330 to 30 B.C.), flood recession cropping that had prevailed for centuries and innovations such as the *Saqqia* and the Archimedes (El Faiz, 2004) screw allowed the development of irrigation especially

during the Fayum depression. Located due North, the Island of Rhodes was therefore a very good customer of Egypt to which it provided wine; Athens and other cities also benefited from Nilotic cereals since the grain coming from the Black Sea were less accessible due to the invasions of the Celtic and Scythian tribes on its coasts. It is also important to note that Indian spices were already arriving through a channel running from the Nile Delta to the Red Sea built around 270 B.C. This canal actually connected lakes that have disappeared due to the presence of the Suez Canal. The Indian Ocean and the Mediterranean have been connected through this channel for a long time. Much later, the bypassing through the Cape of Good Hope did not eliminate this possibility.

On the threshold of a new era, the Roman civilisation emerged in another part of the Mediterranean basin. Under the Romans, the Mediterranean became both a unified and dominated empire.

Mare Nostrum or the first integration-domination

Before it was urbanised by the Etruscans as from – 750 B.C., Rome was an Italian city like many others. It started living its own destiny after having expelled its founders in – 504 B.C. In the shadow of brilliant Greece, Italian cities fought against each other for a long time before Rome unified the peninsula between the 6th and the 3rd centuries. Etruria to the north and the southern part where the Greeks had established colonies, were the last to engulfed under roman rule at around – 265 B.C.

The Roman republic innovated in the field of traffic as it gradually developed its influence throughout the territory. Coupled with a thirst for expansion and hegemony over Italy, the will to protect itself from attacks, led the still fragile republic threatened from outside to set up a network of gravel roads and staging posts. Designed by the Censor Appius Claudius Caecus and connecting Rome to Brindisi, then a major port for trade with Greece and the East, the *Via Appia* was the first to be established in – 312 B.C. With a very regular width of 4.1 metres, it was paved with large slabs of curved basalt allowing traffic. It was bordered with dirt roads for pedestrians. Subsequently, other roads enabling faster and easier circulation of market goods and rapid movement of troops were built. The lust for power did not stop at the boundaries of the peninsula. Rome clashed with Carthage, the dominant power in western Mediterranean. *Delenda est Carthago*, was the reason behind the Punic Wars that took place in several episodes from – 264 to – 146 B.C. In – 264, Carthage was defeated and had to yield the island of Sicily, the “first jewel of the imperial crown” according to Cicero. Sicily was a particularly strategic granary for Rome whose population had increased significantly. Thanks to its fleet, Rome finally managed to win over the Carthaginians after more than a century of conflict.

Now that the Carthaginian lock had snapped, Rome gradually spread throughout the Mediterranean and founded an empire during the reign of Octavian in – 27 B.C. who renamed it Augustus. The conquest of Egypt by the Romans three years earlier

was an essential step in the unification of the Mediterranean. The greed for grain coming from the Nile seemed to have been a determining factor in the acquisition of this territory (Abulafia, 2011). With the gradual expansion of the Empire, the Roman administration continued the construction of roads like those that had been established in the peninsula. At its peak under Trajan, the major Roman road network reached about 150,000 kilometres linking the 3 million kilometres squared of the Empire. This network was completed with important harbours and maritime routes that placed the two large Italian harbours of Ostia and Pozzuolo at less than a distance of 20 days away from the most remote ports of Alexandria and Laodicea (the ancient Latakia).

Due to this expansion of road and maritime networks at a large-scale, entire regions specialised in certain products and traded with each other: wine was to be found in Gaul and Hispania, cereals in Numidia, Lebanon, Sardinia, Sicily and Egypt, oil in Africa and Betica, meat products (smoked, saltedTM) in Gaul. In the framework of this trade expansion, the arrival of agricultural products weakened the Peninsula's farmers, obliging them to become settlers on the public lands (public *ager*³) provided by Rome, thus securing the conquest.

The empire was therefore secured – the so-called *pax romana* – by the control of the land but also that of the sea since piracy became a threat. Thus, in – 66 B.C. Pompey set up a system of protection especially around Sicily, North Africa and Sardinia which were what Cicero called the “state granaries”. Land was also offered to pirates. In return they abandoned their actions at sea.

This evocation of the Roman epic therefore illustrates Rome's obvious concern for organising the food supply including the development of an institutional framework that lasted several centuries. Under the Republic, a magistrate could be appointed in times of insecurity. Gaius Gracchus went much further by setting up the agrarian laws in – 123 B.C. in order to help the poor plebeians. The *lex Sempronia frumentaria* planned to distribute a bushel of wheat per month at reduced prices to all the poor citizens. Nevertheless, like the law related to land redistribution encouraged by his brother, this so-considered “clientelist” policy attracted criticism.

Under the Empire, the institutionalisation of food monitoring deepened and led to the appointment of an officer of the *Annona* (name of the goddess of supply). Supervised by this Prefect, the organisation of grain supply continued to develop with the aim of avoiding disruptions. The period of the republic had been able to show that supply disruptions were sources of instability. Thus under the authority of the *Annona* Prefect, the Empire's commodities were transported to Rome by convoys of galleys. After having been transported towards the capital of the empire via the harbours of Ostia on the Tiber or Pozzuoli (near modern Naples), the products were then stored in the city's warehouses (*Horrea*) before being sold, either to bakers in the case of wheat or to other retailers in the case of other products. Prices were free but at the time of Augustus, part of the stored grain was distributed to

3 - Wealthy families had appropriated these lands. This led to land concentration in the second century BCE. The tribune Tiberius Gracchus and then his brother Caius opposed this state of affairs between – 133 and – 121.

the poor. The number of beneficiaries was fixed to 200,000 citizens and this did not change until the end of the empire (Garnsey, 1995). The quantity of wheat distributed for free amounted to 80,000 tonnes per year. In the first century this represented a third of the total annual requirements of the city of Rome⁴.

With the building of Constantinople in the early 4th century, the flow of cereals was gradually changed as the city founded by Constantine mainly consumed wheat coming from Egypt and the Black Sea while Rome obtained wheat from North Africa and Sicily. The fact that wheat crop yields were more variable in North Africa than in Egypt was an additional source of fragility for Rome that was already subject to pressures from the so-called Barbarian peoples since the 3rd century B.C. The conquest of North Africa by the Vandals in 435 B.C. stopped Rome's supply of grain. This was a terrible blow against the city before the collapse of the western Roman Empire. The Mediterranean basin was thus divided between the Barbarians settled in the western Mediterranean (Visigoths in France and in Spain, Vandals in North Africa and Ostrogoths in the Balkans) and the eastern Roman Empire that dominated the eastern Mediterranean including Egypt.

Insecurity and prosperity in a divided Mediterranean

The restoration of a great Roman Empire by Justinian in the 5th century B.C. was only temporary. A century before his death in – 565, the “knights of Islam” coming from the Arabian peninsula took over all North Africa and the Middle Eastern lands except the Byzantine territory. During the first centuries of Islam, the Mediterranean was therefore fractured once again.

With the occupation of the southern shore of the Mediterranean as from the 7th Century B.C., the Egyptian supply of Byzantium was suspended and henceforth wheat was transported to Constantinople via the Danubian region. Constantinople also developed a policy to support smallholder farmers while peasant-farmers (the stratigotes) were sent to cultivate and protect new areas (Carpentier and Lebrun, 2001).

By developing an innovating urban civilisation in the Mediterranean, the Arabs themselves got their supplies from North Africa and Egypt. Even the newly Arab Andalusia partly stocked up on cereals from North Africa. The Arabs who had turned towards Central Asia and the Indian Ocean where they met Chinese merchants, imported products that were hitherto unknown in this Mediterranean geographical region. This was particularly the case of citrus fruits, cotton, rice, the eggplant, the asparagus, the chicory and the sugar cane that broadly expanded the Mediterranean production base.

On the southern shore of the Mediterranean, the Arabs made use of the camel for caravan convoys. Nevertheless, they also had a shipping fleet even if they were more turned towards coastal navigation than sea crossings. Of course, ships still navigated

4 - Flavius (Joseph), *Les Guerres juives*, see Philippe Remacle's website (<http://remacle.org/bloodwolf/historiens/Flajose/guerre1.htm>).

from all around the Mediterranean to Alexandria even well after the Arab conquest: from Seville to the Syrian harbours, the Mediterranean was still sometimes crossed in one go. However, this fleet operated mainly on more limited trajectories: it was active in the eastern Mediterranean that had become a “Muslim lake” in the 9th century B.C., thus benefiting from Sicilian agricultural products taken over from the Byzantines.

This Mediterranean and commercial bipolarity between Byzantines and Arabs – but can we really speak of Arab unity with the rise of the Shiite Fatimids? – was put into question from the second half of the 11th century. Coming from northern Europe, the Normans were particularly good navigators. They arrived in the western Mediterranean and took over Sicily from the Arabs, thus breaking the chain of grain supply that was so important for them.

At the end of the 11th century, another event of major significance took place. Associating Normans and Europeans, the first crusade began before many others that followed until the 13th century. Thus at the east of the basin, the Levant welcomed a Latin presence that facilitated trade with the increasingly successful Italian cities. Genoa, Pisa and Venice prospered by transporting crusaders, pilgrims and goods to the Levant that was transformed into states. Moreover, these cities traded with the Arabs, especially with Saladin whose empire included the hinterland of the Latin States, namely Egypt and Syria. The *Funduq*, a sort of commercial complex dedicated to Italian merchants, developed under his reign (Éddé, 2008).

If they monopolised trade in the East, in the western Mediterranean, these Italian cities shared their domination with Amalfi. After its provisional conquest by the Normans in the 12th century, like Venice, Amalfi had to abandon the advantage of ensuring its trade that was granted by the Byzantines. Since when the Normans invaded Amalfi, the city had to be satisfied with remaining in the Tyrrhenian Sea where it was active in the trade of wine, wool and oil before being taken over by the State of Aragon in the 15th century. Thanks to its Catalan fleet and from the harbour of Barcelona, the State of Aragon aimed to spread its influence in the western Mediterranean.

Having taken over other Italian trading powers such as Pisa and Genoa, Venice was especially dominant throughout the Mediterranean during the 15th century. Well before having reached prosperity, first of all, Venice built its fortune thanks to its lagoon that allowed the collection of salt. The commercial benefits that were then provided by Byzantium and the active participation of the city in the Fourth Crusade enabling the expansion of its influence in the eastern basin, were important steps that contributed to its progression. Nevertheless, Venice was strongly affected by the plague that came from Crimea via the ships transporting grain in 1347. In Europe and in the Mediterranean, more than half of the population had indeed disappeared due to this epidemic. Consequently, the productive potential and trade have also dried up. According to Ibn Khaldoun who had lost his parents and many members of his family, “civilisation both in the East and the West was visited by a destructive plague which devastated nations and caused populations to vanish. It swallowed up many of the good things of civilisation and wiped them out. It overtook the dynasties

at the time of their senility, when they reached the limit of their duration. It lessened their power and curtailed their influence. It weakened their authority. Their situation approached the point of annihilation and dissolution. Civilisation decreased with the decrease of mankind. Cities and buildings were laid waste, roads and way-signs were obliterated, settlements and mansions became empty, dynasties and tribes grew weak. The entire inhabited world changed” (Ibn Khaldoun, 1863, p.130). Despite the fact that it had been greatly affected by this disaster, in the 15th century, Venice was a real *stato da mar* with a myriad of trading posts and island territories including Cyprus and Crete that provided a staging post for its fleet. Until the 16th century, Venetian vessels often entered the ports of Constantinople, the Black Sea, the Levant and Egypt. This fleet allowed a clear development of trade, including food and agriculture, both in the Mediterranean and beyond: thanks to Venetian ships, the Islamic world provided spices from India, exotic fruits, dates and grain from Barbary (North Africa) while it imported olive oil; Byzantium also provided wheat and bought wine; the Ionian Islands and the Peloponnese exported raisins, fruit and oil; engaged in a textile proto-capitalism, the West imported wool and linen. Even if Venice was mainly specialised in ship owning, it still needed to stock up on food products. This is what allowed the development of its trade. Agricultural production was stimulated on some of its conquered territories including Cyprus where wine and oil were transported to Venice.

However, at that time, Venice the Serenissima had to face a new rival. To the East, the Ottomans who were the heirs of the tribe of Osman that had taken over all the Turkish tribes coming from Central Asia, began to expand the power of what was to become a great empire. The capture of Constantinople by Mehmet II in 1453 marked an important turning point in the construction of this Ottoman Empire that grew significantly during the Sultanate of Suleiman the Magnificent. Under the reign of his successor Selim II, to the detriment of Venice, the invasion of Cyprus in 1570 expanded Ottoman influence while securing trade, including that of the grain, in eastern Mediterranean. Indeed, this island struggled against the largest Ottoman harbour of Mersin and during periods of low crop, Cypriot corsairs threatened Turkish boats bringing grain from Egypt.

Therefore, the influence of Venice in the Mediterranean decreased with the Ottoman’s conquest of Cyprus⁵. Moreover, the rise of competing powers seriously harmed its influence. Thus, in recognition of their support against the Holy Roman Empire in a sealed covenant in 1535, the French obtained a regime of capitulations giving them commercial advantages in the Ottoman Empire. Above all, the Mediterranean trade that had so enriched the city of Venice began to decline in the 16th century. The discovery of the new world was still too recent to be considered as an important factor that brought about global changes. Fernand Braudel states that this is partly explained by the progress in land transport, especially thanks to the breeding of milking animals (Braudel, 1985a). However, according to Abulafia, more than being a cause, this was rather a consequence of sea/land overthrow (Abulafia,

5 - However, despite the acquisition of Cyprus, the Ottoman’s expansion towards the West is interrupted by the defeat of Lepanto in 1571. Venice contributes to this battle against Istanbul by participating to the Holy League associating Spain and the Holy Empire.

2011). For this historian, the manifest insecurity in the Mediterranean Sea contributed to the development of land transport and the advances in animal genetics. At the end of the 16th century, the Mediterranean was divided between two naval powers, the Ottomans in the East and in the South of the basin and the Spaniards in the western Mediterranean. Under Ottoman sovereignty, Barbary⁶ corsairs threatened trade. Nonetheless, in his work, Fernand Braudel also explains that if maritime trade declined, grain trade by sea lasted somehow. The animal revolution did not allow the conveying of large tonnages that were required by such trade. On the other hand, neighbouring granaries like Sicily were no longer sufficient. In fact, after taking a long time to regain its former levels after the Black Death, Mediterranean population increased. Braudel also points out that the culture of grain in the West was then challenged by more profitable products such as vines and olive trees.

Thus, during this period of the 16th and 17th centuries, life in the West “is balanced by goods coming from the Levant that was less populated but rich in exportable grains that generally cost less” (Braudel, 1985a, p. 335). However, at the end of the 17th century, having to cope with an increase of its needs, the Ottoman administration banned exports of grain (wheat and rice) from the empire that mainly counted on Egyptian wheat. But the strong demand for grain in Europe resulted in the development of trafficking and smuggling of goods through the port of Alexandria⁷.

Reconfigured shores: Mediterranean trade under control

This bipolarity lasted for two centuries with on the one hand, the Ottoman Empire whose territory was very vast and on the other hand, an emerging but a very contentious Europe. In this context, the Mediterranean remained an insecure corridor especially its western basin where the Ottoman regencies in the Maghreb depended on raids. In the early 19th century, risks kept increasing in the Mediterranean. The French Revolution led to the Napoleonic wars during which France had to face counterrevolutionary coalitions including the great British power. With the aim of weakening the food supply of the Crown, Napoleon decreed a blockade against the British in 1807. So his corsairs temporarily took action in the Mediterranean where they boarded and searched British ships particularly those carrying grain from Egypt. Moreover, Egypt and the eastern Mediterranean region were coveted by these two rival European powers. The Mediterranean was the route to India and soon to become the route that led to oil.

The conquest of Cyprus by the British in 1878 in exchange for their support to the Sultan against the greed of the Russians showed that this western penetration was facilitated by the Ottoman Empire’s increasing difficulties in the 19th century. It is important to remember that this Russian offensive against Istanbul was conducted

6 - During this century, this was the name used to refer to North Africa.

7 - The Ottoman Empire had implemented a series of measures to prevent seizure of ships, including a ban on any vessel loaded with grain leaving an Egyptian harbour without an authorisation from the pacha, the obligation of guarantee for the captian who was insured by the police officer (*sûbâshi*) or the market controller (*muhtasib*), and the obligation for the captain to hand a delivery report to the authorities in Alexandria.

during this century with the aim of protecting, in particular, the transit corridor of its wheat towards the Mediterranean and importing some products (especially oil and wine) that they had become fond of from its riparian countries.

Adding to this Russian pressure, the Sultan had to cope with an economic crisis that had a strong agrarian component: the Ottoman empire's source of income still depended essentially on agricultural taxation since the industrial diversification had not taken place yet (the rejection of the printing press on the pretext that it was potentially sacrilegious had cut the Ottomans from the dissemination of knowledge). Yet, heavy taxation and widespread corruption have led to the abandonment of agricultural land (Landes, 1998). In the 19th century, this economic weakness was accompanied by the territorial losses of the Ottoman Empire resulting from the rise of nationalism in the Balkans. Greece was progressively detached from Egypt under the reign of Viceroy Mohamed Ali (1805-1845) after the British and the French had fought to take control of the country in the early 19th century.

Aware of the potential of its territory and the strategic nature of grain and cotton, the viceroy of Egypt stimulated agriculture in the delta. The British were particularly fond of Egyptian wheat; in fact, they withdrew from Alexandria in 1807 after Mohamed Ali agreed to provide the wheat that they needed in the Mediterranean for their fleet in Malta. This wealth enabled him to finance his struggle against the Mamelukes and buy the necessary support from Istanbul in order to maintain his position in Egypt. Not only he kept his position but he also managed to completely detach his country from the Ottoman Empire. Consequently, the Ottoman Empire lost control over a very important granary.

Under its rule, the first major irrigation works were engaged. They also facilitated the development of long-staple cotton and sugarcane. By forming alliances with Saint-Simonian⁸ engineers arrived in Egypt in 1833, Mohamed Ali managed to carry out major irrigation projects that gradually replaced the traditional flood systems. The pipelines perpendicular to the Nile ensured flooding and flood-recession cropping. Long pipelines parallel to the river that enabled water circulation in an increasingly integrated hydraulic system gradually replaced the perpendicular pipelines. Nevertheless, the first dam built to increase the water levels of the Nile during low flow periods was only envisaged in 1840. It was constructed between 1860 and 1880 in the Delta under the reign of Ismail. Built where the Nile splits in two branches, Rosetta and Damietta, the dam had to increase water levels during dry periods in order to facilitate irrigation. These works were undertaken in a context of an important increase of cotton prices amid Civil War (1860-1866), which reduced American presence in the global market.

After having benefited from these favourable conditions, Egypt enjoyed another opportunity to immerse itself in the heart of trade with Europe. Egypt was a very important producer of commodities. Moreover, the completion of the Suez Canal

⁸ - Saint-Simonianism develops in the Wake of Bonaparte's expedition to Egypt (1798-1801). Apart from soldiers, Bonaparte had brought 167 scientists, engineers and artists. This intellectual flow nurtured the representations of a common Mediterranean, perceived as a kind of nuptial bed between the East and the West. A group of Saint-Simonians arrived in Egypt in 1833 with the economist Barthélemy Enfantin.

in 1869 upon the initiative of the French placed Egypt as an even more essential player in international trade as it became a strategic passageway. However, the collapse of the Egyptian government in 1876, partly due to the decline of the cotton trade, enables London to take control over the canal before controlling political life in Cairo. As in other times of its history, this British rule placed Egypt under the control of a central authority to which it was supposed to provide agricultural raw material. This was also the reason why the British established the first dam of Aswan inaugurated in 1902 in order to control flooding and to develop irrigation. The independence in 1923 was a false one as London maintained its control over a country that detached itself from European tutelage in 1952.

In the Middle East, some territories gradually supply an increasingly radiant Europe. In Palestine where the British have supported the establishment of a Jewish homeland in 1917, Jewish settlers of the Yishuv produced citrus fruit that were exported to Europe. Moreover, Palestinian Arabs produced olive oil-based soap for the European market that particularly transited via the port of Marseilles. Similarly, in the 19th century, influenced by silk manufacturers from Lyon, the then autonomous Ottoman province of Mount Lebanon progressively specialised in the culture of mulberry. This was essential for the production of silkworms.

In the Maghreb, the Ottomans ruled everywhere except in Morocco. The French, the Italians and the Spanish who established protectorates or colonies progressively replaced Ottoman rule. In Algeria, where the presence of the French dated back to 1830, there has been a massive colonisation in the late 19th century. Landless French farmers coming especially from the Alsace-Lorraine region that was annexed by the Germans in 1871 were sent to settle in Algeria. Thus, the number of settlers has increased from 245,000 in 1872 to more than 750,000 in 1914. Land appropriation was facilitated by the Warnier Law (1885), which had obliterated the inalienable character of *arch* land (collective land). This important immigration facilitated the expansion of viticulture, which increased from 20,000 hectares in the early 1880's to more than 200,000 on the eve of World War II (Vallaud, 2009). At the time, colonial lands represented 40% of arable land, often the most suitable for agriculture.

Later, Libya suffered the same fate as it was invaded by Italy after their victory over the Turks in 1912. Likewise, landless farmers from Calabria, Venice and Sicily were sent to the new lands to exploit the region of Cyrene in particular.

Until the Second World War, Mediterranean agricultural trade was therefore South-North oriented. The South produced for a European region that required agricultural raw materials. The number of mouths to feed increased exponentially – a demographic transition was occurring even if the two wars limited its effects – and industrialisation called for the massive use of raw materials such as cotton.

A New Mediterranean

After the Second World War, a new order emerged in the Mediterranean. Egypt gave the signal of the upheavals that were to take place in the Arab World. The revolution in Cairo in 1952 marked a change in the political regime and a detachment

from British rule. The states of the Levant and of the Maghreb were going through a process of decolonisation after several centuries of Ottoman domination followed by French, Italian or British occupation. After the Second World War, there had never been so many sovereign states in the Mediterranean.

These independent states often gave priority to agriculture for food security purposes as a guarantee for their political stability and sovereignty (Blanc, 2012). Major efforts have also been invested in hydraulic development, land reform and support was given to agricultural organisations. Syria, where the Baath Party proposed several pro-agrarian reforms and Egypt, under Nasser, were the models of these land, hydraulic and organisational choices. Nevertheless, this political transition was also accompanied by a demographic transition. Everywhere, the mortality rate dropped sharply while the decline fertility rates was slower. Between the two, the population growth rate increased with rates varying from one country to another (Courbage and Todd, 2007).

Thus, despite the productive efforts, trade balance deteriorated in the southern and eastern Mediterranean countries (except Turkey) even though it was stable in the early 1960s. Europe particularly benefited from this situation as the common agricultural policy supported the agricultural revolution in the northern Mediterranean. The implementation of guaranteed prices brought security to the producers thus encouraging investment, which is a powerful factor of productivity. For the first time in history, the polarity of trade was therefore reversed during the last decades of the 20th century. Agricultural trade became highly asymmetric with the clear predominance of the north. A few decades ago, who would have imagined that North African and Middle Eastern countries would engulf a fifth of the French soft wheat production? (Abis, 2012). Thus, while the South and the East had been important grain suppliers, they had now become increasingly dependant on the North and more broadly on the world.

This entry of non-Mediterranean powers into agricultural trade is another element that should be highlighted. History has certainly showed that the products consumed in the Mediterranean had been imported from Asia, especially by the Arabs or through the shores of the Dead Sea by the Byzantines or the Turks. However, the uniqueness of this trend lies rather in the significant share taken by third countries in Mediterranean trade. Since the early 1950s, American grain rivalled the one coming from Europe. It now rivals the grain coming from Russia and Ukraine while meat rather comes from South America. If the Mediterranean is no longer the world-economy that it has been once, like never before, it serves as a receptacle of influences and trade logic coming from afar.

Today, agricultural trade in the Mediterranean is booming without being hindered by insecurity as history has showed so consistently. Moreover, unlike the past, agricultural trade takes place between sovereign states. In the past, dependency relationships prevailed between leading consumer cities and productive territories that were sometimes far away but under domination. Agricultural trade therefore seems to be “liberated” from these relations of dominance or of subjugation. At the same time, we are witnessing a tariff dismantling. Better yet, this trade takes place today in a

Mediterranean region that is somehow trying to invent a space for cooperation. Although the region is not free of geopolitical tensions, with regards to trade at sea or between the shores, this present time seems to be far away from many long periods marked by domination/capture or by an insurmountable insecurity.

Among various innovations, it is important to point out the technological developments. If the Phoenicians, the Romans and the Venetians, to name just a few, have gained such influence in the Mediterranean, it is clearly because they have introduced major innovations in navigation techniques but also in logistics. Not to mention the past only, the present times are also very rich in technological and organisational advances. Containerisation, multimodal platforms and motorways of the sea are at the heart of a revolution in Mediterranean agricultural trade.

The new direction of flows, the power of the technology deployed, the peaceful nature of trade and above all, the advent of a new and more balanced political framework, at least in terms of a history where domination has prevailed, make this very ancient Mediterranean agricultural trade, a profoundly renewed activity.

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