

Sustainable Urban Form - Methodological Approach for Portugal

Eduarda Marques da Costa, Jorge Rocha, Michael Rodrigues, Patrícia Abrantes

Centre for Geographical Studies of the University of Lisbon

IGOT – University of Lisbon, eduardamcosta@netcabo.pt

Phone/fax numbers: 00 351 217940218 - 00 351 217938690

In the last decade, discussion about urban form has been growing importance. First academic studies were related to the efforts to reduce the environmental costs of suburban development (BERRY et al, 1974). After Brundtland Report, sustainability concepts have been integrated and in this context, sustainable urban development depends of achieving a "sustainable urban form".

Recognizing the importance of this subject to the national and European land management policies, the key challenge to policy implementation and evaluation is the elaboration of key-indicators that analyse the evolution of urban form and their linkages to sustainable urban and regional land management (STEAD, WILLIAMS and TITHERIDGE, 2000). Other research explored remote sensing in linkage with other sources of data in modelling urban environment (ACEVEDO, FORESMAN and BUCHANAN, 1996; CLARKE, HOPPEN and GAYDOS, 1996; MEAILLE and WALD, 1990; WU, 1998). In spite of the work being done in this field, the morphological assessment remains a key issue when taking into account the urban form. As such, there is an increasing need to establish a core of several morphological indicators in order to integrate them with sustainability indicators.

The main objective of this paper is to present selected morphological indicators applied to mainland Portugal, relating this with the urban network.

This paper is structured in 3 parts. In the first part a synthesis of theoretical discussion is presented. In the second part, a brief presentation of Portuguese urban system evolution is made. In the third part, some small scale morphological indicators are selected and tested.

Keywords: Sustainable urban form; morphological indicators; urbanization process