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## Theme 3

# RURAL RESOURCES, A TRIGGER FOR RURAL INNOVATION

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#### Main theoretical framework and contextualization of the research problem

In the last decades, a new rural development paradigm, described by van der Ploeg *et al.* (2000), contributed to an increasing diversity of the rural economies: "rural" is no longer a synonym of agriculture and includes a large number of assets and activities that are important for urban and rural society, namely those related with quality of life and environment, natural and cultural heritage, diversified agro-industries, agri-tourism, traditional quality products, etc. (OECD, 2006).

These changes also brought diversified types of innovation to rural areas, that can be described as "different ways of thinking and different ways of doing things" (Brunori *et al.*, 2007), not only related to agriculture development, increased productions and food security, or to new technologies, but including also interactions inside the value chains, from farmers to consumers, different types of logistics and services, the re-invention of traditions with innovative practices and techniques and also social innovation related to fulfilling emerging social needs or to induce collective learning or co-operation through actor-oriented networks.

The new patterns of the rural economies are based on a much wider range of resources: to the conventional rural resources, that in some cases also gained new value or importance, were

added a large set of new resources that sometimes can only be "guessed" through an extensive literature review concerning the new rural activities and innovations.

## Research problem and main aims of the paper

The literature review confirmed that the innovations that happen in rural areas use for their innovation processes a multiplicity of unsuspected resources which potential for rural development is not yet fully captured.

The main aims of this paper are to present evidence on this unsuspected multiplicity of rural resources and how the resort to both conventional and novel rural resources is relevant to the increasing innovation patterns and productive specialisations that arise in rural areas.

The results obtained can, with a large amount of confidence, be extended to other European and non-European rural areas where multifunctionality became a reality in the rural economy.

## Methodology and techniques used to address the research problem

To assess the rural resources that are relevant for innovation in rural areas, we built and analysed a database of 647 innovations, obtained through a survey, which gathered information on the innovations carried out by 120 organisations. The survey was made in the scope of the project RUR@L INOV - Innovation in Rural Areas (Madureira et al., 2013), that intended to capture the different types of innovation that are being developed and implemented by the organisations located in the Portuguese rural areas.

A set of rural (and non-rural) resources categories was identified through a detailed characterisation of the resources that better fit the surveyed innovations, having as a reference the literature review, and gave shape to a broader concept of rural resources. Each innovation was allocated to the resource category that was more important to its development. As the analysis was made by organisation, the data matrix obtained related organisations with resource categories.

Through a hierarchical cluster analysis, preceded by a factor analysis, the organisations were grouped in clusters that were named and described by comparing the within-cluster average counts for the different resource categories.

# **Main findings**

The conventional and novel rural resources that are relevant for rural innovation include: physical and natural resources; natural and cultural amenities and heritage; restored or re-invented traditions including quality agro-food products and handicraft; local agriculture and forestry and other economic activities; rural populations, territories and settlements (*e.g.* Bosworth, 2012; Brunori *et al.*, 2007; Cannarella and Piccioni, 2011; Copus *et al.*, 2013; DATAR, 2010; Esparcia, 2003; Garrod *et al.*, 2006; Ilbery *et al.*, 2005; Kalantaridis and Bika, 2011; OECD, 2006; van der Ploeg *et al.*, 2000; Sánchez-Zamora *et al.*, 2014; Smallbone, 2009). Other resources used for innovation by the rural innovators are, as expected, not specifically rural (*e.g.* non-rural technologies and functioning and marketing related resources) and some innovative organisations settled in rural areas, often very important to local employment, don't specifically involve rural resources.

Most of the interviewed organisations resort to more than one resource category to introduce innovations. Near half of them reported innovations related to the (re)introduction of traditions and, revealing a renovation of the conventional agriculture and forestry activities, near one third resorted to soil, water, climate resources and a quarter to agriculture and forest products.

A group of 6 clusters of innovative organisations was identified, corresponding to different resource patterns:

Cluster name	Reinventing Traditions	Experiencing Landscape	Building Capacities	(Rural)-locating by choice	Differentiating Land-based productions	Supporting Agriculture & Forestry
Main resources	<b>Traditions</b> (and Agriculture & forest products)	Landscape amenities and Wildlife & nature	Rural territories + Non rural + Local communities (and Traditions)	Non rural	Soil Water Climate (and Agriculture & forest products)	Agriculture & Forestry (and Soil Water Climate + Agric. & forest products)
Nr of organis.	46	28	7	5	25	9
Nr of innovat.	237	136	47	40	132	55

The analysis undertaken revealed a comprehensive concept of rural resources that are a trigger for innovation in rural areas confirming that rurality matters for the dynamics and society trends that search for territories identity and authenticity.

The research also confirms that most of the rural innovators use different types of resources to achieve innovation, searching economies of scope, diversification and added value and highlights the importance of specialised products and services alternative to the conventional agriculture and forestry, including reinvented recipes and handicraft activities resorting to local knowledge, a landscape- and nature-based tourism, the supply of agriculture and forestry quality and environmental friendly products, a growing importance of capacity building and supporting activities.

The importance of these clusters suggests that they should be included in rural development policies and regional innovation agendas.

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