The Urban Spaces of Uncertainty - The Environmental Assessment Perspective

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Uncertainties hamper the implementation of Environmental Assessment (EA) methodologies. However, many researches focus on the introduction of fundamental concepts, guidelines, or environmental assessment framework, but not operational methods. In order to quantitatively characterize the uncertainties of environmental impacts, and considering that the existing EA approaches are based on qualitative judgments or lack adequate quantitative analysis, this paper develops an integrated technique of uncertainty analysis on land use change and its environmental impacts into the environmental assessment process for urban spaces using scenario planning approaches.

Considering this, and in order to scientifically forecast, analyze, and assess the trends of changes in environmental quality in urban spaces, it is necessary to quantitatively characterize the uncertainties of environmental impacts by systematically establishing relationships between land use changes and the environment in the decision-making process. This paper pretends to enable a systematic characterization of the urban planning, to identify key environmental factors, with regard to uncertainties and scenario planning.

Keywords: Environment Assessment, Urban Spaces, Scenario planning