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WINERIES AND AGRITOURISTIC FARMS FOR SUSTAINABLE DEVELOPMENT OF THE TERRITORY OF THE AEOLIAN ISLANDS

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Abstract

The research examines the production and environmental characteristics of the wine producing chain that represent the territorial system of the Aeolian Islands. The aim is to analyze the functional integration between production and agricultural landscape and to suggest some actions for the protection of the area. The research has provided a supply of a questionnaire of knowing several information: general, socio-economic and structural data of farms and entrepreneurs. The Aeolian Islands are a remarkable union between nature, art, traditions that can be exploited in an environmentally sustainable way, avoiding crossing the threshold of the carrying capacity and determining negative externalities that are detrimental to the socio-economic environment.

Key words: *Wine Growing, Agritourism, Insulation, Rural Development*

Introduction

The Aeolian archipelago, located inside the Calabro-Peloritano arc, consists of seven main islands for a total area of 117 km²: Alicudi Filicudi, Stromboli, Panarea, Vulcano, Lipari and Salina. The key feature is that the territory of the Aeolian Islands is strongly characterized by an intense volcanic activity that has affected environmental components and evolution of morphological, social and economic life during the times (Fichera et al, 2006).

The charming coast of black sand, the predominantly vine cultivated fields and forests, the unique natural features, the typical Mediterranean climate and human settlements, all these components create a mixture of natural and agricultural highly distinctive landscape.

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According to data given by ISTAT Census of Agriculture, Aeolian wine production is concentrated in the town of Lipari that with its 508 farms and its 137.04 hectares of planted area represents 62.82% of the total. This predominance of extension does not reflect a greater propensity to productions of excellence such as DOC² wines which are concentrated in the territories of municipalities in the island of Salina: Leni, Malfa and Santa Maria Salina (Nicolosi et al, 2008).

The geographical limits from the isolation are the basis of economic and social hard conditions that determine particularly detrimental situations for local businesses that have to operate in environments characterized by isolation of markets, low competitiveness, reduction of human capital, high/absolute dependence on imports and close ties to foreign investment or state aid.

The presence of these elements causes certain conditions in the economic and social analysis of the islands (Manenti et al. 2005) and in the formulation of appropriate policies for their development. In such contexts, tourism plays a crucial role in the economy of the islands. Being the only viable economy, it generates a vicious circle in relation to other local activities that become simple additional activities to the main one. The islands are subject to considerable seasonal problems related to the influx of tourism, with difficulties in the supply of basic resources and inability to distribute excess cash flows in other areas. Accessibility issues may lead to phenomena of dependence on national and international markets, especially respect to catchment areas and transport, often determining a prominent reduction in benefits on a local scale and a reduction in the added value in favor of foreign investors and intermediaries. Moreover, on the balance of the ecosystem of the Aeolian Islands it's added the pressure of mass tourism that is particularly strong in number and characteristics at particular times of the year.

The Aeolian archipelago is recognized as UNESCO, which in World Heritage Site Management Plan emphasizes the importance of a better use of natural resources, systems related to ecotourism (identified in the agritourism, wine tourism, fish tourism and rural tourism), together with the improvement of the quality and image of agricultural products made in the area, including the strengthening of quality assurance systems.

It has been shown that in a context of islands the predominant forms of business are made up by production units with a very small economic and mostly characterized by single activities directly conducted by individuals (Ruggieri, 2006).

This production structure, while allowing greater flexibility in dealing with market changes, causes a number of weaknesses related to characteristics of the reduced availability of financial resources, lack of access to the credit and the inability to implement economies of scale and scope. These issues should be added to the reluctance of entrepreneurs to participate in associations.

It's connected to the structural problems of the system of farms in the islands the cost of insularity (EURISLES, 2002), defined as the set of economic disadvantages that the units in the islands suffer due to higher-cost imports. It concerns the cost of transporting goods and people and domestic cost of production processes of goods and

2 Denominazione di origine controllata ("Controlled Designation of Origin").

services, including distribution costs.

In particular, the internal cost of production of goods and services of the island is influenced by a number of factors that contribute in large part in determining the cost of insularity. Among the most common:

- a) the weak size of domestic markets;
- b) the transport costs related to certain export transactions;
- c) the small size of the region;
- d) the high cost of agricultural plots competing to tourist resorts;
- e) the lack of available manpower for agricultural or industrial activities;
- f) the lack of convertible capital for productive investments;
- g) the incomes from estate or commercial area.

All of these factors is related to the degree of insularity of the studied area, its ability to produce tourist services and social structures. In several islands the dominance of certain sectors like tourism has the effect of the sharp decline of traditional production practices and particularly of the agriculture. This situation is not without consequences on the environment.

Methodology

This study aims to analyze the functional interactions that exist in the socio-economic system between wine production and agritourism. Considering the state of abandonment of agriculture production and the fragile ecosystem of the Aeolian territory, rural tourism, fish tourism, wine tourism, etc. represent the right balance between the natural and productive environment, influx of tourism, while ensuring respect for the environment overwhelmed by pressure from tourism, and the recovery of the historical-production, consisting of the traditional manufacturing companies, which alternatively could be converted into facilities enslaved to the touristic system. In particular it has been analyzed the ability of the wine sector to attract new economic flows generated by the impressive number of tourists that has being characterizing for many years the Aeolian area, by offering products and services suitable for securing additional supplementary income for farmers.

The research has provided as a first step the identification of socio-economic characteristics of the farm wineries in the area of the examination order to identify the main productive realities that characterize the area of the Aeolian Islands.

Based on the information obtained was prepared a questionnaire to identify the general and socio-economic characteristics of the farm wineries and agritouristic activities that may develop in them.

The questionnaire used in the surveys has provided the following information: general, socio-economic and structural data of farms and entrepreneurs.

The analysis was performed on the territorial system as a function of several variables that are closely interlinked:

1. Historic-cultural dimension: the location of the Aeolian Islands that focuses on the routes between Sicily and Naples has provided a long history;

2. Landscape dimension: the insularity and the volcanic nature has influenced the land and its inhabitants; the presence of the vineyards has affected the spatial and structural components of the islands, and also the rural architecture for the presence of typical structures for the dehydration of grapes ("cannucciati") prior to the next stage of crushing; even the sea is an important element of the landscape of the Aeolian Islands and represents an economic resource, based on fishing and related activities. The landscape consists of signs and of marine structures that have influenced the local cultural identity and strengthen the economic structure;
3. Touristic and rural touristic dimension: the most important economic sector which led to radical changes by projecting the Aeolian Islands in the international scene;
4. Food and wine dimension: the Aeolian production (Malvasia, Salina wine and capers) are known and appreciated throughout the world.

The survey was conducted during the agricultural years 2008/09 and 2009/2010. The companies identified were 12, distributed between the municipalities of the Aeolian archipelago. Particularly interesting are the companies that use its production facilities to provide holiday accommodation (Table 1).

Among the 12 companies identified during the investigation, it's produced Malvasia DOC wine, "IGT³ Salina" (white and red) "Grappa di Malvasia, loose wine, capers, extra virgin olive oil, jams, preserves and various desserts.

The research aimed to highlight in particular the agritouristic and scenic role of vineyards in the Aeolian municipalities.

Table 1 – Farm wineries interviewed in the archipelago of the Aeolian Islands (2008-10)

Municipalities	N. of interwied farms	N. of interwied farms					Agritourism activities and/or hospitality in the farms
		Type of wine		Other productions			
		Malvasia DOC	Salina IGT *	Grappa di Malvasia	Capers**	Extra virgin olive oil	
Malfa	5	4	3	4	5	-	2
Leni	3	3	3	1	3	2	3
Lipari	4	-	1	-	3	2	3
Totale	12	7	7	5	11	4	8

³"Vino Salina IGT" white and/or red
^{**} Production of capers, cucunci and derivatives (caper sauce, etc.)

Considering the great importance of wine production in the 'typification' of the territory and the Aeolian and the great economic power resulting from a careful use of land resources of the islands in relation to the provision of eco-sustainable

3 Indicazione Geografica Tipica (Typical Geographical Indication).

hospitality services, it is possible to identify some important keys to restoring the local landscape system in the policies aimed at recovering the production of degraded areas and abandoned land.

Main results

The farms conductors interviewed during the research work have an average age of 49 years, a good level of preparation (the 58.34% of them have a diploma of higher secondary school graduation and 33.33). They are predominantly male (75%) and work in farms with a total farm area ranging from a minimum of 3 ha up to a maximum of 14 ha. The vineyards have an area ranging from less than 1 ha to 10 ha and are located at an altitude ranging between 50 and 600 m.a.s.l., with a clear majority, almost 85% in the range 0-400 m.a.s.l. in areas with environmental restrictions (SIC areas or SPAs) or, in the Island of Salina, in pre-reserve areas. The Aeolian Islands continue to attract tourists that from simple visitors are now residents, have purchased homes or have initiated or taken over economic activities, thus introducing into the economic territory of the Aeolian archipelago. This phenomenon has also occurred in agriculture and wine sector and 25% of respondents are not resident in the archipelago.

In 67% of cases farms are owned, while 17% are rented, and in the remaining cases are either owned or rented.

The production is certified organic and produced in 50% of cases.

Particularly interesting is the weight of family farm income on revenue that is marginally in 41.67% of companies, and represents almost all of the family income in 25% of the cases examined.

The production of Malvasia D.O.C. is present in 7 of interviewed farms, and in the range between 11 and 60 hl. It is bottled in 500-ml size and mini-bottles of 375 ml, with a sale price in the company ranging from a minimum of € 16.00 - € 18.00 per liter (8.00 € - 9.00 € a 500 ml bottle) to a maximum of € 90.00 per liter (€ 45.00 per bottle of 500 ml), and an average between € 20.00 and € 30.00 per liter.

The production of white Salina wine and Salina Rosso IGT (7 companies among those interviewed) is even in most of the cases about 25 hl. It is bottled in 750-ml size, with a sale price in the company ranging from a minimum of € 6.70 per liter (5.00 € per 750 ml bottle), up to a maximum of € 35.70 per liter (€ 26.00 per bottle of 750 ml), and an average between € 7.00 and € 10.00 per liter.

The commercialization methods are divided mainly into two types: direct sales in farms and intermediation (the farm is supported by other farms or other service companies for the sale of all or part of its production). Most of the companies has its own website where you can buy their products without any intermediary, with a rather cheap price.

The intermediation is the methodology for the commercialization of medium or large farms, characterized by high production. In this case, almost the entire production is sold to distribution companies that are able to make the product known to a number of potential customers such as wine bars or restaurants, and in the last period there is a growing interest in these products by large-scale distribution, that in the coming years

will be an increasingly growing share of sales.

Wine production is located in 40% of cases in the local market, 20% in the national and international markets, while the remaining 40% in local, national and international markets. The international market share (which varies from a minimum of 10% to a maximum of 50%) is primarily concerned with the Malvasia (+15% in recent years), with requests coming mainly from England, Japan, Northern Europe and the United States.

In the examined area 66.6% of farms offer tourist accommodation in real agritouristic farms (5 cases) or through forms of hospitality in the company (3 cases). The agritourism activity is conducted primarily through the rental of apartments and/or bedrooms. The availability of beds is between 11-20 (60% of cases) and 1-10 (40%). All the companies offer a family restaurant (no staff outside the family farm) with an availability of 30 to over 60 places.

Farms conductors have focused primarily services related in some way to food production business, according to a farm idea to be inclined to commercial exploitation of products: the opening of a restaurant in the company (in all surveyed farms) with a store (80% of companies) where the farms own productions and more are sell.

The essential services are to ensure all farms in drinkable water and electricity. In addition, in 2 companies are present structures of green building (solar panels for hot water to cut the cost of electricity using solar energy).

As for the booking service, it's dominant the direct sales by telephone, assisted by booking through email or through web site (present in all farms). The websites are exploited mainly for farms promotion, while it is totally absent the promotion through television and radio, including local stations.

This phenomenon will surely increase with the evolution and improvement in the use of information technology and electronic commerce; indeed many companies are using this electronic tool not only for reservations but also for advertising because it allows to reach a substantial number of potential hosts in a massive and widespread way, so much to undermine the typical kinds of reservations such as associations and tourism office.

Guests are of national origin (from 50% to 65%), regional (10% to 40%), foreign (from 20% to 30%); the share from foreign countries is growing and usually come from Germany, France, Holland and Belgium, although in recent years are appearing in the Aeolian farmhouse landscape (perhaps attracted by the increasing publicity of the places and local products) the Japanese and Russians, who snubbed this type of accommodation until a few years ago.

The agritouristic guides are widely used, so that all companies are present in at least one guide: Agritourist, Turismo Verde, Terra Nostra.

Conclusions

The work shows a changing situation. The area is characterized by a strong pulverization and by a strict land market for the overvalue that doesn't encourage the land consolidation. The remarkable costs of land improvement interventions are really important, linked with the insularity and the constraints placed on the whole territory recognized as a World Heritage Site.

In some sites of the aeolian territory, as those of Lipari, farming is losing an important economic value, while in other site, as Salina, the agricultural activity is strongly present. It's possible to find out two important aspect on which the aeolian economy can operate: from a side the high quality wine production activity (Malvasia D.O.C. wine and Salina I.G.T. wine), in the other side the rural tourism and the agritourism. These two aspects can join, whereas the spread of the wine-tourism.

As for the farm wineries, most of them are well under way, known on the market for the quality of their products, included in the wine road "Malvasia delle Lipari" of the province of Messina, some as early as the second generation.

The fragmentation of productive structure makes it difficult to offer competitive dynamics, with the difficulties associated with the cultivation of small plots of land far away from each other and with distribution and transport problems.

Diversification of productive activities through the exploitation of tourism in the Aeolian archipelago is a useful tool for the survival of manufacturing companies. At the same time those features of typicality of aeolian agriculture should be enhanced, in association with the farm's direct selling of products, which is often the only used commercial channel. The young age of entrepreneurs is also something that makes think positive about the possibility of adopting new technologies to make the production better and more modern, such as the choice of better cultivars in dependence of the area characteristics or the most modern methods of wine production and distribution, or by using marketing strategies able to make your product knew and then establish itself in new markets.

Literature

1. Istat V Censimento generale dell'Agricoltura (2001)
2. Piano di Gestione UNESCO Isole Eolie
3. Eurisles, commissione europea delle isole (2002): A Largo dall'Europa e le problematiche insulari
4. Fichera C., Barreca F, Modica G (2006): Indicatori e modelli per lo sviluppo sostenibile del territorio e la valorizzazione del paesaggio. Ambito delle piccole isole: arcipelago delle Eolie, PROFILO ITALIA. Indicatori e modelli per lo sviluppo sostenibile del territorio e la valorizzazione del paesaggio - a cura di Mennella V.G.G., ali&no, Perugia (ITA), pp. 241-272

5. Manente M., Montaguti F. (2005): Economic Impact on Small Europeans Islands Discussion paper presented in occasion of Insuleur Forum on Towards a Sustainable and Quality Tourism in the European Islands, Palermo, 9 October, 2005
6. Ruggieri G. (2006): Size and role of micro-enterprises in the major EU islands, Discussion Paper presented at 6ème Forum Insuleur , Basse-Terre 2006
7. Nicolosi A., Tromby F., Cortese L. (2008): La filiera viticola nella valorizzazione delle risorse paesistico-culturali delle Isole Eolie atti IV Convegno annuale AISSA, Imola 26-28 novembre 2008