PEASANT AGRICULTURE AND PART-TIME FARMING: USE OF RESOURCES AND LANDSCAPE EFFECTS IN A RURAL AREA OF SOUTHERN ITALY

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1. INTRODUCTION

The analysis of the factors influencing the decisions of the economic operators that use the territory as a fundamental resource, seems a good point to start for any study finalized to understand the dynamics of the landscape.

In the rural areas, where the agriculture still has a prevalent role in economic terms, big responsibility in maintaining the landscape is attributed to the "farmers." It becomes fundamental, therefore, to know the main variables able to condition the choices operated by these figures in terms of land use and utilization of the territory in general.

The name "farmers", in reality, defines a series of relationships between management and ownership of the resources, which could have great importance in the studies on the preservation of the environment.

In the U.E., during the last decades, these relationships have changed, carrying out the consolidation of two main types of farm organization: the capitalistic farms and the family-farms.

As it is known, the first is a farm managed very much as a typical industrial firm, where the entrepreneur buy on the market all the necessary inputs (included the land or the use of it) and sell all the economic outputs.

These farms, that represent a very small part of the total European farms, usually manage large amount of land and their behaviour is guided by the maximization of farm profit.

The prevailing form of farm organization in Europe and in many countries all around the world is, instead, a typical family-farm, which, very often, owns the land where the family components mainly work into the farm or, non rarely, outside.

Among the family-farms we can distinguish (cfr. Ellis, 1992) a peasant farm and a more modern family-farm, also called part-time family-farm or pluri-active family-farm. The latest is completely integrated in the inputs and outputs markets, especially in the labour market, where it participate as supplier and as demander.

Many family-farms belonging to this typology, in fact, have components working in other sectors, while the agricultural activity represents just income integration. On the contrary, the traditional peasant farm is a family-farm only partially integrated in the markets. In this case the decision to work only into the farm depends both by the characteristics of the family components (age, sex, education level, etc.) and by labour market condition (demand side). The small dimension

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and the low quantity of capital per work-units typically associated to the peasant farm, strongly influence its productive choices, pushing them to intensive cropping system and labour intensive activities. The family-farms completely integrated in the market usually adopt cropping system characterized by intensive use of capital and more extensive use of labour. These two prevailing forms are in a kind of dynamic equilibrium, influenced by the economic and demographic characteristics of the family and, above all, by the characteristics of the context, i.e. by the possibilities, for the members of the family, to find occupation in the local labour market. Considering only the family-farms, that represent by far the most important form of farm organization in Italy, the objective of the study is to verify which form of management is more sensitive to the rural landscape and to the environmental problems in general. In particular the study attempts to clarify if the new forms of farm organization, that take place of the traditional peasant farms, are more or less sensitive to the rural landscape respect to the former.

2. The study area
The study has been conducted in Basilicata, a small region of Southern Italy, in an area about 1,700 km², representing the 20% of the regional territory. This area has been interested by many research activities financed by the Environment Division of the U.E. (DGXI). This area can easily divided in three homogenous sub-areas, both from a physical-environmental and agronomic point of view, and from a socio-economic and demographic characteristics one, as well as the production activity performed: coming from the mountain to the see the upper, the middle and lower valley. According to the last Population Census (1991) the number of resident units in the area was about 100,000. In the last forty years the population of the area as a whole was almost constant, but the dynamics of the three areas has been very different. In fact, residents have decreased in the middle valley bringing the population to 32 per km², while they have increased in the lower valley up to 72 per km², even though these values remain much less than the Italian value (190). The most important factor determining this pattern is the migration phenomenon which has interested the total area. Both intra-Bacin, from middle and upper valley to lower, and extra-regional movements have contributed to create the present situation. Many municipalities, in fact, have reduced their population by half it was forty years ago, and some others doubled their residents. An other consequence of these population movements, is the demographic fragility and impoverishment that is very serious for a large part of the study area. Taking as an example the elderly index, calculated as the ratio between the resident population over 65 years old and the population under 6 years old, we can find many villages made up only by old pensioned people (see figure 1). In fact, this index goes from an extreme of more than 1.000 to less than 100 in the lower valley. The economic fragility of the area is also confirmed by the fact that the primary sector absorbs around one third of the total working population, value decidedly remarkable and four times higher than the correspondent national value. The most substantial fraction of the active population (43%) works in the services, that for the area mean public servants. The last General Agricultural Census (1990) identifies 15,520 farms, which were almost as much as ten years before. These farms conduct 173,300 hectares of cropping area, with an average size of 11 hectares. The distribution of land by size illustrates a typical poor agriculture structure: in fact the two third of the farmers manage farms having an average size around 2.5 hectares. It emerges, in this way, a reality marked by a depth structural dualism that has not showed any change in the course of the last fifty years and no intervention of Agricultural Policy has succeeded to modify. The farms less than two hectares represent, however, an important element of the area as well as for many other places in Italy. They represent the demonstration of both an inverted exodus that for many years has induced the people to prefer the rural areas to the urban areas and cultural heritage on the posses of land. The

(1) Among the others: Medalus and Medimont projects.
(2) The phenomenon, for its evident implication on economic, social an environmental conditions, needs much more attention and would require a specific study.

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Figure 1 - The elderly index for the study area in 1991.
quality of the resources, both environmental and human, available in this area allows, almost exclusively, a marginal traditional agriculture. Agri-environmental conditions are such that the safeguard of the landscape strictly coincides with the maintenance of the agricultural activity. In fact, the zone has a delicate environmental equilibrium, almost deprived of natural vegetation, where the presence of the man causes positive effects on the landscape when the use of the resources is rather extensive. On the contrary, a too much intensive use of the resources that in this area coincides with grain cultivation translates in negative effects on the environment and on the landscape.

3. DATA AND METHODOLOGY

Since the available data from the official statistic are not sufficient to answer the objective of the study, it has been essential to collect information directly by the family-farms. A representative sample of family-farms has been selected. From the total, for the reasons above mentioned, the farms that have total agricultural land less than 2 hectares have not been considered. Since the limited variability of the population regards to the structural parameters of the farms and regards the demographic characteristics of the families, from the statistical point of view can be considered sufficient a sample dimension of 1.5-2% of the whole population. The sample, randomly selected, is constituted by 154 family-farms.

The agricultural land, managed by the farm directly inquired, usually dry, destined for the 70% to cereal production, while pasture and arboreal crops utilize the rest of land. The arboreal crops more representative are olive-trees, vineyard and citrus. Therefore crops that can be considered fundamental to safeguard the landscape of that area and the environment interest less than 50% of the whole sampled agricultural land. More than half of the inquired family-farms practices goats, sheep and cattle breeding. As for the total farm population the farmers of the sample are prevalently male, of middle age to around 50 years, with a level of formal school of 7 years and their families have usually 4 components. The family-farms of the sample have been then grouped in homogeneous groups, using the technique of the cluster analysis. In order to classify the family-farms the variables that define the relationships between labour, management and ownership of the land, have been chosen as discriminating variables. The procedure identifies rather clearly two typologies of prevailing family-farms in the study area: the typical peasant family farm and the family farm that we can define not peasant. The first family typology, in fact, is little integrated in the labour market and lives prevalently in the farm. The second, instead, is tightly connected to the labour market from both sides: as supplier and as hired. The farm, in fact, hire labour for agricultural activity and sell part of the own labour force in other sectors.

4. ANALYSIS OF THE RESULTS

The first analysis on the two groups of farms shows results according to which the family-farms not peasant have made a better adhesion, in terms of total land involved, to the agri-environmental measures (Regg. CEE 2078/92(1) and 2080/92(2)). The apparent anomaly of this result resides on the fact that does not confirm the role, for a long time accredited only to the peasant family-farm as unique type of farm organization that takes care and safeguard the rural landscape. The coincidence between farm center and house of the family as well as the presence of labour surplus respect to the farm needs that can be used in “maintenance” of the territory, have always considered the peasant farm as having an effect on the rural landscape. It seems reasonable, interpreting this result as a better information available to the family that is integrated and works in other sectors. At the same time this result came also from the mostly extensive character of the agriculture operated by this type of farms that better fit their needs. It is resulted, therefore, obvious to investigate on the possibility that other elements should influence the farm decisions regards to the management of the territory. A retrospective analysis, of historical farm behaviour (averages of the last years) on land use by the two farm typologies has been performed. This also to assess the attitude towards the landscape not only as regards the new tendencies emerged in the last years, but as usually behaviour characterizing the agricultural activity of these farms. To such purpose, for each farm, a specific index has been elaborated: LCI (Landscape crop index). This index is constructed as ratio between the land destined to crops whose cultivation causes positive effects on the environment and on the rural landscape and the total farm land:

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LCI = \frac{\text{Woodland} + \text{meadows and pasture land} + \text{+ olive trees}}{\text{total agricultural land}}
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(1) The Reg. 2078 constitutes a form of voluntary and conditioned support in base to which the producers sell some rights on the custom of the natural resources in change of a compensation for a lack of income. Measures of Reg. CE 2078/92:
A) Sensitive reduction of chemicals and fertilizers, maintenance of the reductions already effected, introduction of the methods of organic agriculture;
B) Promoting or maintenance of the extensive production already on its way;
C) Reduction of the density of the bovine and ovine per hectare;
D) Employs of other echo-compatible methods, care of the rural space and of the landscape, breeding of animal kind in by of extinction;
E) Care of the agricultural and forests land abandoned;
F) Long stay (20 years) Set-aside;
G) Correct management of the land for public and recreational use.

(2) The Reg. CEE 2080/92 promotes: A Re-forestation of agricultural lands; B improvement of the forest existing patrimony.
This index includes values from zero (maximum negative effect) to one (maximum positive effect).
The unequivocal landscape value, beyond the advantages caused on the stability of the soil has brought to include the wood, the pastures and the permanent meadows between the land use having a positive effect. The vineyards and the olives trees have considered, instead, because they are the most typical expression of the Mediterranean landscape and because their cultivation causes a low impact on the land.

It is possible to compare, then looking the LCI index farm behaviours respectful of the landscape and of the environment in both the homogeneous groups of family-farms. The index shown a mean value equal to 0.3 for both groups. This result, therefore, has brought clearly in evidence that the type of management of the firm could not be considered as the key variable, able to explain the attitude towards the landscape problems but there will be other factors able to drive the farm decisions.

This consideration has pushed to find new variable that could better explain the correct interpretation of the farm behaviour.

Among these the economic variables have been considered as, in particular, incomes of the family-farms have been chosen. To such purpose budgets of the single family-farms have been elaborated considering the incomes coming from the farm activity and those coming from out-farm labour activity.

The farm incomes are strictly related to the cropping system, which depends by the nature and by the quality of the available resources and by the level of market integration.

The family incomes coming from out-farm activity have been elaborated on the base of gathered information and by the level of sectoral retribution.

They tightly depend by the age, by the education level, by the labour market characteristics. It has been also considered the distance and the time occurring from the farm to the work place for the notable reflexes that this may have on the farm activity. It is, in fact, evident that a meaningful distance conditions notably the residual availability time to destine in farm labour and pushing toward cropping system more extensive. The family incomes have been then assessed jointly to the LCI, for each family-farms.

The figures 2 and 3 shown a graphic representation for the two family-farms groups. It is evident that for both the typology exists a direct correlation of these two indicators: as the family income increase so do the portion of the farm land destined to cultivations that better fit the desirable landscape.

In other words the richer family-farms are more sensi-

Figure 2 - LCI and family income in peasant family farms.

Figure 3 - LCI and family income in pluri-active family farms.
tive to the environmental problem and more active in the preservation of the rural landscape.

CONCLUSIONS
To consider the family-income as explanatory variable, it allows both to take in account the farm profitability and the demographic characteristics of the family. It is evident, therefore, that the farms that manifest better attitude towards rural landscape are those either equip with greater natural resources and those in which the family has the possibility to integrate its farm income. The family-farm better integrated in the context and with greater economic availability can appraise the landscape as an economic resource and that can be offered to the collectivity. They are mostly involved in the process of revaluation the territory to produce services like agri-tourism, rural tourism and, therefore, to create occasions of additional income to the agricultural activities, starting a virtuous circle. This in turn means also that it became crucial to improve the conditions of life in the rural areas and create labour opportunities in the same rural areas (policies for the rural development). On the contrary, the family-farms less integrated in the context, with poorer economic availability not guaranteeing a sufficient income to all the family components, carry to escape of the most qualified members of the family toward other sectors and toward other geographic areas, where greater are the possibilities to find a job. That sets an ulterior tied up problem to the destination of these lands whose actual use jeopardizes their return to a natural condition. Another important aspect the study has showed is related to the methodology to be used when the described conditions are found. It become evident the necessity to integrate in a single framework all the relevant variables. To this the agricultural household models seem to better interpret the family-farms behaviour in this kind of context. These models, in fact, consider farm characteristics (size, technological level and other characteristics) and the social-economic features of the family (number of components, age, education level, etc.) as important variables to influence the choice of cropping systems.

For instance, under the same price system, with the same farm structure, families may choose different cropping systems according to opportunities for their members to work on the farm or outside, in relation to the local labour market and social characteristics of the family.

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ALTERNATIVE TOURIST ACTIVITIES IN THE FRAMEWORK OF SMALL MANAGEMENT INTERVENTIONS IN PELION MOUNTAIN (GREECE)

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ABSTRACT

The massive touristic development in Greece is responsible for many problems as environmental (pollution, disturbance of biotopes), cultural (alteration of cultural identity) and social (increase of life cost, diminution of agricultural land etc.). Other types of tourism are needed, which will be absolutely compatible with the environmental and cultural conservation. In this paper the possibilities of the development of new forms of sustainable tourism on mountain Pelion are examined.

This development consists of activities such as environmental education at a Centre of Environmental Education or in the nature, Museum of Natural Resources, religious tourism, climbing, study of nature, development of forest recreation facilities, sea side touristic activities (some of Pelion's villages are near the sea), equine tourism etc. under the controlled management of touristic flow and the creation of necessary infrastructures as roads, telecommunications etc.

RéSUMÉ

Le développement touristique de masse, est responsable de beaucoup de problèmes environnementaux (pollution, destruction des biotopes), culturels (altération de l'identité culturelle), sociaux (augmentation du coût de vie, diminution de la terre cultivable etc.) et spaciaux (pression sur l'utilisation du sol).

Alors, le développement d'autres types de tourisme, compatibles avec la conservation environnementale et culturelle, apparaît nécessaire.

Dans cet article nous examinons les possibilités de développement de nouveaux types de tourisme durable dans la montagne de Pelion.

Ces possibilités sont liées aux activités qui concernent l'éducation environnementale, comme un Centre de l'Education Environnementale, ou la nature (Musée des Ressources Naturelles), le tourisme religieux, l'étude de la nature, la mise en place de petites infrastructures pour la récréation forestière, des activités touristiques maritimes (aussi des villages de Pelion sont près de la mer), équitation, escalade etc. sous la régulation contrôlée de flux de tourisme à travers de petites infrastructures nécessaires comme le réseau routier, les télécommunications etc.

Ecotourism is a "soft" type of tourism which is characterized by respect for and conservation of the natural and cultural heritage. Ecotourism is a form of sustainable tourism, or better is a "style" or "philosophy" of travel which is characterized by respect and protection of the natural and cultural heritage, of "sustainable development" and it aims to acquaint the tourists with nature. The definition of ecotourism depends on who you talk to. Tour group operators, government officials, business owners and conservationists have spent a great deal of time trying to agree on a common definition, but have failed to do so. Some people feel that nature tourism, adventure tourism, culture tourism, educational tourism and historical tourism are all parts of ecotourism; others believe that ecotourism is a separate category. Also, activities as for example birdwatching, trekking, canoeing activities are in the frame of ecotourism. However we will define ecotourism as "a concept that describes a form of development that respects tradition and culture, protects and preserves the environment, and educates and welcomes visitors." In addition ecotourism should be economically sustainable over the long-term.

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