

# NATURAL CHARACTERISTICS AS AN INITIAL FACTOR FOR A PROPER TERRITORIAL PLANNING IN THE FUNCTIONAL AREA OF DONOSTIALDEA-BAJO BIDASOA (BASQUE COUNTRY)

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The regulation of the territory in the CAPV is formed in the first place by the Law 4/1990, May 31<sup>st</sup>, of Organization of the Territory in the Basque Country, establishing the legal framework under which the policy of the land use planning throughout the Basque Country is developed.

The preamble to this Act itself clearly presents the objectives, among which we can emphasize one specifically for the Basque Country: «to mitigate the effects caused by an uncontrolled urban and industrial growth, withstood by the CAPV mainly during the second half of this century, effects that have led to significant degradation of living standards of the population located in its territory» (Preamble III, Law 4/1990, may 31<sup>st</sup>, of Organization of the Territory in the Basque Country).

Three are the means provided by this Law: guidelines for the territorial organization (DOT), zoning plans (PTP) and sectoral spatial plans (PTS). The relationship between the DOT and the PTP with the PTS is hierarchical, so that no requirement of the latter may be contrary to the foregoing. Likewise, the PTP has in principle the same range as the PTS, prevailing upon them by means of the DOT as their instruments of their development.

The functional area under consideration has an area of 379 km<sup>2</sup> and is located in the northeastern part of the CAPV, bordering France. It comprises the municipalities of Andoain, Astigarraga, Donostia-San Sebastián, Errenteria, Hernani, Hondarribia, Irun, Lasarte-Oria, Lezo, Oiartzun, Pasaia, Urnieta and Usurbil, and records a population of 392.543 inhabitants. Due to its mountainous relief, and therefore a shortage of land suitable for many uses and activities, the urban-industrial one has been localized by the littoral chain row and in every valley, forming a continuous urban area stretching without interruption. Considering that in these depressions and valley bottoms sits most of the people recorded in the functional area, the high concentration they suffer can be sensed. These issues and the fact that it is currently

undergoing a process of review of progress to the partial territorial plan of Donostialdea, show great potential in front of these lines of research and geographical work.

## I. AIMS

This article responds to the results obtained from the realization of the doctoral thesis by the author of this paper. The main goal is to study the natural elements of the territory in order to analyze how they can influence the regional planning of the functional area of Donostialdea-Bajo Bidasoa, as well as to determine the risk of suffering some kind of environmental threat (flooding, floods...) by means of the built spaces or those that, even with a clear potential, can be found embedded in particularly vulnerable areas. Thus the Basque government and the deputation of Gipuzkoa are provided with an information tool that may assist decision-making authorities, both on regional and county scales, as well as on a local one, from the Urban Plans of each municipality involved in the functional area.

## II. METHODOLOGY

The study was performed using the FPEIR model, which responds to the initials of Driving Forces, Pressures, State, Impact and Response. Also known as DPSIR, responding to the English apocopation. This is a relatively new method, because despite being used in large studies related to environmental issues – «Environmental Indicators» (Organization for Economic Co-operation and Development, 1994); «Europe's Environment: The Second Assessment», (European Environment Agency, 1998); «Indicators of Sustainable Development. Framework and Methodologies», (United Nations, 2001); «Sostenibilidad en España», (Observatorio de Sostenibilidad de España, 2005, 2006 y 2007), «Estado del Medio Ambiente», (Gobierno Vasco, 2004) – up to date it has been rarely used within the stages of analysis and diagnosis with reference to the processes and land use planning. However, it is believed to offer significant advantages because it is based on the estimation of relevant variables with a treatment similar to that shown by the territorial indicators. In fact, this methodology has been applied successfully in the doctoral thesis recently defended by the author of the preset paper.

## III. RESULTS

As you have seen, due to land scarcity and high occupancy rates of the same activities by residential and industrial use, the area is facing increasing competition from all sorts of activities. The areas most intensely occupied detecting highest population densities are precisely the ones with less availability of land suitable display, so that municipalities such as San Sebastian, Lasarte, Renteria, Pasajes and Irun, occupy the major negative positions, while others like Usurbil Urnieta, Oiartzun and Hondarribia are among the least threatened by this scarcity. In the middle would fall for other municipalities: Hernani, Andoain, Astigarraga and Lezo.

In 2007, residential and industrial activities occupied approximately 25% of the total functional area, a percentage that perceptual perspective may increase. That is, as explained

by Urrea Ruiz and Galdos (2008), from the lower parts of the valleys, the predominant uses are residential, industrial and transportation, but if one is situated, for example, at the summit of Peña Aia, the sense of urban-industrial density is relativized to contemplate an overview predominantly rural in which urban complexes elongated draw tapes that fit the bottom of narrow valleys, following the sinuosities out therein.

The location of these uses in the valley bottoms and even in flood plains, while making an irreversible loss of land with a capacity agrological very important (fluvisoles), has led to catastrophic consequences in case of severe flooding. Remember that rivers, due to the limited length and steep slopes to be saved, are characterized by torrential. In fact, the timing between the time of maximum rainfall and flood flow is hours, therefore the floods are swift and violent.

On the other hand, the less attractive areas for urban-industrial uses are those which a mountainous terrain and steep slopes. These features can be seen especially in the unity of the Cinco Villas massif, which characterized for being a rough terrain, and the coastal monocline Jaizkibel. The first is dominated by forest uses, beech, oak and forest plantations, both softwood and hardwood. Extensive grazing is of some importance in upland areas and the rest scattered. The villages are scarce in the field of space, and they are distributed in a scattered way. Clearly, urban and industrial uses are non-existent, and are also covered in the Plan of Natural Resources Management Area Aiako Harria, approved by the Basque Government Decree 240/1995 of 11 April. Moreover, the chain of Jaizkibel Mountains (distinguished by the Natura 2000 network as SCI) is also outside any urban industrial development. The main land use in occupied area is extensive grazing (cattle and sheep), and secondly appears forestry, promoting conifer plantations and hardwood lesser extent. Also, Ulija, which continues to Jaizkibel, despite its proximity to the core of Donostia-San Sebastian, is notable for the absence of residual activities. Effective, it is a very rugged stretch of coastline with important drops, so it is not conducive to promoting urban development.

#### **IV. CONCLUSIONS**

In short, the PTP Donostialdea must take into account the limited availability of land and reduce the extensions referred to processes of artificiality in previous advances. And, both in the Advancement of 2003 and the new document published in 2008, the territorial model presented is more a planning model that includes all the AF, the prevailing management of residential, industrial, trade and transport to the management of the remaining territory nonexistent. The aim is to achieve a model «decentralized focused,» also called «network multinucleated city», a model that assumes a diffusion process entirely urban, justifying the expansion of urban area in the need to balance employment and population (with the objective to lessen the growing need for daily commute) and the need to decongest the crowded areas and strengthen the least. However, this expansion does not seem appropriate to some artificiality rates higher than the average CAPV (Dávila, 2010). Moreover, the documents you can see the little claim by the PTP to cut with expansive urban dynamics in the functional area of Donostialdea-Bajo Bidasoa has been recorded over the last two decades.

