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Anthropic pressures on Egadi Islands

The Egadi Islands are three main islands off the western coast of Sicily, close to Trapani and Marsala: Favignana, Levanzo and Marettimo. There are also two minor islands, Formica and Maraone, lying between Levanzo and Sicily. Favignana and Levanzo are closest to the coast (16 and 13 km), whereas Marettimo is located 24 kilometers far from it.

The largest island in the archipelago is Favignana, with a land area of 19.8 square kilometres.

The Egadi Islands, like most Mediterranean islets, have radically changed the traditional lifestyle and the economic development model, based for centuries on the almost self-sufficient resources and production activities, mostly related to the sea (fishing and fish processing) and to the land.

During the second half of the 1900s, the development of transport radically transformed this model to make smaller islands, at least those closest to the coast, more tightly interconnected and dependent on the mainland. This change is both in terms of material resources, now mostly coming from the outside, and of human resources. In fact, this situation has given rise to daily and seasonal commuting to and from the islands that is likely to contribute to the depopulation in wintertime, with a serious impact on the care of the land.

From the economic point of view, however, instead of the traditional activities tourism has been increasingly developing and so have all the activities associated to it (e.g., the construction and maintenance

of holiday accommodations). Nevertheless, particularly in the case of Favignana, which is the most populous island and very close to the coast, such activities have led to a strong anthropic pressure concentrated in a few months of the year (summer) on the one hand, and a reduction of the resident population during the winter months on the other.

These two negative phenomena are strictly interconnected and should therefore be contrasted with appropriate policies aimed at the seasonal adjustment of tourist flows.

Use and occupation of the territory - The depopulation

Land use in the three major islands of the Egadi archipelago is different. Favignana is the most populated island, hosting the largest number of resident people (about 75%) and tourists, where most of the productive activities in the area take place.

For this reason, unlike Levanzo and Marettimo – where settlements have largely developed within the historic center – Favignana has recently developed tourist resorts (e.g., holiday homes, accommodation, villages/camping areas), being its historical settlements located outside the historic center and mainly linked to mining and farming activities.

The depopulation of marginal areas, and of small islands in particular, is one of the most important issues also from the environmental point of view. Actually, the population drain leads to the degradation of territories and the loss of their cultural

identity, often characterized by unique traditions.

Therefore it is important finding a balance between tourism and resident population, which encourages local job thus avoiding depopulation and the invasive use of natural resources that may seriously affect their integrity.

Unfortunately, the number of residents have suffered a significant decrease over the last few decades: data available from 1971 to now show a steady reduction until 2001 and an arrest of this trend from 2001 onwards (Figure 1).

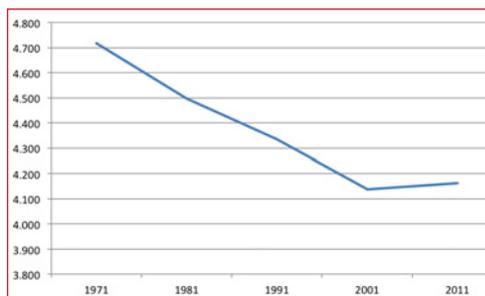


FIGURE 1 Demographic trends 1971-2011
Source: Urbistat, 2011

Since 2001, albeit with some fluctuations, this trend has essentially stopped.

Another worrying phenomenon is the aging of population. The old age index -i.e., $(\text{Population} > 65 \text{ years} / \text{Population} 0-14 \text{ years}) * 100$ - in 2011 in Favignana was 295.07, a figure much higher than both the average value of 144.5 scored in Italy in 2011 (source: Tuttitalia.it ISTAT data) and, on average, the values reported for southern Italy, that are lower than those of the center-north.

These data lead us to reflect on the aging of population, which could cause a gradual depopulation of the islands despite the considerable presence of production activities related to tourism.

However, the seasonal nature of most of these activities produces phenomena of temporary residence. Indeed, except for the summer months, during the rest of the year the opportunity to work in the islands is very limited.

This has gradually produced a process of emigration, which contributed to the aging of population along with the fact that a large amount of Favignana residents spends most of the year elsewhere, also because of the reckless general rise of prices associated to tourism, heavily impacting on the budgets of the islanders' families.

Depopulation and aging have mostly been affected by the phenomenon of disappearance of traditional activities, such as tuna killings ("mattanze") and the extraction of material from clay pits, in addition to farming and agriculture. Moreover, in the past, the identity and economy of Favignana were tied to Florio's family through the Florio factory (the second industrial structure born in Italy after Fiat), which employed thousands of people in the island and was dedicated to the entire production chain for tuna products. These activities could completely cover the islanders' job demand also attracting labourers from outside to reach the 10,000 permanent residents only in Favignana.

Tourist-driven pressures

The three major Egadi islands are faced with all the typical problems of restricted and isolated areas. To these are added those resulting from pressure on the environment by services arising from the summer tourist flow when, in August, the only island of Favignana is home to about 60,000 people daily, compared to a resident population of about 4,500 people. These numbers are especially



related to the proximity of the islands to the coast with a tourist flow, often only daily, from the centers of Trapani, Marsala and Palermo.

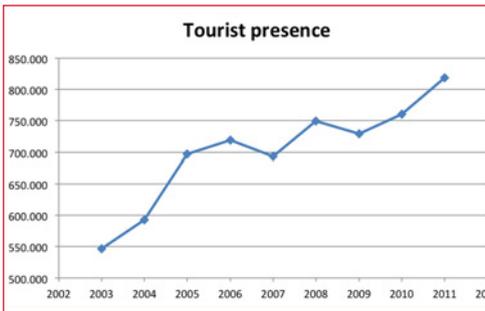


FIGURE 2 Tourist presence 2003-2011

The city of Favignana has had a strong growth in tourism over the past decades (Figure 2). Consider that it has gone from 23 years in the sector “hotel-restaurants” (with 33 employees) in 1971 to 81 stores and 364 employees in 2012 for the same sector. The tourist flow in the Municipality of Favignana is concentrated in a few months of the year, causing great pressure on the environment. The main form of hospitality that has been developed on the three islands, especially in recent years, is in private homes given for rent in the whole season summer (only in Favignana there are about 1,600 dwellings used especially for seasonal stays, bot by the owners of the houses and by seasonal tourists).

This kind of hospitality is particularly developed in Levanzo and Marettimo, which have a limited number of residences or hotels. The recent “Report on Tourism in the Province of Trapani period 2012-2013” of the Province of Trapani also reports the data of 2011 and estimates for 2012, highlighting the growth of tourism that seems enhanced in the following years (2013 and early 2014). This growth is

particularly significant in terms of arrivals (+7% in 2009-2012) and much less in terms of attendance (only 0.8% increase over the same period) because of a reduction of the average stay (which decreased by 5.8% in the period 2009-2012). The presence of foreigners has increased by 48.9% in terms of arrivals and 45.7% in terms of attendance, and has compensated for the decrease of Italian tourists in terms of attendance (-2% between 2009 and 2012). As already stated elsewhere above, the primary concern of local tourism is related to the high concentration of flows, as shown in the graph (Figure 3).

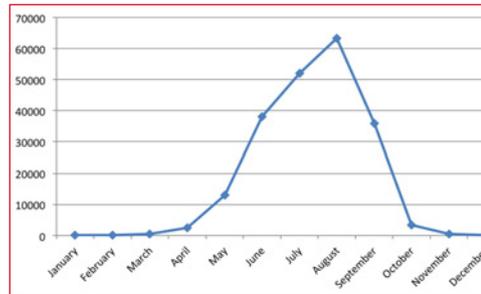


FIGURE 3 Data tourist arrivals in 2013 (ENEA processing data APT Trapani)

This concentration exerts the strongest tourist-related pressures on the environment (waste, water consumption, waste water, traffic, etc.) and promotes depopulation. Exacerbated by territorial discontinuity which involves a huge increase in marine traffic, especially in the case of Favignana and Levanzo (closer to the coast), the tourist impact is worsened by the presence of numerous boats that come daily from cities and seaside resorts nearby with heavy consequences affecting a sea of extraordinary merit but also highly vulnerable, that is rightly protected by the presence of the largest marine protected area in Europe ever.