

Avoiding Environmental Convergence: A Possible Role for Sustainability Experiments in Latecomer Countries?

Frans Berkhout
Institute for Environmental
Studies, Vrije Universiteit
Amsterdam
The Netherlands
Email:
frans.berkhout@ivm.vu.nl

Anna J. Wieczorek
Institute for Environmental
Studies, Vrije Universiteit
Amsterdam
The Netherlands
Email:
anna.wieczorek@ivm.vu.nl

Rob Raven
School of Innovation Sciences,
Eindhoven University of
Technology
EindhovenThe Netherlands
Email:
r.p.j.m.raven@tue.nl

Abstract: Global sustainability is increasingly influenced by economic growth and social change in non-OECD countries, especially in Asia. Growth models suggest that industrializing economies will become first relatively more resource- and pollution-intensive, before becoming more resource-efficient and less polluting, following the pattern of higher-income economies. This ‘environmental convergence’ is assumed to parallel economic convergence during processes of catching-up by latecomer countries. To accelerate environmental convergence, or to achieve pathways of ‘green growth’, greater emphasis needs to be placed on sustainable innovation and capability-building in latecomer countries. Drawing on insights from system innovation research on long-run change in socio-technical systems, we discuss the potential role of ‘sustainability experiments’ to generate innovations that will constitute new ‘greener’ growth models. We observe a great number of sustainability-oriented innovation initiatives in latecomer countries. We set out a conceptual framework for assessing the role of experiments, and for evaluating how they link with and become anchored in alternative more sustainable regimes. We argue that sustainability experiments represent a potentially significant new source of innovation and capability-formation, linked to global knowledge and technology flows, which could influence emergent socio-technical regimes and thereby contribute to alternative development pathways.

Keywords: convergence, multi-level perspective, sustainability experiment, system innovation

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