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Recreational Services and Multifunctionality: an Economic Analysis on Agro-tourist Farms in Sardinia (Italy)

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Abstract

A wide literature has focused on strategic role of multifunctionality in fostering sustainable farming [1; 2]. Today farms are expected to jointly produce (food and no-food) goods and positive externalities for the society. The recreational function is one of the most relevant in order to promote sustainability, to incentive good farming practices, and to enhance rural territories [3]. Despite the inherent normative difference among countries, the so called “agro-tourism” is the widest and known typology of recreational activities provided by farms [4]. More generally, it is a style of holiday that is normally spent on farms [5]. Agro-tourism basically concerns two tourist services: overnight accommodation in the farm for one or more days and consuming meal – prevalently derived from farm and local products - in loco.

Scientific community has debated in depth on these issue and on agro-tourism, especially by a sociological point of view. On the other hand, poor attention has been put on the economic dimension of the farming recreational function. However, agro-tourism would also be a tool to increase their profits by enlarging activities in farms and/or better enhancing farm products. Indeed, agro-tourism is typically adopted by traditional family farms that can be forced to combine several agricultural and non-agricultural resources in order to improve their own incomes [5].

In the light of these considerations, this study aims to investigate on economic issue related to agro-tourist and recreational functions in Sardinia. Based on a sample of about 40 agro-tourist farms, we aim 1. to evaluate how multifunctional activities affect farm management, 2. to estimate the role of recreational services in conditioning revenues, incomes, and costs, and 3. to estimate economic efficiency related to use of both agricultural and non-agricultural resources.

Farms were selected in two areas – the region of “Nurra” in the North-west Sardinia and the region of “Montiferru” in the Middle-west of the island - characterized by different sort of

agricultural systems and rural contexts. Information was collected by face-to-face interviews to farmers.

We used two methodological approaches.

Firstly, the balance sheet analysis was applied to evaluate economic outcomes achieved by the farms and the incidence of recreational activities by an economic point of view, taking into account possible differences in services provided.

Secondly, the Data Envelopment Analysis (DEA) was applied in order to estimate technical and economic efficiency in using technical inputs, the single-input efficiency related to each input, possibly lying on different technological reference points on the basis of type of services supplied and geographical location. A two-output frontier was estimated as to take into account the double production attitude of the farm. In our knowledge, the DEA application is one of the first attempts focused on agro-tourism, specifically that handle production separating the two categories of products (agricultural / non-agricultural).

Results would allow us to put on evidence the relevance of recreational and multifunctional activities in affecting farm outcomes. Among the most important implications that derive from these findings, this study

can support policy- and decision-makers in promoting adequate measures devoted to take advantage of multifunctionality for improving farm incomes and to better enhancing recreational services related to farming.

Keywords: two-output frontier, technical efficiency, scale efficiency, recreational services

References

- [1] Randall A. (2002). Valuing the outputs of multifunctional agriculture. *European Review of Agricultural Economics* 29 (3): 289-307
- [2] Zhang L., Schwärzel K. (Eds.) (2017). *Multifunctional Land-Use Systems for Managing the Nexus of Environmental Resources*, Springer, Switzerland
- [3] Flanigan S., Blackstock H., Hunter C. (2015). Generating public and private benefits through understanding what drives different types of agritourism, *Journal of Rural Studies* 41: 129-141.
- [4] Knowd I. (2006). Tourism as a mechanism for farm survival. *Journal of Sustainable Tourism*, 14 (1): 24- 42
- [5] Sznajder M., Przezbórska L., Scrimgeour F. (2009). *Agritourism*. CABI, Wallingford (UK)