



The impact of spatial policies on insular and coastal landscape. Evidence from Heraklion, Crete Island

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Landscape, is the result of the interaction between natural and human-made environment, it is a dynamic procedure and an important component of the quality of life. Insular and coastal areas, due to social, economic and environmental factors, receive significant pressures that in cases drive to intensive landscape changes, land use conflicts, pressures of natural and cultural heritage, coastal erosion and degradation of local social-economical networks. Urban sprawl is here considered as the principal factor that creates intensive pressure on those areas.

This study focuses both, on the evaluation of the landscape changes by using spatial metrics and on a critical analysis of the spatial policy framework concerning landscape management and protection. As a case study area the Large Urban Zone of Heraklion, in Crete Island, was chosen. For the analysis, geospatial data for the period 2006 – 2012 obtained from the Urban Atlas project are used.

The analysis highlights the fragmented character of Heraklion landscape. The man-made environment dispersion is considered as the principal cause, which is expected to increase over the years. In Greece, the urban sprawl is a common practice driven mostly by spontaneous, self-promoted housing strategies. The planning legislation framework includes numerous regulations that favor built-up areas expansion in ex-urban areas. The built-up areas expansion is directed mainly in: (a) the peri-urban areas, (b) the littoral zones, (c) the islands, and (d) along the routes. The urban sprawl had negative effects not only because of its important volume, but mostly because of the receptor areas fragile character. It is also considered as a principal pressure on coastal and island landscapes.

Keywords: spatial policies; landscape changes; spatial metrics; Heraklion; Crete Island

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