

## **EU-LUPA Interim Report Commentary**

This project has a strong methodological focus. Its main objective is *“to provide a consistent methodology to analyse comparable information about European regions based on data from different sources and different levels [...] integrating physical dimension (land cover) with social economic (land use) and environmental, in order to understand and obtain a clear view on land use changes [...] identifying main challenges [...] and defining policy options to cope with those challenges.*

It argues that land-use planning and management are essential to better reconcile land use with environmental concerns. The report explains that land use has both a scale and a time dimension, with intensive processes having a more immediate effect than extensive ones.

### **Urban form and sprawl**

Urban form and urban sprawl are important themes in this project. It makes the point that “urban sprawl” has been used to describe a range of development patterns: contiguous suburban growth, linear patterns of strip development, leapfrog and scattered development, which represent a continuum from compact to dispersed settlement. Furthermore, urban sprawl is not just geometry, rather it is a process of urban change.

Thus the research team plan to create indicators of “urban compacity (sic)” and of mixed uses (since mixed uses are seen as desirable). Other measures being undertaken are: soil sealing per capita (again a measure of compactness); distance to the city centre; ratio of built-up area to total land area; percentage of sealed area to total land area; increase of built-up area; change in built-up land take per capita; redevelopment as a percentage of new built-up areas; and the growth rate of industrial, commercial and transport areas.

### **Typologies**

The report reviews the attempts in ESPON to develop robust typologies that define core characteristics of regions as urban or rural or having special geographical features. The view of the team is that none of these connect sufficiently to the issue of land use and land cover. Therefore they propose their own. The intensity of land use is seen as a central concern (though the CORINE data is not adequate on this). The team proposes a land cover typology built from three layers: basic land cover, land cover change intensity and socio-economic intensity (population density and GDP per inhabitant). Note: CORINE land cover data is not yet available for the UK (or Greece) for 2000-2006, so the typology in relation to UK is likely to be of less value.

### **Land use functions and multi-functionality**

Land Use Functions (LUFs) are defined as follows: they “express the goods and services that the use of the land provides to human society that are of economical, ecological and socio-cultural value and likely to be affected by policy changes” (p.21). Six key LUFs are identified, which concern the provision of work; leisure and recreation; food and energy; housing, transport and energy infrastructure; and abiotic and biotic resources. Thus the underlying idea – an important one – is of multifunctionality, of the use of land serving a number of purposes at the same time.

The intention then is to collect data on these LUFs and normalise it (so that the various statistics can then be combined). In this way the project will create comparable measures of the performance of land use functionality in different territories.

In essence then the project is building a multi-criteria evaluation model which can be used to look at ways in which land use is changing across Europe. While the report says that final analysis of trade-offs is left to the end user, the usual “health warning” has to apply. This is that the availability and selection of data, together with internally developed weightings (e.g. through use of expert panels), are likely to significantly shape the narrative to be presented to the policy makers. What is sought is a form of retrospective territorial impact assessment, in which the multiple impacts of changing land use functions can be mapped by regions.

### **Policy context**

There is a section of the report that summarises relevant EU policies since the adoption of the European Spatial Development Perspective in 1999 through to the Fifth Cohesion Report that came out in October 2010. The hope of the project is that “Scientific evidence on the land use patterns and dynamics and its correlation to land use efficiency will allow policy makers to identify those regions where land use conflicts exist and also regions where there is a potential for territorial development and define policy measures accordingly” (p.34).

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**Other Partners:** UAB (Spain), Nordregio, Alterra (Netherlands), IGSO (Poland)

**Related ESPON Reports:** From the ESPON 2006 programme, the projects on polycentric development (1.1.1), urban-rural relations (1.1.2), small and medium-sized towns (1.1.4). From the 2013 programme EDORA, FOCI, CAEE.

**Future reports:** Draft Final Report June 2012; Final Report October 2012.

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