Introduction

SALINAS OF THE MEDITERRANEAN - PAST AND FUTURES

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Dispersed throughout the coasts of the wider Mediterranean, from the Atlantic Ocean to the Black Sea, salinas are very special places for a variety of reasons: because of the salt they produce, and their historical, cultural and ecological values, as well as for their landscape: special, even extreme, at the edge of earth, sea and air.

Although salt today is considered a trivial product, for many centuries it was an extremely important commodity. In fact, salt has always been an essential element for mankind, first because it is one of man’s physiological requirements and lack of it leads to salt hunger, secondly because it constitutes a major ingredient for seasoning food, and thirdly because of its qualities as a preservative, which have made it a widely used necessity that has influenced all humanity. A fourth reason is because salt has been an indispensable raw material for industry in the 20th century and before. However, to make this substance a series of conditions are required that limit its production to a few areas only, excluding other vast regions. As a result, since the beginning of civilisation, salt production and trade have had a strategic character, comparable to products like gold, silk or spices. In fact, salt has been the white gold of history, with a role similar to that of crude oil today.

To obtain salt in the Mediterranean, different peoples used various techniques: most important was solar evaporation of brine obtained from the sea or inland salt-springs, while salt has also been produced through direct mining of rock salt or ablation of brine (from the sea and salt-springs). Due to the ideal climatic conditions prevailing in the area, with long, warm, and dry summers and favourable etesian winds, the Mediterranean basin is a region where salt exploitation through solar evaporation in coastal areas has been extensively practised for many hundreds of years.

Although self-formed salt is easily produced in the Mediterranean area, to actively produce salt in the basin was not an easy business. This is why the first civilisations in the area, like the Greeks, probably never dealt with what is called salt-making or salina cultivation, being satisfied with the self-formed salt appearing as a natural phenomenon in easily accessible places like seaside rocks, puddles and lagoons. In fact, there are many reasons why the salt-making business was not so easy to carry out in the Mediterranean area: first there has always been a lack of the extensive flat

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1 Etesian (ancient Greek), a term meaning winds blowing once per year, also called meltemia (modern Greek), are the local north winds blowing in the Aegean during the summer months. Such winds exist all over the eastern Mediterranean.
Arabs through Spain and, very likely, by the Ottomans to Crete. First applied in the salinas of Pag, operating under the control of the Byzantine Diadora, and soon afterwards in many Adriatic salinas (e.g. Chioggia and Cervia), the technique passed to the Aegean a few centuries later. The first illustration of this rather sophisticated method was made by the German scholar Agricola in his De re metallica (16th century). By the 17th and 18th centuries almost all major salinas of the Mediterranean operated with the method of successive evaporation ponds.

The method is based on the circulation of brine through successive ponds in which different salts precipitate successively according to their solubility. Improvements over the millennia have diversified several techniques depending on climatic vicissitudes of different geographical areas. For instance, according to the frequency of salt harvesting, salinas may use continuous crystallisation (one harvest per season or less) or periodical (intermittent) crystallisation (several harvests per season, the frequency varying from a few times to every day). Despite the changes over the last century, such as the mechanisation of the Mediterranean salinas, the basic operating principles remain.

Among the hundreds of salinas operating in the Mediterranean since ancient times, only about 170 are recognisable today. Ninety of them are still working, while the rest are inactive or have been converted. Of the 90 active salinas, 77% are located on the northern, European coast, the rest in Turkey, Tunisia, Algeria, Lebanon, Israel, Egypt and Morocco. Their surface may vary from 1 ha to 12,000 ha, with an annual yield of approximately 7 million tons of salt. Most of the salinas operating in the Mediterranean today have been modernised and transformed into large-scale or industrial salinas. Among the few still operating in a fully manual, traditional way, we can distinguish primitive and artisanal salinas, as essential elements of the Mediterranean cultural landscape.

Traditional, as opposed to modern, salt is produced in non-modernised salinas, which may in fact be large-scale ones, like those operating in Greece, Italy and Spain at the beginning of the 20th century. As a general rule, the borderline between traditional and modern in the Mediterranean is just after the Second World War, while in a few countries, like Greece, it may extend as late as the 1960s. Today there are only remnants of this traditional operation, found in a few salinas continuing to operate below capacity in a state of generalised decline and uncertainty. Such salinas are those of Nin and Ston on the Dalmatian coast of Croatia, and to some extent those in Ulcinj, Montenegro.

In addition to its time significance, the term traditional is often used instead of, and even confused with, artisanal. Artisanal is a term related to art, manual work and craftsmanship, concerning the way of working, as opposed to industrial and mechanised. Artisanal salinas can only be small-scale ones, operated manually by one salter at all stages of production. Typical examples of such salinas still operating in the wider Mediterranean are the salinas of Guàrdano in Britanny, those of Slovenia and Portugal, the municipal salina of Pomorie (Bulgaria), the partly working salinas of Koukouri in Mani (Greece), and Cervia and Marsala (Italy), as well as those in Malta. Artisanal salinas share the same basic operating principles as traditional salinas as well as industrial.
Today salinas constitute a threatened landscape in the Mediterranean and in Europe. This is more pronounced for artisanal salinas, because of the small size and manual operation that makes them much less profitable compared to industrial salinas. And as there is no commercial differentiation between industrial and traditional salt, artisanal salinas, with much higher operating costs, have been gradually abandoned during recent decades, with only a few still in operation.

In many parts of the greater Mediterranean region, the clock has been ticking for the re-opening of disused salinas. These rehabilitated salinas are frequently used as demonstration salinas for their past technology and know-how. However, the future of Mediterranean salinas needs more than the mere passion for salinas of the past. In fact, as Mediterranean salinas are limited in size and productivity, they are in practice unable to keep up with the world industrialisation process and to compete with the ongoing globalisation of the salt business. Under these circumstances, and on the assumption that salinas represent more than strictly economic values, the only solution is to preserve their operation by applying an alternative type of protectionism depending on the salina type, to consider the salt produced there exclusively for consumption or to regard it as a “wetland”, therefore as a “green product”; finally to “certify” salinas, the salt-making process and the salt in order to market it under “special labels”.

Looking closer and analysing the situation of today’s Mediterranean salinas, characterised by a high degree of uncertainty even in the case of the large ones, we conclude that it is high time for action. Besides individual salt and salina lovers in the Mediterranean and the Canaries, sometimes united to confront the difficulties of the salt business, as with ALAS, there are important international bodies with an interest in salinas and the European Commission. With their contributions, all the above aims will be certainly easier, and may be feasible.