**Communicating Urban Growth and Ecosystem Services in the age of Web 2.0**

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The paper focuses on the urban growth of cities and urban regions, particularly with reference to the potential conflicts between changing land-use and ecosystem services (ES). In spite of the existing research carried out around the world, this problem still seems to pervade planning in cities and urban regions. The study adopted a novel approach, where planning is inherently connected to the professional and political contexts of planning epistemology. Although this issue has been theoretically discussed before, there are few empirical studies on the actual functioning of different epistemologies, novel technologies, and communicative cultures of cities.

The papers draws on planning theory and practice, in particular, participation of different stakeholders and the relevant communication between planners, other experts and the wider public. In addition, the development of information technology has provided new tools for participation in the planning projects. The development of what is now usually called Web 2.0 - a term that refers to a second-generation web based on the use of novel technologies - has added a new layer to this toolbox, through social media, through online publishing in blogs, and through a variety of interactive tools, such as maps where stakeholders can add relevant information and give feedback. Secondly, the paper focuses on the planning processes that urban regions and cities are increasingly facing in land use when adopting the ES concept. The ES can be categorized as supporting services (e.g. biodiversity and habitat), providing services (e.g. fish and wood), regulating services (e.g. controlling flood) and cultural services (e.g. recreation). Only recently the ES have been brought to the attention of urban and regional planning and policymaking. The benefits from the ES are still unknown for a large group of experts and non-experts. Within this context it is still difficult to reach a consensus and define the relevant knowledge in ES, considering also that public servants and politicians who are not enough informed make most of the land-use decisions. In addition to this, the latest changes in communication in the age of Web 2.0 are increasingly proposing new methods to communicate the ES concepts and to both experts and non-experts. However, only a few examples of online forums and Web 2.0 platforms have focused on how to stimulate public debate on ES. It seems that the existing conceptual framework of participation is not sufficiently developed to address the communication of urban growth and ecosystem services. To this end, the four metropolitan regions of Helsinki, Stockholm, Berlin and Manchester have been studied with the aim to understand how the Ecosystem Services discourses are structured in the planning discourses and participatory process. The methods used are a cross-case comparative analysis of planning documents from the four metropolitan regions, semi-structured interviews to local experts and planners. In addition to this, active participation through Web 2.0- technologies allowed to understand the integration of ecosystem services to the planning practices. The preliminary results show that Helsinki has not yet used the Ecosystem Services approach except a few explicit references in the official planning and policy documents. Stockholm has adopted the ES concept in the early 2000s. In Manchester, an early Residential Environment Assessment Tool in 2005 has adopted the ES concept while Berlin has recently introduced the ES concept in the Urban Landscape Strategy and Biodiversity Strategy. In addition to that, recreational supporting services and the protection of individual species have been mostly emphasised in the comprehensive planning of Stockholm and Berlin while Manchester has focused on the health and wellbeing of residents by analysing the characteristics of neighbourhoods. The discussion moves to possibility to re-conceptualize the public participation, and developing a multi-disciplinary approach that embraces academics, practitioners and stakeholders. To conclude, the papers emphasized that currently information on ecosystem services of urban regions is still lacking. However, there is a need not only to improve the knowledge base for land-use planning, but also to better communicate the urban growth and the benefits of ES to both experts and non-experts.