Coastal salt pans: strengthening the new emerging role of Maltese shore platforms for geo-tourism with GIS Mapping

Ritienne Gauci (1), John A Schembri (1), Raphael Mizzi (1), and Rob Inkpen (2)
(1) University of Malta (ritienne.gauci@um.edu.mt), (2) University of Portsmouth (robert.inkpen@port.ac.uk)

Salt has been a foremost natural resource for millennia with a wide range of uses from preserving edible foods, and cooking with it, to cleaning, laundry, hygiene, and as a medicinal balm. The Mediterranean, with its long indented coastline, numerous islands and a distinctive climate has been a favourable area for salt production from sea water. It was the source of supply of salt to the Eurasian land mass, and trekking it through to sub-Saharan Africa. With a salinity of around 36 ppt, the Mediterranean is one of the most productive areas in the globe for salt yield per volume of water.

In small islands with poor natural resources, the production of salt from sea water, through insolation, aeolian processes and intense human endeavour, offered economic benefits and created a socio-environmental cultural heritage around the sites of production of this staple resource. The Maltese Islands are no exception to this activity with rectangular or oblong pans etched on the softer surface limestone of Malta and Gozo. Located strategically on the foreshore, the rectangular (0.5-1.5 m$^2$), shallow pits (ca 15cm), supplemented by larger reservoirs occupy significant areas as near to the shoreline as possible. There are about 40 artisanal sites along the littoral varying in area from one thousand to 17,000 m$^2$ and with their nearest point located between one and ten metres from the water’s edge. Some are no longer in use. Their total area around the islands is about 170,000 m$^2$.

This aim of this paper is to explore the multiple geographies of still existing salt pans in selected sites on Malta. This research aims to map out the traditional but complex management system present at each selected shore platform site, some of which are considered the best preserved salt pans on the Islands. Consequently, they transform into focal touristic attractions, especially during the summer months when a daily display of soil harvesting work can be witnessed and admired. The mapping and management analysis aims to highlight the unique industrial setting behind this industry and provide additional impetus to geo-tourism support and geo-heritage conservation status.

Keywords: salt pans, shore platform, GIS, geo-tourism, Maltese Islands.