Abstract

Sustainability and Geography

Challenges for innovation research

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In the past decade, the literature on transitions towards more sustainable future socio-technical systems has grown considerably. However, transition analyses have often neglected where new configurations are likely to emerge as well as the spatial patterns of transition pathways. An explicit analysis of this "geography" of transitions would contribute to the extant transitions literature in a variety of important ways. Firstly it sensitizes researchers for the regional variation in preconditions for the emergence and maturation of new industries. As a consequence, it enables contextualizing the relative role of and interplay among regional, urban, national and international sustainability initiatives. Secondly, a geographical perspective opens up the view on new empirical phenomena. So far, the majority of empirical studies have been conducted in a small number of industrialized countries. Interest in emerging economies has only recently surged, which provide room for fundamentally new development trajectories (e.g. leapfrogging, bottom of the pyramid business models, or rapidly growing niche markets). Finally, this understanding has considerable implications on research, technology and industry policy supporting sustainability transitions. The recent rise China and India as industry champions in renewable energy technologies presents a formidable challenge to national RTI policies in countries like Germany. What is ultimately at stake here is an explicitly global approach to transition management.