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A Geographical Framework for Studying the Territorial Sustainability Based on Land Use Change

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Abstract : The emergence of various interpretations of sustainability, including weak and strong paradigms, can be traced back to the definition of sustainable development provided in the 1987 Brundtland report and the subsequent evolution of the sustainability concept. However, there has been limited scholarly attention given to clarifying the concept of sustainability within the theoretical and conceptual framework of geography. The discipline has predominantly been focused on understanding the diverse conceptions of sustainability within its epistemological boundaries, resulting in tensions between sustainability paradigms and their associated dimensions, including the incorporation of political perspectives, with particular emphasis on environmental geography's epistemology. In response to this gap, a conceptual framework for sustainability is proposed, effectively integrating spatial and territorial concepts. This framework aims to enhance geography's role in contributing to sustainability by utilizing the land system theory, which is based on the dynamics of land use change. Such an integrated conceptual framework enables incorporating methodological tools such as remote sensing, encompassing various earth observations and fusion methods, and supervised classification techniques. Additionally, it looks for better integration of socioecological information, thereby capturing essential population-related features.

Keywords: geography, sustainability, land change science, territorial sustainability

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