

Result based payments as innovative policy tools for Mediterranean agro-silvo pastoral systems

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Contextualization of the problem and main objectives of the communication

The Portuguese agro-silvo pastoral system Montado, similar to the Dehesa in Spain and to other extensive land use systems in the Mediterranean basin, are highly resilient land use systems adapted to the biophysical constraints imposed by dry Mediterranean climate and poor soils (Guimarães et al 2018). Due to their extensive nature, they are considered as High Nature Value farming systems (Pinto-Correia et al 2018). Management practices related with production, support also high levels of biodiversity, of structural diversity and of landscape heterogeneity. Such values are followed by a high societal valorization, mainly regarding cultural identity, recreation and tourism, and hunting. Nevertheless, the 1,2 M hectares of Montado existing in Southern Portugal have been under constant decline in the last 20 years, with over 5000 ha loss/year, mainly due to a progressive decline of the tree cover and a lack of tree renewal, resulting in increasing clearances in the tree cover (Almeida et al 2016; Godinho et al 2014). This decline in tree cover is often followed by a decrease in diversity of the under cover vegetation. Drivers for this decline are diverse, but the literature is consistent in showing positive relation with the intensification of livestock production and the replacement of sheep and light regional cattle breeds, by heavy imported cattle breeds. The role of public policies has been conflicting, as there are both support tools leading to livestock intensification and decline in the tree cover, and agri-environmental measures, aiming to support the preservation of the system by protecting the trees and the shrub layer (Pinto-Correia and Azeda 2017). And furthermore, the diversity of

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the Montado lies on its heterogeneity at the landscape level, while support measures are only targeting individual action at the property level. There are no integrative measures tuned to increase the resilience of the system and the presentation of the fragile natural resources in the areas where these agro-silvo pastoral system are dominant. The aim of this paper is to address innovative constructions of policy intervention that better can tackle the complex agro-silvo pastoral systems and enhance governance mechanisms at a landscape scale. In particular we aim to address agri-environmental schemes tuned to "result based measures", where farmers are paid not solely for respecting management practices following pre-defined rules, but by a set of results attained, concerning nature and landscape value. With such result based measures, farmers have more room for flexibility in their practices, and can thus better adapt their management to the local conditions of their farm and to the landscape context the farm is part of.

Methodology and sources used

Result based payments are already in practice in some regions in Europe, but not yet implemented in Mediterranean Europe. They can be supported within the Common Agricultural Policy or by national policies, or a combination of both. In order to design and test this type of measures in the agro-silvo pastoral systems, we followed a participatory approach in the region of Alentejo central, in Southern Portugal. A process of several dedicated meetings has been organized, involving farmers, technical staff from the administration, organizations and researchers. Examples from other countries (ex.Ireland), have been visited and discussed. The central administration as well as officers in the European Commission have been consulted. The aim has been to create a set of result based measures specially adapted to the Montado, aiming to maintain or enhance biodiversity, landscape heterogeneity and the renewal of the tree cover, by individual choices but also through collective action at the landscape scale, in a specific small region.

Conclusion

Result based agri-environmental measures can be powerful tools in creating room for flexibility in farm management, particularly in the complex agro-silvo pastoral system of the Mediterranean. Nevertheless, their construction requires both a change in the mindset of farmers, land managers and technical staff, and a change in the established paradigm of public policy intervention in agricultural systems. With our empirical evidence, we expect to contribute to the debate on the role and design of future public policies influencing farm management.

References (Harvard system) (at least five)

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