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Cavalcani E., Selicato F., Torre C.M.

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HISTORICAL IDENTITY OF RURAL AREAS IN THE MEDITERRANEAN AND UNSUSTAINABLE LAND USE*

Eugenio Cavalcanti, Franco Selicato, Carmelo Maria Torre
Department of Architecture and Urban Planning, Polytechnic of Bari, Italy

ABSTRACT

The use of agricultural landscape for out-of-context activities is favoured by some effect of globalisation of markets. Localisation of leisure activities needs open rural space only as a physical base, without paying attention to the identity of places and environmental balance. The same could be said as regards some not proper agricultural land uses, which appear more economically profitable in the short run. But evaluations are not provided to support the sustainability of these activities, and, at the same time, participation of different actors, who have different visions of the profitability of the use of rural landscape, is not favoured. This paper reports some experiences where criticism is posed about economic feasibility of such out-of-context uses, and the telling of some processes supported by the construction of data showing different peculiarities of rural zones, supported by negotiation processes, and finally supported by the results of wide evaluations when can change the points of view of stakeholders interacting in the context of the rural landscape of centuries-old olive trees.

1. INTRODUCTION

The effects of the global market are giving rise to a more and more homologous use of land. More and more frequently, in fact, situations of discontinuous territorial levelling can be seen today, resulting in a considerable reduction in the complexity of the landscape.

In this context, reference to the Apulian region in the South of Italy has brought to light various forms of exploitation of the land for economic purposes that have impoverished the value of the environment, including:

1. uses for economic gain diminishing environmental values, especially:
   - (i) the removal and pulverization of calcareous rock formations practised in the highland plains of the Alta Murgia (an area recently set aside as National Parkland), aiming to obtain a so-called improvement in the agricultural land;
   - (ii) the removal and levelling of consistent rocky formations practised above all along the Adriatic coast in central Apulia, to be replaced by market gardens requiring far greater water resources than those currently needed;
   - (iii) progressive landfill of the gullies, facilitated by mechanical ploughing of the adjacent land plots that results in alterations in the superficial hydrographic network and impoverishment of subterranean groundwater;
2. subversion of the original functions for economic reasons, together with replacement of historical, traditional and consolidated identities by new methods of usage and out-of-context operations such as:
   - (iv) the production of new built-up areas, together with abandonment and degradation of the old rural habitations;
   - (v) distorted use of the agricultural land for leisure use, that is aggravated by the alterations and loss of identity of living areas;
3. subversion of the original functions, again for economic reasons, together with transfer to new sites, of particular elements with a well-defined historical and cultural identity, resulting in more out-of-context environments, both of the original site and the new one, especially:
   - (vi) uprooting and sale of centuries-old olive trees to decorate ornamental gardens of private villas in the North of Italy, resulting in severe alteration of the historical landscape from the vegetation and production viewpoints.

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* This contribution is due to a joint effort, where the work of single authors is recognisable as follows. The general considerations in the paragraph 3 are by E. Cavalcanti, paragraphs 1 and 2 and general considerations contained in 4 are by F. Selicato, evaluative aspects and outcomes containde in paragraphs 3 and 4, and paragraph 5 by to C. Torre.

Many of these forms of alteration are thus determined by present-day agricultural practices, and yet agriculture itself should be seen as crucial to the process defining the identity of a place. What, then, are the reasons for this progressive loss of identity? What are the permissible limits of agricultural activities, even of innovative type, within which no risk is run of subverting the identity of a place? (Ferraresi, 1993)

The search for a difficult balance between the agriculturally productive historical landscape and the need to introduce innovative practices beside the traditional ones requires a preventive estimation of the transformation and conservation processes that will ensue after introduction of new activities, to verify to what extent they are sustainable from the economic and environmental standpoints.

Moreover, in addition to the forms of environmental alteration caused by the current agricultural practices, more radical transformations of the land are under way that are extremely invasive and give rise to "decontestualized" places, that although highly recognizable, have no affinities with the site where they are implanted. These out-of-context sites create “new” places, with a well-defined, “egocentric” identity.

The origin of these places is to be attributed to the influence of a generation of city-users whose “ideal city” is the epitome of the perception of space as a consumer item. The image of a consumer citizen is in fact linked to the growing search for material and immaterial needs shorn of their context, needs that induce a view of the land as a “simple” place with precise functions.

The consequence of this approach is the growing tendency to treat the land as a consumer object, invading even places with strong historical connotation and identity, as often occurs in the ancient city centres. The defence of places reported by Castells (2002) is thus, above all, a defence of identity.

Technology itself sometimes provides harmful support to the growing quest for immaterial needs, in the building of post-modern cities, providing solutions to immaterial consumer needs, social mobility, dreams and play, simulating prototypes of future communities entirely divorced from their context.

We are now faced, therefore, on the one hand with these new places that have acquired a strong identity during the course of their evolution, where there is little interest in safeguarding the original historical, social and cultural identities, and on the other, with the urban planning, social, historical and cultural approaches, that are more and more preoccupied with the attempt to preserve social, historical and environmental identities (Gambino, 2001).

The present contribution is a reflection aiming to stimulate discussion on these issues starting from an analysis of some experiences. These were obtained by observation of opposing examples aiming to achieve competitivity in the same agricultural area, characterized by an important cultural value. In the first case, the transformations were prompted by the attempt to reap economic profit, taken as the foundation of territorial competitivity, while in the second, the aim was to reconcile the collective aspiration to preserve the environmental resource, without harming financial operators in the area that preside over it and contribute to maintain it.

2. THE CONTEXT

The area where these experiences were gained belongs to a complex environmental system, layered as a result of the historical process of interaction between natural and cultural elements. It is an agricultural territory in the Apulian region to the south-east of Bari, where the landscape has evolved over time around large plantations of olive groves, that over the centuries have become a dominant element. This has resulted in a close interweave of natural elements and rural anthropization, imprinting the area with its own characteristic identity, while at the same time creating new forms of territorial complexity.

This complexity is still apparent, despite the many processes of territorial homologation underway, in the rich, articulated structure, consisting not only of the agriculturally productive olive groves but also of the historical karstic rock caves once used as dwellings, the farmhouses, the coastal look-out towers and the countryside villas belonging to the better-off classes of the eighteenth and nineteenth centuries, as well as in the geomorphological structure of the gullies and linked subterranean groundwater, and the natural ecosystems associated in their turn with the gully network.

In this abundance of resources, the dominant character assumed by the historical olive groves has had the strongest effect on binding the whole territory together to create a harmonious landscape. In fact,

there is exceptional continuity among the historical plantations that cover a zone accounting for about 28,000 hectares. In origin this zone was so densely planted with trees that the many visitors passing through expressed wonder and amazement, claiming that it looked like an olive wood and could hardly be believed unless you saw it with your own eyes: “un paesaggio che invero pare cosa molto difficile da credere a quelli che non avranno veduto le selve d'olivi, delle quali sono pieni questi luoghi” (Alberti, 1550).

While the density of the plantations has now diminished, the “monumental” character of the trees has certainly grown over the passing of years. This concept of trees as “monuments” has to do with the value of the places in the sense that they bear historical and cultural witness to the relationship linking them to the communities that settled there (Maciocco, 1991; Selicato, 2001). A sacred kind of monumentality, to be jealously preserved, protected and highlighted, and that in some senses recalls that of the famous giant redwood trees (sequoias) in Redwood Park near Sausalito, that are now the objects of a cult and visited by thousands of tourists each year, and where the most spectacular of the trees is in fact known as “the cathedral”.

From the productive point of view, the territorial structure features a high number of olive oil producing factories. Olive groves account for about 70% of the total surface area of the district, and have a yield of about 28 quintals per hectare, totalling nearly 80000 tons per year (for the 28000 hectares shown in figure 1).

Overall, a marked reduction in the agricultural area used is recorded, while the trend for commercial farming is less negative (see figure 2). The two opposing trends indicate a tendency to break properties up. The enterprises of at least 10-20 hectares probably remain but smaller plots are becoming more and more common, owned by residents whose primary activity is not farming and who use their plots to produce oil and other farm produce for personal use and only partially for sale. Finally, there are small properties of about one hectare that are used purely for personal consumption and cannot therefore be considered under the heading of commercial farms.

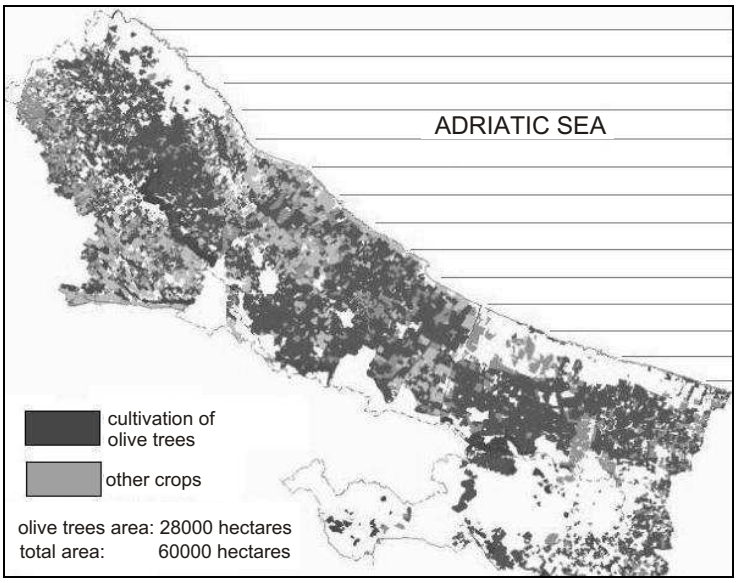

Fig. 1. The study area, showing the 28000 hectares of surface area devoted to olive groves.

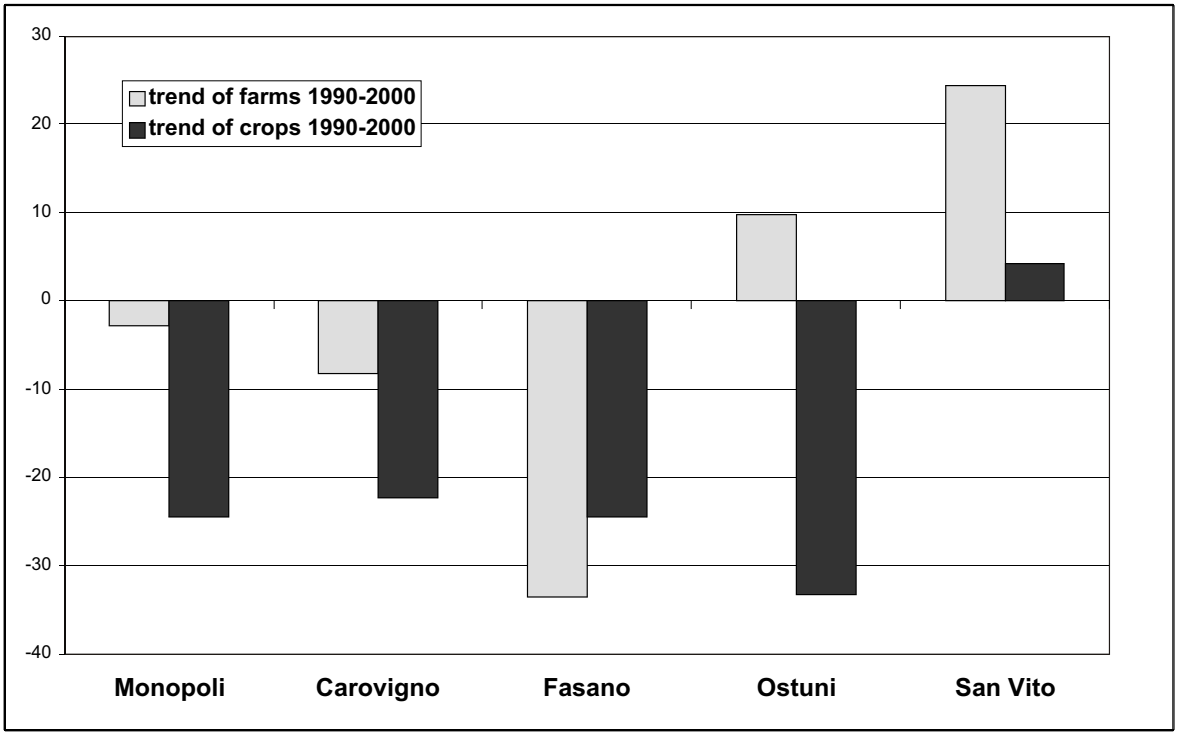

Fig. 2. Comparison between the trends for commercial change and the total agricultural surface areas in the council jurisdictions studied.

3. OUT-OF-CONTEXT TRANSFORMATIONS

An important trend of land transformation in this agricultural landscape is the creation of leisure parks in peripheral areas of the sub-regional district described above. The site of one of these leisure parks, to cover about 130 hectares of agricultural land near a historical centre, is planned, whose central theme will be the elements and that is to feature imported symbols that are extraneous to the olive grove context where it will rise. The park is to be sited on agricultural land to the north of Conversano (a Council on the margin of the land devoted to olive groves under study), near a historical settlement unprotected by legal safeguards. It should appear as a new landscape, somewhat surreal, as it will associate the theme of the elements (earth, air, fire and water) with the building of artificial volcanoes and lakes.

Meanwhile, in the zones nearer the coast, further to the south, golf courses have already been built, that require plentiful water resources that exceed the replenishment capacity of the existing groundwater reserves. These facilities have already cancelled many of the traditional crops and created a new landscape that is erasing the original rural identity of the area.

In these sites of homologation, those elements that have preserved the local connotations are considered at most to have a value as “illustrations” or “references” (Augé, 2001). In fact, the original features of the places are extracted to serve as signs in the sense of “place markers”, so that inside the theme parks or golf courses, some imposing centennial olive trees are laid out as exhibits on the top of artificial hillocks covered by lawn. In the same way, the old farm-houses, bearing historical witness to a rural architectural tradition that is strongly anchored to the rural culture of the area, are used as centres for services, denaturised of their structural components. Thus they preserve only partially, on the façade, apparent references to “local” features to denote their original identity. Local elements are therefore only passing references, appearing rather as “overexposed photos”, to echo another comment by Augé (2001), that tend to highlight how overexposure blurs the image, in reality as in a photo.

Moreover, in these homologation processes, when they acquire the value of unique, even monumental features, the characteristic, most representative elements of a particular landscape - such as these very cases of centennial olive trees or the old farmhouse complexes that are expressions of the ancient peasant culture - become “symbols”, even objects to be preserved in museums, in exactly the same way as there are historical reconstructions in the museums in Paris, Berlin or New York.

To justify the need for such operations, estimates are produced that underline the advantages of processes that are in reality monuments to the convenience of private entrepreneurs and will yield high profits. These estimates have the classical format of the business plan. The parameters used in such socio-economic feasibility studies are, in fact:

(i) analysis of the trend of consumer incidence for recreational, cultural and tourist purposes on the consumer total,
(ii) individuation of the primary and secondary user pool,
(iii) analysis of the current accommodation potential,
(iv) spin-off effects on employment.

But what estimates can support the choice of such transformations and justify the decisions of those deputed to regulate land usage processes?

Once an ex ante estimate has confirmed the profitability of the activity, an attempt is made to individuate a trade-off that will make the project attractive to local administrators. In comparison with the detailed economic-financial analysis, there is a virtual total lack of historical and environmental studies analysing the features of the land and guaranteeing sustainability of the operation.

The loss of natural capital is considered to be compensated by the creation of employment and economic profit. Cost-benefit analysis becomes the means for setting up a marketing strategy.

In practice, a true local dimension of the analysis is lacking. The facts that the main macro-economic parameters considered may not be optimal, that there is a minor tourist flow in the area and that in all likelihood local competition, by offering different solutions, may offset the apparent benefits of the project, are rarely taken into account. The result may be an over-optimistic view of the operations even as regards the purely economic aspect. The presentation of the process from an optimistic point of view, to convince local administrators of the advantage of the land transformation, appears to be deliberate, aiming to encourage them, amongst other things, to adopt accelerated authorization procedures for the proposed transformations.

The effect of these methods of carrying out negotiations is that the impacts of the projects on the landscape are underestimated. The land is wrongly considered to be an inexhaustible resource, whereas in fact it will undergo changes that may jeopardize its future integrity, with no certain guarantees that the undertaking will even be profitable.

In order to estimate the profit margin more precisely, the financial analyses now introduce uncertainty factors that prudently mitigate the overoptimistic forecasts in terms of profit, and feature an innovative way of drawing up the “business plan”, in comparison with the traditional approach presenting a new project only from the standpoints of the managerial capacities of the entrepreneurs themselves and the potential - at a purely economic level - of the product. A careful feasibility study is associated with a risk analysis that identifies the weak as well as the strong points of the undertaking.

Investment forms set up to create out-of-context tourist undertakings in lands with a high historical-environmental value are not always competitive compared with the economic-financial spin-off effects on the surroundings and with the revenue of the previous commercial farming operations combined with other undertakings correlated with sustainable tourism activities, that are appearing in other territorial ambits such as the case of the Spanish “vias verdes”. In fact, sustainable tourism has been found to be one of the most profitable “investments”, and not only in Spain.

It is therefore always worthwhile verifying the feasibility of such operations, as a pre-condition in order to be able to opt for the least invasive methods. It is clear that such feasibility analyses must take into account cultural and environmental values and cannot therefore be interpreted on the basis of a simple *cash-flow analysis*. Besides, even economic estimates are expected to consider effects other than market considerations, especially in contexts with a high socio-environmental value.

The advantages illustrated to local administrators are the classical ones of increased employment and preservation of rural settlements which are the main items of an urban market study. These analyses often fail to take into account external factors of environmental type.

A different estimate, in terms of cost-benefit or cost-opportunity, would instead reveal that in the present case studies, for instance, each billion euros spent corresponds to the loss of up to 14000 mg/hectare of biomass per year (Tivy, 1990), and that the identity of the rural settlements, imprisoned

inside the leisure parks, has been profoundly changed, if not erased, despite their physical persistence in the place.

4. SAFEGUARDING THE LOCAL FEATURES

The threat posed by unsustainable tourism is associated with that of ongoing land transformation, that is leading to the uprooting of centennial olive trees to sell them as decorative elements for the villas of the better-off classes in the north of Italy. New, more profitable crops, market gardens or extensive greenhouses for early produce are often put in their place; otherwise, new young olive groves are sometimes planted, while on other occasions the land is just abandoned, to wait for new, more profitable transformation opportunities.

This process of uprooting centennial trees that has a strong physical and symbolic impact, has galvanized environmental associations, local administrators and politicians, civic committees and University associations to combine and oppose the phenomenon.

In fact, apart from its value in terms of produce, the centennial olive tree is a resource with an intrinsic value linked to its age, that makes it a non renewable resource, at any rate except in the very long-term over several hundreds of years, and a complex social value due to its strong imprinting identity that links it indissolubly to the historical process of development of the area.

Starting, therefore, from an analysis of these processes of impoverishment of the above resource, an alternative view of land transformation has been developed, that aims not simply to preserve but really to ensure sustainable land use. A working group consisting initially of research fellows and scholars at Bari Polytechnic has drawn up a project aiming to build an Agricultural Park called the Olive Grove (PAU). Various initiatives to promote awareness and debates have drawn in an increasing number of citizens and representatives of associations and government institutions (about 10,000 signatures for creation of the PAU were collected in a couple of months). The process of promoting awareness and policies aiming at safeguarding the centennial olive groves and hence the identity of the whole district is still ongoing, but the path unfortunately still seems long and strewn with obstacles.

Actions coherent with the principles of sustainability have been proposed, requiring the preservation of non-renewable resources and limitation of operations tending to destroy natural capital, while setting in motion a search for new forms of competitive land usage. As nearly always happens in cases of the planning of areas subject to safeguards, the greatest problem was that of reconciling the needs for preservation and for development.

Criteria were identified serving to estimate how sustainable the proposed operations might be, and the business operators themselves were involved in this estimate, including commercial farmers, and small and large-scale olive oil producers. The vital issue, often exploited by the entrepreneurial categories to their own advantage, was that of preventing the creation of the PAU from turning into a financial burden only for the producers and a benefit for all the other subjects present in the district and interested in its use.

In practice, the distribution of the benefits only apparently excluded the olive oil producers, because the whole territory would gain from environmental safeguarding actions, from the sustainability standpoint, and - in an integrated planning picture - preservation of the resources could be financially advantageous for entrepreneurs, if it were to increase competitivity of land usage in the medium-long term.

However, it is still necessary to redistribute the financial burden in a more equitable fashion among the different stakeholders and stockholders. The limits on some forms of agricultural land transformation posed by the introduction of safeguarding policies individuating protected areas, is usually interpreted as harming commercial farmers and is generally the most powerful argument employed against their institution.

In the case under study, some commercial farmers of about ten-twenty hectares came forward, who continue to maintain their centennial olive groves, and whose owners - who often also have small olive presses nearby - expressly stated that they could see no economic advantage in transforming ancient olive groves into fields for the plantation of new crops.

This did not entirely dispel the doubts as to the possible structural fragility of these businesses and the consequent inevitable need to transform them sooner or later. It was therefore judged necessary to draw

up financial estimates of the relative economic potential of different hypotheses for transformation of the land, with and without preservation of the ancient olive groves. The absolute cost-benefit of the transformation was calculated on the gross productivity of the new undertaking that should be higher after detracting the costs of the transformation than the current net revenue (Grillenzoni and Grittani, 1993).

Thus as regards the hypothesis of transforming the centennial olive groves into a new olive grove plantation the estimated transformation costs considered were: (i) the cost of uprooting the old trees, (ii) the costs of the new plantation (cost price of the new trees, costs of labour and use of suitable technological planting tools), (iii) loss of earnings until the new plantation become productive. In this case, a traditional commercial farm was found to be poorly competitive. However, there are enterprises where the density of the centennial grove is increased, or else part of the land is set aside for complementary crops, or where agritourist activities or other complementary activities of this type are introduced. To ensure the reliability of the results, then, the hypotheses considered were not only the extreme ones of total preservation or total transformation.

Brief calculations therefore estimated the costs and gross produce saleable in the years 1999/2000 and 2000/2001 per hectare of agricultural surface area, taking as reference an enterprise of between 10 and 20 hectares. In normal conditions, such an enterprise would rely on essential tools and rural outhouses - that could house complementary activities - would not feature internal oil presses, and would be run by the owner. These generic calculations were put together with direct estimates of the revenue of some enterprises that are representative of the agricultural production in the district.

However, the situation would change if uprooting of the trees, from being a cost, were to be converted into a source of earnings, bearing in mind that centennial olive trees are sold at prices in the order of three-four thousand euros. In this case, an “invisible market” situation would develop, and the advantages - based on factors other than economy - would overturn the estimates based on normal conditions. Some entrepreneurs, in fact, by finding loopholes in the current legislation that forbids unauthorized uprooting of olive trees but does not succeed in effectively combating the “easy” granting of such authorizations, have become dealers in centennial olive trees.

In the other hypothesis, that of extending the number of activities linked to the presence of the olive groves - favouring forms of agritourism, recycling waste from the olive oil production cycle, setting up integrated policies in the context of the management of EU funding schemes, promoting fine registered brands (DOP), etc. - maintenance of the centennial olive grove was found to be certainly economically viable. In such cases, in fact, the transformation was not determined by replacement of the productive activity with another one but by integration of new activities with the pre-existing one(s). The resulting increase in revenue can therefore be more profitable than the creation of new olive plantations.

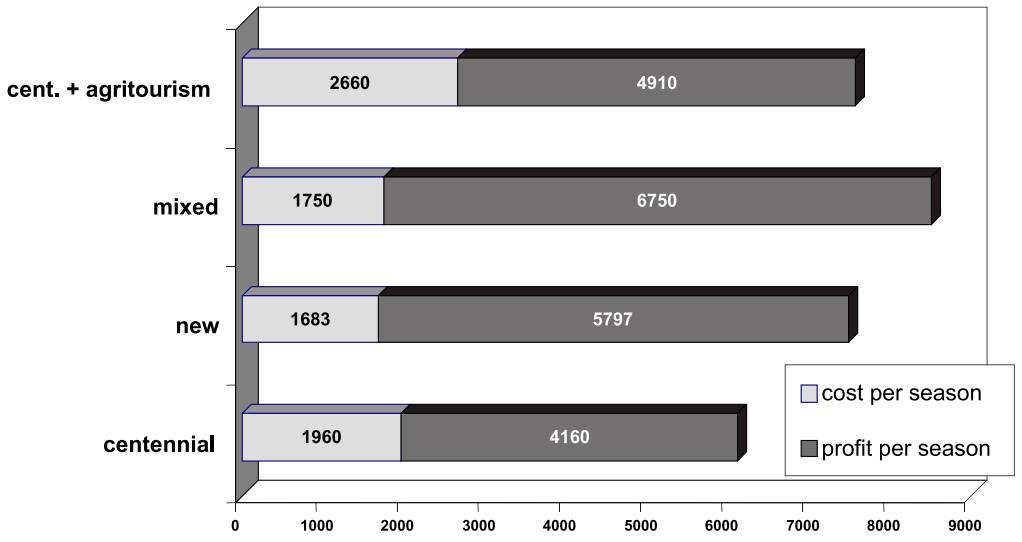

Fig.3 Estimates on productivity per hectares of different typologies of 10 hectares sized farms.

Estimates show that contained integrated production operations, or complementary activities such as agritourism have made it possible to fill the gap between the traditional olive groves and new crops (see fig. 3). However, this study gives new confirmation that in the area the net business income still owes a large debt to EU contributions, which account for 30% of the revenue (fig.4).

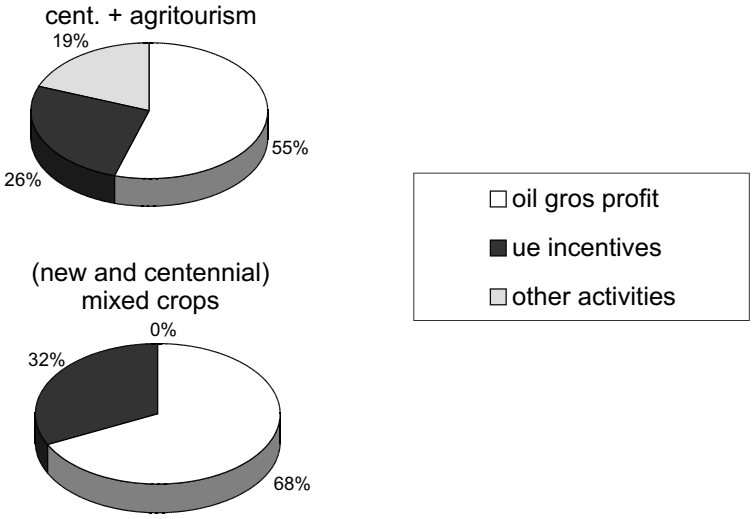

Fig. 4. Incidence of UE contribution on the gross profit of a 10 hectares sized farm.

The creation of the park can give all these business activities greater visibility and power, in a "unifying" image of the whole area, that at present suffers from a largely fragmented, weak view of its identity, a puzzle of mixed images and single circumscribed realities. In short, the park can take on a vital role of promoting and coordinating policies at the area level that should have an undoubtedly positive effect on the economy of the whole territory.

5. CONCLUSIONS

The above considerations give rise to some reflections on how to assess sustainable development. Apart from the institutional context, that has still not succeeded in drawing up operative tools directing assessment procedures to buttress the planning tools which are also still largely lacking, it must be noted that sustainable development can rely not only on recent estimation tools but also on the traditional techniques for evaluation, provided that these are used in an innovative fashion.

Assessment of sustainable development is nothing other than a coherent estimate with new emerging targets, aiming at this, that is to promote actions combining social equity, environmental safeguards and economic development. Thus assessment techniques that can pursue such aims, both in the strategic phase and the decision-making and operative phases, can be seen to be appropriate tools (Fusco Girard and De Toro, 2001).

The context plays an important role in the choice of the evaluation procedure. The core of the estimate must in each individual case be shifted towards equity requirements or safeguards, as appropriate.

In this scenario, the assessment of sustainability is always a dialogic element of discussion and agreement during realization of the processes. Even estimates based on consolidated tradition, such as gross saleable productivity or agricultural revenue, are important not only as elements supporting the choice of each operator but also to uphold the debate aiming to institute a more widely accepted, less controversial planning program, especially in processes that by definition require and/or dictate participation of all those involved.

Yet again the issue is that of estimation and communication. The results of the estimation must be communicated and discussed, to individuate the most widely accepted strategy, fostering a greater awareness of the possibility of setting up sustainable policies that do not harm agricultural operators, and overcoming the initial pessimistic attitudes that are generally adopted in such situations.

REFERENCES

Alberti L. (1550), *Descrizione di tutta Italia*, Bologna.

Augé M. (2001), *Finzioni di fine secolo. Che cosa succede?*, Torino, Bollati Boringhieri.

Castells M. (2002), *Il potere delle identità*, Milano, Università Bocconi Editore.

Ferraresi G. (1993), "Parco e territorio. Note sul contesto teorico della ricerca", in Ferraresi G., Rossi A. (eds.), *Il parco come cura e coltura del territorio*, Milano, Grafo, pp. 11-25.

Fusco Girard L. and De Toro P. (2001) "Human sustainable development and planning: Towards integrated evaluation", in Voogd H. (ed.) *Recent development in evaluation,* Groningen, Geopress, pp. 377-404.

Gambino R. (2001), "Per ricostruire il rapporto uomo-natura", *Parchi*, 32, Rimini, Maggioli Editore, pp. 12-19.

Grillenzoni M. and Grittani G. (1993), *Estimo. teoria, metodi e casi applicativi,* Bologna, Ed agricole.

Maciocco G. (ed.) (1991), *Le dimensioni ambientali della pianificazione urbana*, Milano, FrancoAngeli.

Selicato F. (2001), "Il sistema insediativo del Sud-est barese tra conflittualità ambientali e persistenza dei caratteri strutturali del paesaggio", in Macchia F. (ed.), *Territorio e Società nelle aree meridionali*, Bari, Mario Adda, pp. 491-504.

Tivy J. (1991), *Agricultural ecology,* New York, Wiley.