

# OTALEX C Local Landscape Units (Spain-Portugal Cross Border region)

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**STUDYAREA (ALENTEJO AND CENTRO (PORTUGAL) AND EXTREMADURA (SPAIN))**

**OTALEX C** is the **Territorial and Environmental Observatory of Alentejo, Extremadura and Centro**, a cross border region between Portugal and Spain. It has a **Spatial Data Infrastructure** ([www.ideotalex.eu](http://www.ideotalex.eu)) built up with environmental, social and economic indicators that provides the information to support decisions.

Fig. 1: OTALEX C study area

## LOCAL LANDSCAPE UNITS (LLU) CONCEPT

The concept of local landscape unit is set as the combination of factors / components of the stable structure as geology and/or lithology and geomorphology or landforms and the factors related to the circumstantial structure of the landscape, which comprises the land cover and use of the soil. It considers that variables such as the structure of property and human settlement are reflected largely in the mapping of soil occupation and land use.

Physical factors such as geology, geomorphology, soils and climate (the action of water and wind), which define the shape, the land cover, which affect the human occupation are the most relevant factors in the delimitation of units landscape, yet it is the human action currently is the most important factor in landscape construction, either through dynamic and rapid changes that shape all spatial matrix, either through the forms and well individualized structures that differ from the organic morphology.

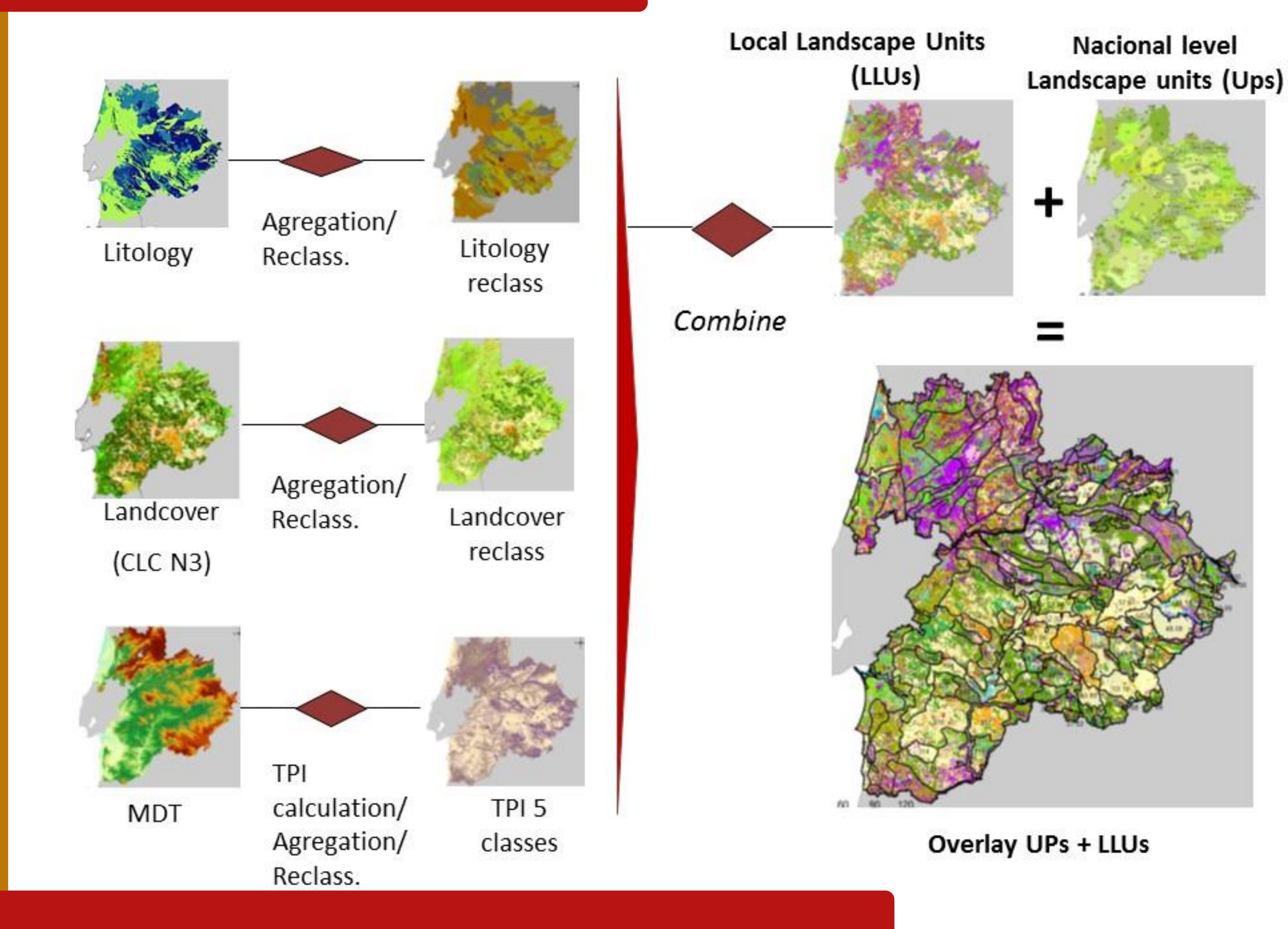
In this sense, we selected three variables considered most relevant in defining of local landscape units applied at regional level:

- occupation and land use,
- lithology
- and morphology of the terrain.

So LLU is defined as the smallest landscape mapping unit, at a management and planning scale. LLU are important analysis tools, to a better understanding and management of the landscape at local level.

The LLU are based on Land Cover (LC), Geology and TPI - Topographic Position Index (Weiss 2001) maps.

## GIS MODEL



## CONCLUSIONS:

This result shows the internal heterogeneity of the national landscape units developed by Cancela d'Abreu et al. (2004) for Alentejo and Centro regions and HERRAIZ et al. (2003) for Extremadura, showing a high adjustment of macro-units to the heterogeneity of local landscape units.