

Chapter 1

Benefits of a Spatial Data Infrastructure on the Sustainability of a Southwestern European Territory

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ABSTRACT

OTALEX C is a cross border project elaborated by several entities of the administrations, agencies, and Portuguese and Spanish enterprises. The aim is to develop joint cartography, in addition to the union of territorial and environmental data and their interexchange. SDI-OTALEX C has defined a method capable of assigning the degree of sustainability through the integration of environmental, social,

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and economic indicators. Thus, a link has been established with consumption and productivity, which promotes the appropriate use of resources and, consequently, the sustainable development of the territory. The benefits for local population of this territory fall within the very term of sustainable development since its objective is to define viable projects and reconcile economic aspects, social and environmental impacts of human activities. To reconcile all these aspects, the SDI makes it possible to contribute to sustainability and to try to envision projects that help to keep the population of these largely depopulated territories.

INTRODUCTION

The number of countries in the world, since the middle of last century, has increased almost three times, increasing the number of border areas greatly. Borders are a very complex social phenomenon associated with the confluence of many layers which are related to the territorial organisation of the society, as well as with human psychology, having produced an evolution in the form of interpreting the borders along with changing social investigations. Over the years the borderland studies passed from the field of geography and history, the pioneer disciplines, to the field of interdisciplinary knowledge on rapid expansion, developed in parallel by political scientists, geographers, sociologists, anthropologists, psychologists, ethnologists, lawyers, economists and even experts in technical sciences (Kolosov, 2015; Laine, 2015).

Borders, Boundaries, Frontiers, and Borderland Regions

The border areas, established by the international agreements that delimited them, gave rise to a series of territories of strong dynamics despite being far from the centres of power with a dominant interest in national control, located in the capitals of the new states that they established over time. Although for some authors the borders are always in motion, including concepts such as border construction and reconstruction, search for balances, transboundary flows, undecided borders and the most drastic through the exercise of power, finally by mechanisms of alteration and reconciliation occurs the stability of these peripheral territories (Kornrad, 2015).

Currently, border relations contribute to maintaining the prosperity of the territories of the two countries near the borders, ensuring continuity and promoting links in the globalization environment that has been developing in recent times (Konrad & Nicol, 2011). The border areas contribute to the fact that the population settled in these territories achieves improvements in their economy and social services of

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