ABSTRACT

The problematic of floods and its association to territorial transformation is undergoing a significant trend change, in terms of understanding the scope of the problem and dealing with it. The aim of this research, however, has been confined to the flooding from fluvial origin, in small basins, maximum 500 km². Most of these basins have common diverse characteristics, among which were considered remarkable little or non-existent regulation, short reaction time by public population, activity or constriction channels due to inadequate locations of some buildings and the high generation torrential event which provoke considerable damages.

The territories which present the described problems have been the subjects of research through its application on Girona pilot river basins and the ravine of Portelles, located in the north of the Alicante Province. The main objective was to study the preventive measures which have been developed in the pilot basins, from different regulatory framework, legislative and regulation, management plans and urban planning. It was found necessary to evaluate the input which contributes the prevention of floodplains regulation and alluvial fans as well as amending the insurance approach against extraordinary risks, improving its effectiveness in terms of prevention..

To conclude, through nonstructural measures such as land use planning, the regulation of uses in floodplains and alluvial fans, and mandatory insurance policy in high risk flood zones, small basins, such as the present one, would be able to manage flood risk more efficiently than through diverse emergency works, which is currently happening. In order to make this approach operational, all social agents, administrations at all levels and individuals’ involvement and participation are required.

The management plans carried out, which have been subject of analysis in this investigation, are heading as planned, however, the coordination and cooperation still continues to be a pending issue.

Possible approaches are put in on how to act on the small basins where integrated measures along with the local populations are considered essential. Thus, efforts have been made to cope with problems of social perception through different social agents, carrying out diverse pending interviews, all social agents, a lifelong learning on flood management, particularly in the prevention phase, which has been lacking until today in the basins of Girona River and the ravine of Portelles.