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## ON THE LINK BETWEEN SOCIO-ECONOMIC DEVELOPMENT AND LANDSCAPE CHANGES IN TWO PYRENEAN VALLEYS: THE TRUE CHALLENGE OF MULTIFUNCTIONALITY

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### Abstract

Pyrenean regions have undergone deep changes in the past 50 years. These changes have affected their socioeconomic structures, leading to a shift in land management, which is eventually reflected on the landscape. Two opposite processes are found throughout the mountain range: abandonment and intensification. Land abandonment results from a shift in the socioeconomic model that sustained this mountain area for thousands of years. On the other hand, intensification results from tourism-based development. Furthermore, designation of nature protection areas has contributed to this overall change in land uses.

In this study we address impacts concerning land use changes and a shift in management strategies, taking into account landscape's multifunctional dimension. We compare two valleys within the Catalan Pyrenees which differ in their socioeconomic context: on one side Vall de Cardós, where tourism has great significance together with nature conservation and, on the other side, Vall Fosca, where primary activities are more relevant and tourism has developed on a smaller scale. Landscape structural changes in the past 50 years (1956-2005) have been quantified through GIS techniques and the use of landscape metrics. Our results show that management strategies influence landscape configuration and land uses at present, which becomes especially relevant from a global change perspective.

*Key words:* landscape dynamics, land management, land use changes, mountain areas, Pyrenees

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