

THE RURAL WORLD IN THE 21ST CENTURY: A COMPROMISE BETWEEN RURAL CULTURE, COMMUNICATIONS INFRASTRUCTURES, NEW TECHNOLOGY AND LOCAL INITIATIVE

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Introduction

This research is a continuation of the project entitled “The Rural World in the 21st Century: A Compromise Between Rural Culture, Communications Infrastructures, New Technology and Local Initiative”, financed by the Abertis foundation (2000-2004). The aim of the study is to find out about the social, economic and territorial situation of the mountain regions of Catalonia through analysis of homogeneous territorial units. The qualitative and quantitative methodological basis and structure were established on the basis of the preliminary results. First of all, local initiative within a framework of “local firm embeddedness”; secondly, the protection or fostering of substantial experiments in the fields of agriculture and tourism and, in third and final place, consideration of landscape as an overall model covering human activities and the natural environment in the homogeneous territorial units studied.

The *comarcas* (a *comarca* is an area more or less equivalent to a county) classified as mountain areas are those laid down in the high mountains act 2/1983 passed by the Catalan Parliament on 9th March 1983: L’Alt Urgell, L’Alta Ribagorça, El Berguedà, La Cerdanya, La Garrotxa, El Pallars Jussà, El Pallars Sobirà, El Ripollès, El Solsonès and La Val d’Aran. They cover a total of 9,559.80km² and their population according to the 2001 census was 188,255 people, spread over a total of 162 municipalities. In relation to Catalonia as a whole they make up 29.97% of the land area, 2.97% of the population and 17.12% of the number of municipalities.

The three pillars upon which this study rests are, firstly, local development within the framework of the local embeddedness model. The primary goal of the embeddedness model is to foster the revival of economic relationships within the social structure of a place, as well as inter-relating human capital, social capital and economic capital and generating a network favourable to the development of industrial and service activities. Secondly, taxonomies of areas as a method for establishing analytical typologies in the Catalan Pyrenees: identifying homogeneous areas makes it possible to separate the development of the different “constructed landscapes” within the administrative limits of mountain areas, in order to construct specific development proposals tailored to the problems identified in each area.

Thirdly and finally, landscape as a method of synthesis for analysing changing land use. Studying the landscape involves a dynamic combination of variables within the natural, historical and social settings that, taken together and as a whole, explain the relationship between nature and society. The multi-disciplinary techniques required for the study of the landscape should make it possible to explain the technological and social context at each point in time, and to link up the techniques and methods used with the natural and social worlds. This should make it possible to create tools for the proper management of territory.

The Catalan Pyrenees were chosen as the area for this study because of their marginal position in relation to the main transport and communication lines of Catalonia. In the last third of the 20th century there was extensive development of the network of motorways, dual carriageways and main roads, creating major differences of opportunity with the coastal and pre-coastal strip, as well as some major east to west or north to south routes, both inside and outside Catalonia. Rural areas, in particular mountain areas, need the benefits of local development and improved communications in order to avoid depopulation of the territory, while preserving its social and environmental quality. Rural culture and landscape are the main indicators for assessing the results of local development.

Aims

Aims of two kinds were envisaged for this study: firstly a general aim and secondly a methodological aim. The general aim of the study is to show the economic, social, cultural and landscape diversity of Catalonia's high mountain areas. This should serve for the subsequent drawing up of proposals allowing development strategies to be grouped together while analysing the structural features which are inherent to each of the scenarios that make up the typology of areas in the Pyrenees. The methodological aim is to use the most suitable procedures to get the best results in each topic area.

The result obtained is based on the preparation of proposals to allow a change in the development of rural areas on the basis of three blocks of measures: first, local initiative; second, protecting and fostering outstanding experiments in the areas of agriculture and tourism. Third and last, landscape and changing land use.

The complex nature of the study means that, while it has a general aim, each of the topic areas has specific aims:

Local Development

The current economic position of the mountain areas reveals a degree of uncertainty as to the direction to be taken by their productive capacity and their main economic driving forces. The second specific aim is defined by analysis of local economic development within the framework of the embeddedness model and comparative advantage. Thus, the aim is to determine the possibilities for development of the existing industrial fabric, in order to appraise the structure of the material and immaterial networks built up in the area among small and medium-sized enterprises (SME's) and local institutions, as well as their economic embeddedness. In this case the area studied was the Val d'Aran.

Homogeneous Areas

The mountain areas (*comarcas*) are small – and not-so-small – territorial units with little internal homogeneity. The third specific aim is to analyse and explain the differentiating features between them by means of a methodology of our own, using geographical information systems and factorial analysis, discriminating between different typologies to analyse local development in mountain areas. In the preliminary study the *comarca* of El Berguedà served as a pilot area for an initial approach to the methodology of taxonomies. The second phase was to involve applying the methodology to all 164 municipalities in the Pyrenees.

Landscape and Changing Land Use

As a preliminary hypothesis it was postulated that the current dynamics of mountain areas involve social fragmentation, economic disorganisation and a territorial impact of such a magnitude that if it persists, it may lead these areas to a situation of no return. Altogether this has very important consequences for the native population and the landscape. Social fragmentation is evident in the increasingly widespread existence of villages which are either abandoned or of a highly fragile demographic viability, in contrast to the uncontrolled spread of second homes with very low occupation rates. Economic disorganisation is evident in the gradual abandonment – sometimes complete – of activities involving direct management of the environment (in the primary sector) and the concentration in a certain number of places of activities which are highly lucrative but of a speculative nature, so that only a very small part of the profits go to the population and the territory. The territorial impact is the result of these dynamics which leave behind them extensive areas which are completely abandoned and other areas with heavy seasonal concentrations of population and excessive human use.

The main aim of this block is to describe, on a comparative basis, a certain number of areas in order to determine whether they have suffered an impact and/or integration of tourist activities connected with winter holidays and leisure (ski slopes) and building around protected natural areas.

Methodology

The methodology proposed to carry out the research is based on complementary quantitative (statistical analysis, factorial analysis and geographical information systems) and qualitative (interviews and description of behaviour) techniques for doing the work.

Summary of the Work

The research is made up of three broad topical blocks which are related to one another in order to explain local development in the Catalan Pyrenees.

In the field of local development the behaviour of economic activity and policies for action were analysed in two specific areas, El Berguedà and La Val d'Aran. Comparing their economic activity this made it possible to explain their development towards a new system of production.

Moreover, local development in the Catalan Pyrenees has features which are easily associated with new approaches to theories of regional development. In order to analyse local development in mountain areas, the initial idea covered the Catalan Pyrenees, but the differences within this territory are substantial enough to warrant defining a series of typologies. These typologies, defined here as taxonomies of areas, cover areas with similar social, economic and territorial features.

The taxonomies are what make it possible to implement territorial policies to foster development of the Pyrenees. They are also what provide the material for possible policies for maintaining and planning protected natural areas in the face of the more environmentally aggressive activities such as winter ski stations or adventure sports. One of this project's contributions is to foster the areas' own assets and make them into driving forces for economic activity, so mitigating the main social and economic problems faced by remote areas.

The end result is a mosaic of different types of area which does not coincide with administrative boundaries (between *comarcas*). The physical components which make up the territory often do not have artificial limits, while administrative divisions are just this: artificial. The difficulty of obtaining broken down statistical information leads us to use the municipality as the smallest territorial unit.

To explain the differentiating features within individual *comarcas*, we followed a methodology based on the use of geographical information systems (GIS) to process and analyse spatial information, on the one hand, and on the other, factorial analysis of principal components. This made it possible to understand the taxonomies of these mountain areas.

The use of this approach was piloted in the *comarca* of El Berguedà, selected because of its social and economic features. Subsequently, for this second phase of the research, the same methodology was adopted, but for all the municipalities in the mountain *comarcas* under the 1983 act, and with a total of 124 variables. From this, six hierarchies are obtained which allow different behaviours to be explained.

Finally, the recent historical dynamics of the territory in mountain areas are studied. This involves an analysis of changing land use in the second half of the 20th century, in particular between 1956 and 1997. Two processes can be identified which might at the outset seem contradictory. On the one hand, the tourism attracted by leisure and holiday activities linked to the landscape (skiing, adventure sports, walking, etc.) leads to intensive occupation of the territory. On the other, the territory is being abandoned; this can often be related to changing land use caused by the abandonment of the most traditional social and economic activities (agriculture, stock rearing, forestry, etc.).

Having identified these two processes, we set out to conduct research based on the comparison between areas characterised by traditional uses (extensive forest, agriculture and pasture) and the landscape impact and/or integration caused by the installation of infrastructures connected with winter holidays and leisure (ski slopes) and building close to protected natural areas, a process which has been referred to in Catalan as "*naturbanització*."

For this part of the study the following ski slopes were chosen: Baqueira Beret (Val d'Aran), Portainé (Pallars Sobirà) and the area of influence of the ski slopes of La Molina-Masella, which have been separated into two adjacent areas: Urús and la Masella (Cerdanya).

Conclusions

The philosophy behind the aims and hypotheses of this work ties together several scenarios with a single common denominator: rural and mountain areas of the Catalan Pyrenees. In the work emphasis is placed on the differences between the mountain areas for the express purpose of showing the diversity, in a broad sense, of the economy, society and culture of a relatively large territory of Catalonia. One of the basic frameworks for this work is that of grouping together development strategies for these areas while appraising the innate structural features of each of the scenarios which make up the typology of areas in the Pyrenees.

The Pyrenean mountain areas are regions with historical structural deficiencies which have tended to hinder their development. At the end of the 20th and the beginning of the 21st century, however, they cannot be said to be areas in economic decline. Despite their depopulation, the principal – and striking – feature which seems inherent to remote areas, substantial efforts have been made to improve action in the area in the broadest sense, and economic activity is emerging as a challenge, a provocation, transforming businesses, industries, communities and political actions. These efforts have come from different quarters, often resulting from individual initiatives springing from rather marginal social phenomena such as the neorural movement; others have come out of intangible feelings of ties to the territory, as in the case of rural entrepreneurs who carry on tradition by introducing innovations; businesses in the new economy which take advantage of the natural setting and lower land prices; service activities linked to mountain tourism which exploits the features of the environment, leading to building and winter and mountain sports services in the broadest sense; and finally, they have come from local institutions attempting to act as a focus of economic activity aligned to the potential of the areas.

The relationship between economy and nature – or, more precisely, with the environment – is obvious in mountain areas. This is why the need to plan the territory to combine its development with integration with the rest of Catalonia seems obvious. Destruction of the environment would have a negative effect on the economic activities of Pyrenean mountain areas. This study includes a considerable amount of scientific evidence to prove and document significant risks arising from uncontrolled growth and economic activity, which could destroy the basis for this growth – the natural setting. At the same time, it points out lines of development involving existing group feelings, such as the rise in public awareness of the risks to the environment from uncontrolled development. The intensive spread of second homes in these mountain areas, for example, represents an obvious source of private benefit (among other things, the owners enjoy a privileged setting in comfort), but it is not entirely clear that they contribute to the collective good, particularly in the medium to long term. This set of local processes is also influenced by external factors which are important and help to condition the process as a whole.

Below are listed the main lines of action in the development of mountain areas:

- To lay down working guidelines for agricultural, craft, industrial and service activities in line with the principles of comparative advantage and the preservation of rural culture.
- To analyse and structure industrial and service activities on the basis of the theoretical principles of territorial embeddedness.
- To foster integrated policies to preserve the landscape. On the one hand, to make it possible for agricultural and other activities compatible with the natural environment to continue; on the other, to prevent abusive use of land in mountain areas.

This matter is obviously not closed. The emergence of an awareness of how the environment becomes a “concept” and “commodity” in mountain areas and, at the same time, how these processes are regulated, cannot be dictated by hard and fast rules. There are many interests involved. This study aims, on the one hand, to appraise the actual situation in the Pyrenees and see how the region can develop in a sustainable way. On the other, it attempts to contribute to the debate on the future of mountain areas by putting forward new arguments as a basis for future research and discussion.