

## Chapter 8

# Resource Conservation: Key Elements in Sustainable Rural Development

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### ABSTRACT

*Rural areas represent key spaces at European level from the perspective of the society's sustainability. They represent spaces for the re-equilibration of strongly human modified societies and need to be prioritised by future political programs. Rural areas have an essential role in maintaining the integrity of natural and semi-natural ecosystems, in the preservation of key natural resources, the conservation of genetic resources, supplying a reserve of healthy areas, maintaining traditions and habits, assuring the demographical equilibrium or the alimentary security of Europe. The detailed knowledge of the processes and phenomenon specific to rural areas represent a priority of European and national sustainable development strategies. For this purpose, databases such as Corine Land Cover, EUNIS, EEA, IRENA, Eurostat, and IUCN become essential tools for the spatial implementation of this concept. They present an important background for the numerous instruments of sustaining the durability of European rural environments, such as the Natura 2000 network, Landscape European Convention, Common Agricultural Policy, different financing instruments (Interreg, Leader, Life Nature), and the green economy concept.*

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## INTRODUCTION

The definition of rural is not as simple as it would appear at first sight. Even in the European territory, what rural means varies widely according to the specificity of each country or the academic expertise of the scientists working on the subject, definitions regarding demographic, administrative or functional criteria.

For a demographer, rural is a spatially defined population (Fuguitt 2004) characterized by small size and low density. Local administrative units are classified as rural if their population density is below 150-200 inhabitants per square kilometre (van Eupen et al. 2012). The degree of urbanization separates local administrative units into densely populated areas (density of at least 500 inhabitants per square kilometre and a total population of 50,000 or more), intermediate areas (density of at least 100 inhabitants per square kilometre) and thinly populated areas (Westhoek et al. 2006). This is the mechanism used by Eurostat in their analyses.

For the administrative purposes, the definition of rural has to consider the size and geographical level of the unit, the main criteria used for characterizing them and the thresholds used as boundaries between rural and urban (van Eupen et al. 2012). A series of documents at European level try to classify rural areas: the Rural Development Policy (2007–2013), the Community Strategic Guidelines for Rural Development (2007–2013), the EU Sustainable Development Strategy (2006), the Territorial Agenda (2007), the Fourth Report on Economic and Social Cohesion (2007) or the European Research Area Green Paper (2007) (van Eupen et al. 2012).

The OECD has recently developed a simple definition of rural areas for making international comparisons of rural conditions and trends. To facilitate analysis, regions are grouped into three types (OECD 1994): predominantly rural regions (with over 50% of the population living in rural areas), significantly rural regions (15 to 50% of the

population) and predominantly urban regions (less than 15% of the population living in rural areas).

It has been agreed at European level that rural areas are complex economic, natural and cultural locations, which cannot be characterized by one-dimensional criteria such as population density, agriculture or natural resources (Westhoek et al. 2006). As a result, member states use a wide range of criteria for the designation of rural areas (such as population size or density, commuting intensity or the share of agriculture) (van Berkel & Verburg 2011) even if the thresholds vary between them – 1.5% of the population involved in agricultural activities in Luxemburg and almost 20% in Greece. This is a main reason why statistics developed by Eurostat at European level can be seen as inconsistent as they are not based on commonly applied definitions and thresholds, and the European Union doesn't have a harmonized definition of what is rural (Plieninger et al. 2006).

This chapter is structured into four sections. In the introduction, the theoretical framework illustrates various definitions of rural areas. Section one, Background, presents the current processes with manifestation in European rural environment. The second section presents spatial instruments useful in sustainable management of natural resources from rural areas. The third section presents the categories of key rural resources and the instruments for promoting a good management for its. The last part of the chapter presents successful forms of resources conservation at regional and local level.

The objectives of this study are:

- Presenting the overview of rural areas in Europe and the categories of key rural resources used in the promotion of sustainable development;
- Presenting the instruments that based on Information and Communication Technologies (ICT) promote a sustainable management of natural resources; and
- Showing successful forms of resources conservation at regional and local level.

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