

Engineering Topology of Ecological Model for Orientation Impact of Sustainability Urban Environments: The Spatial-Economic Modeling

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Abstract : The modeling of a spatial-economic database is crucial in recitation economic network structure to social development. Sustainability within the spatial-economic model gives attention to green businesses to comply with Earth's Systems. The natural exchange patterns of ecosystems have consistent and periodic cycles to preserve energy and materials flow in systems ecology. When network topology influences formal and informal communication to function in systems ecology, ecosystems are postulated to valence the basic level of spatial sustainable outcome (i.e., project compatibility success). These referred instrumentalities impact various aspects of the second level of spatial sustainable outcomes (i.e., participant social security satisfaction). The sustainability outcomes are modeling composite structure based on a network analysis model to calculate the prosperity of panel databases for efficiency value, from 2005 to 2025. The database is modeling spatial structure to represent state-of-the-art value-orientation impact and corresponding complexity of sustainability issues (e.g., build a consistent database necessary to approach spatial structure; construct the spatial-economic-ecological model; develop a set of sustainability indicators associated with the model; allow quantification of social, economic and environmental impact; use the value-orientation as a set of important sustainability policy measures), and demonstrate spatial structure reliability. The structure of spatial-ecological model is established for management schemes from the perspective pollutants of multiple sources through the input-output criteria. These criteria evaluate the spillover effect to conduct Monte Carlo simulations and sensitivity analysis in a unique spatial structure. The balance within "equilibrium patterns," such as collective biosphere features, has a composite index of many distributed feedback flows. The following have a dynamic structure related to physical and chemical properties for gradual prolong to incremental patterns. While these spatial structures argue from ecological modeling of resource savings, static loads are not decisive from an artistic/architectural perspective. The model attempts to unify analytic and analogical spatial structure for the development of urban environments in a relational database setting, using optimization software to integrate spatial structure where the process is based on the engineering topology of systems ecology.

Keywords : ecological modeling, spatial structure, orientation impact, composite index, industrial ecology

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