

BOX 1: TERRITORIAL CHARACTERISATION OF THE BAIXO VOUGA LAGUNAR AREA

In the case of Baixo Vouga Lagunar, the Portuguese pilot, the first step in implementing the Territorial Integration Strategy was the territorial characterisation of the area, including all the variables referred to above. To understand the territory, a physical analysis was made, along with a climate analysis and one containing recent data indicating potential climate changes. Research was also undertaken on soil characterisation, water resources, fauna, flora, landscape, land use, demography, social and cultural aspects. Lastly, a

detailed characterisation regarding agricultural activities and a survey on potentially relevant economic activities were carried out, which implied a mix of territorial variables. This analysis concludes that landscape depends on agricultural maintenance. This is particularly striking in reference to the rice fields, extremely important for feeding the birds (protected species). Another important aspect regarding this balance and inter-relationships is the strong dependency of agriculture on good quality soil and water availability. ■

text like climate change. Therefore, the first and fundamental step to achieve this target is to analyse the processes that take place in a territory so as to know how to influence them. This implies looking at the territory by using multiple perspectives, knowing their variables (table 1), realising the relationships between them and evaluating in what ways resilience depends on those variables and their relationships.

As can be seen in table 1, one group of variables affecting territorial processes are socio-economic ones. During the course of time, people have occupied

FUNDAMENTAL VARIABLES AFFECTING TERRITORY		
BIOPHYSICAL		SOCIO-ECONOMIC
NATURAL	ANTHROPOGENIC	
<ul style="list-style-type: none"> ■ Topography ■ Climate ■ Geology ■ Geomorphology ■ Soils ■ Water ■ Biologic resources 	<ul style="list-style-type: none"> ■ Land use ■ Landscape ■ Cultural recourses ■ Heritage ■ Physical quality of environment (water pollution, waste) 	<ul style="list-style-type: none"> ■ Demography ■ Housing ■ Services ■ Economic activities

Table 1: Types of territorial variables (extracted from: Partidário, R., 1999. *Introdução ao Ordenamento do Território*, Universidade Aberta, Lisboa).



Flock of bustards by Nuno Lecoq, (courtesy of Liga para a Proteção da Natureza).

territory to take advantage of its resources and thus used it as a basis to develop their socio-economic activities. This occupation is determined by the kind of use that is made of land. For these reasons a complete analysis of a territory not only needs to study the variables affecting it and the relationship between them, but the main land structures (property structures, parcel shape and size, hedges, pathways, drainage system, etc.), the production assets (how they are distributed and linked to territory), and the technology used to manage them. Furthermore, it is also important to pay attention to the different factors which contribute to balance the territory, such as population growth, economic development models, functioning markets (especially land markets and land mobility) knowledge and technology.

Territorial analysis requires a system approach (considering the territory as an eco-system) so as to understand the complex processes and how they determine the effects of climate change. At the time of analysing territory, the use of the concept of Ecosystem Services (ESS) based on system-thinking, where the focus is on cyclical rather than linear cause and effect, is important. Understanding the parts in relation to the whole and examining the links and interactions between the elements which compose the whole system provides the basis for two things: identifying potential in the area and relating functions to space/location. The idea that all goods and services ecosystems can contribute to society may be considered as a holistic and global framework which simultaneously enables thinking about the characteristics of the territory within two perspectives: a) human-organised areas with the focus on multifunctional land use and b) strong human pressure on ecosystems (through urbanisation, fragmentation, effects of CC, pollution, etc).