

The multifunctional pastoral systems in the Mediterranean EU and impact on the workforce

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Abstract. Pastoralism constitutes a multifunctional system of animal production; the system is endowed with a range of values, which, nonetheless, are not captured in the prices of products. Indeed, pastoralism protects rural livelihoods – especially in marginal and remote areas which, in the absence of inhabitants, would become abandoned or nurturing illegal activities –, is endowed with important cultural features, produces high-quality dairy products and plays an irreplaceable role in preserving and maintaining ecosystem functioning. An important function of the system lays in the provision of income and employment to communities inhabiting mountainous or remote areas, for whom productive opportunities are limited. The purpose of this study is to present the main functions of pastoralism, alongside with the main pre-conditions for the protection and development of its various forms in the Mediterranean (transhumance, island animal production, grassland-based livestock farming). The study focuses on necessary political, social and regulatory adjustments to formulate a favorable operational environment, which should accommodate its unique multifunctional features and differentiate it from conventional intensive or semi-extensive systems. The discussion is extended to the role of immigrant farm workers in the reproduction of pastoralism.

Keywords. Extensive livestock farming – Externalities – Rural development policy.

La multifonctionnalité des systèmes pastoraux dans l'UE méditerranéenne et l'impact sur la main-d'œuvre

Résumé. Le pastoralisme constitue un système multifonctionnel de production animale; le système est doté d'une plage de valeurs, qui, néanmoins, ne sont pas prises en compte dans les prix des produits. En effet, le pastoralisme protège les moyens de subsistance ruraux – en particulier dans les zones marginales et isolées qui, en l'absence d'habitants, deviendraient des secteurs abandonnés ou entretiendraient des activités illégales –, est doté de caractéristiques culturelles importantes, crée des produits laitiers de haute qualité et joue un rôle environnemental irremplaçable. Une fonction importante du système réside dans la fourniture de revenus et d'emplois pour les populations ayant un accès limité à d'autres ressources dans les zones montagneuses ou éloignées, en particulier pour les jeunes "victimes" de la crise économique à la recherche d'un emploi. Le but de cette étude est de présenter les principales fonctions du pastoralisme, à côté des principales conditions préalables pour la protection et le développement de ses diverses formes dans la Méditerranée (transhumance, production animale de l'île, élevage basé sur les prairies). L'étude se concentre sur les ajustements politiques, sociaux et réglementaires nécessaires pour formuler un environnement opérationnel favorable, qui devrait accueillir ses caractéristiques multifonctionnelles uniques et le différencier des systèmes intensifs ou semi-extensifs classiques. La discussion est élargie au rôle des ouvriers agricoles immigrés dans la reproduction temporelle du pastoralisme.

Mots-clés. Production animale extensive – Externalités – Politique de développement rural.

I – Introduction

The debate concerning the benefits and disadvantages of extensive and intensive animal production systems has been ongoing and is now highly relevant in Southern Europe, as it not only concerns food production, but also relates to environmental, climate change as well as socio-cultural dimensions. Indeed, the shift of consumer preferences towards quality, healthy

and safe food products, awareness of animal welfare, genetic diversity, biodiversity and environmental issues, the acknowledgement of increasingly tight links between food and territory by the public, interest in culture and tradition and the inter-temporal support of the European Model of Agriculture constitute only a few of the paradigms comprising the “big picture” in the primary sector. This seems especially true for livestock products and extensive systems, which are endowed with unique features enabling them to come up to these expectations. Pastoralism constitutes a particular category of extensive livestock production, manifesting itself through a broad range of systems throughout Europe. Especially in the Mediterranean, pastoralism plays numerous roles which shape its multifunctionality. Multifunctionality is defined as the entire range of environmental, social and economic functions of the primary sector, as, in addition to tradable goods (food and fibre), agriculture produces a range of non-market outputs (OECD, 2001). These outflows are externalities, positive or negative, and fall into three categories (Lankoski and Ollikainen, 2003), depending on whether they affect the environment, rural development (rural viability) and food safety.

The purpose of this study is to present the formidable functions of pastoralism, alongside with the main socio-political adjustments and regulations necessary to recognize the diversity of its societal contributions and to accommodate this multifunctional role. An integral part of the discussion concerns the potential contribution of pastoralism in the provision of employment to youths in countries suffering financial crisis and the – rival or complementary – role of family and hired labour in these farms, mainly considering that the latter is supplied by immigrants.

II – Materials and methods

In order to examine the multifunctional character of pastoral systems, it is necessary to briefly present the current regulatory framework within which pastoralism in Europe operates and its part in the larger picture of the Common Agriculture Policy (CAP). Following the previous financial support schemes (Reg. EC/1782/2003 and EC/73/2009) income support for the EU primary sector is now regulated by Reg. EC/1307/2013. Except for a particular reference to extensive grazing systems, the new support schemes do not make actual distinctions between intensive and extensive livestock farming, implying that they have the same needs to be addressed by legislative acts. Rural development/Second pillar policies (Reg. EC/1305/2013), much the same, target livestock farmers as a homogenous group; pastoral farmers are eligible for financial support for modernizing their farms or for counterbalancing losses from natural handicaps and/or for the introduction of environmental-friendly measures, but structural and system-specific problems are not addressed or are disregarded. Out of a number of declarations and slogans addressing a ‘smart, sustainable and inclusive’ growth and an agricultural sector aiming at ‘not only delivering high quality food but also helping to manage environment and fight climate change’ (EC, 2010), the reality is that the recent reform of the CAP has provided little improvements – if any – to extensive livestock systems. Pastoral farmers seem excluded from the decision-making process (Koblenz Declaration, 2015); they face increasing difficulties in maintaining their multifunctional production system, and they are rather directed towards intensification and the adoption of a different production pattern which is, nonetheless, not always compatible with their culture, values and lifestyles. In addition, they are subject to particular strict regulatory constraints: sanitary barriers, food safety rules, etc.

III – Results and discussion

The agricultural cultural heritage of pastoralism and the heterogeneity of its socio-cultural contributions is one of its multifunctional features that characterize pastoral territories up to now: music and dances, habits and customs, traditions and norms, natural and man-made landscapes. Flock and farm family mobilities also involve the dispersion of cultural elements among territories. The reproduction of pastoral farms essentially involves passing not only the

farm to future generations but also the whole range of cultural and traditional aspects characterizing the life of pastoralists and the operation of their farms.

The socio-economic role of pastoralism is of utmost importance. Especially in EU Less Favoured Areas, where economic activity is not adequately diversified, pastoralism provides employment and income and sometimes it is the sole economic activity. Even in mountainous communities, in which other sectors have emerged – such as tourism and manufacturing – pastoralism is still an important source of income and has induced a form of development "from within", based on inherent regional advantages and cultural features. Therefore, pastoralism supplies all sectors of the economy (primary, secondary, tertiary) through positive multiplicative effects. In addition, pastoralism protects rural livelihoods, especially of marginal and remote areas which, in the absence of inhabitants, would become abandoned, encroached by wild species and animals and thus inaccessible to humans, or areas nurturing illegal activities.

In this context, the systematic production and marketing of pastoral dairy products is a potentially profitable economic activity, as these products often have extremely high quality characteristics. However, conventional marketing channels and methods are suitable for industrial mass production but not ideal for these products. Reg EC/1305/2013 favours short supply chains linking territorial actors with pastoral farmers, thus generating added value for local actors. Note that traditional cheese-making methods are cultural heritage and their certification could contribute to the improvement of the marketing of pastoral quality products.

The environmental functions of pastoralism are two-fold. First, flocks play an essential role in the management of natural rangelands, especially the mountainous ones, thus contributing to the protection of biodiversity and to the natural renewal of vegetation and providing a most effective way to store CO₂ and therefore support climate change mitigation measures (McGahey *et al.*, 2014). Third, by rearing autochthonous animal breeds, pastoral farmers contribute to the protection of genetic diversity in the European continent, which constitutes a major challenge for sustainability, food security, human nutrition and rural development (FAO, 2007).

The multifunctional character of pastoralism stems from its particularities in the use of resources. Pastoralism is tightly linked to and highly dependent on land uses, more than every other system of livestock farming. The operation of pastoral systems depends on the successful management of rangelands, as they base animal nutrition on grazing. This dependence presupposes a fair system of land allocation, among alternative uses and among pastoralists. However, this is seldom the case, as several activities are now rival to pastoralism (protected areas, alternative energy sources, intensive crop production, tourism, etc.) thus altering a land allocation system – empirical or official – in use for centuries. Hence, pastoralists are deprived of their land and even from access to it, when alternative land uses hinder the mobility of flocks – for instance, passing through lowland cropland is necessary for transhumant farmers to reach their summer domiciles. The alteration of the competitive relationships between intensive and extensive land uses also impacts adversely the production of forage – used to supplement grazing animals –, as farmers turn to crops with higher profitability.

Considering labor, highly skilled specialized labor is more and more substituted by unskilled employment, following a generalized world-wide trend. However, a job as a pastoral farmer requires many skills: a very extensive practical background, knowledge of climate, natural resources, new technologies, herd management and manufacturing as well as a clear understanding of economic operations and market conditions. In Mediterranean countries, as France (4) and Spain (5), schools addressing the training needs of herders and shepherds have been established with interesting degrees of success. The availability of such high specialized labor is not always a given, as it is less remunerated under the current conditions; so, even though pastoral families have elaborated an effective way of farm reproduction through time, there have been times in history, including this one, that younger family members leave farms. This phenomenon and the related generational gap that pastoral territories are facing is much the outcome of recent political and commercial dynamics that have restructured the livestock

sector throughout the EU; this has brought major changes in the size of the flocks and the nature of labor. The growing presence of wage labor signals the loss of a workforce generated through family relations and the fact that the overwhelming majority of these workers are foreign immigrants indicates that, with the current wages, it remains difficult to find local workforce.

Pastoral systems are less dependent on capital. The use of purchased feedstuff is substituted by grazing and fixed capital requirements are relatively low, as milking machines are not very usual and modern buildings are not needed. Rearing autochthonous breeds also constitutes an advantage as these animals are not costly and are characterized by high adaptability and remarkable endurance. This low dependence on capital is the main asset of pastoral systems shaping their resilience over time and explaining their resilience under harsh socio political and economic conditions (Davies and Nori, 2008).

IV – Conclusions

The characteristics of pastoralism outlined in this paper partially determine the cost effectiveness and competitiveness of the system. It can be supported that pastoralism can further improve its position in the market economy and provide income and employment to mountainous and disadvantaged areas through appropriate structural interventions. Political, social and regulatory adjustments are necessary to formulate a favourable operational environment, which should accommodate the unique multifunctional features of pastoralism and differentiate it from conventional systems. The most important prerequisite is to incorporate particular adjustments in the EU legislation; it cannot be expected that the restrictions imposed to intensive systems can be equally applied on pastoral systems. Also, particular arrangements should be made in land uses: access to mountainous rangelands should be enabled by designating routes for flocks and these areas should be protected against competitive uses (e.g. environmental protection areas, alternative energy establishments etc). The systematic production of dairy products at the farm level could be supported through the introduction of a simpler bureaucratic system and the products from pastoral farms could be circulated through alternative and innovative marketing channels and short supply chains, with the participation of local actors (hotels, restaurants, retailers), in order to reach consumers willing to pay higher prices for high quality. When it comes to education and information, “pastoral schools” would be very important for the temporal continuation of the system, as they would be in charge not only of the provision of technical knowledge but also of the transfer of traditional practical knowledge. In this aspect, EU legislation provides incentives for the communication between producer groups throughout Europe in order to disseminate good practices.

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