

Contents lists available at ScienceDirect

Environmental Innovation and Societal Transitions

journal homepage: www.elsevier.com/locate/eist



Transnational linkages and sustainable transitions in emerging countries: Exploring the role of donor interventions in niche development



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ARTICLE INFO

Article history: Received 24 May 2012 Received in revised form 4 July 2013 Accepted 4 July 2013 Available online 27 July 2013

Keywords:
Developing countries
Donor programs
Multi-level perspective
Renewable energy
Strategic niche management
Transnational linkages

ABSTRACT

Recent studies have found that further development of the MLP is needed to conceptualise and empirically assess the role of transnational linkages in niche development. This paper explores the factors that may explain the effect of twenty years of donor interventions as one form of transnational linkage in promoting the development of a palm oil biomass waste-to-energy niche in Malaysia. The paper contributes to the existing literature by a conceptual and empirical examination of this research question. With regard to its empirical findings the paper concludes: (i) that advice on energy policy had a limited impact mainly due to strong opposing interests in maintaining the existing situation; (ii) that creating the necessary conditions for transferring a private-sector model of electricity production to Malaysia remains a challenge; and (iii) that the short duration and unpredictability of interventions generally can be seen as an important impediment for programs in reaching their objectives.

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1. Introduction

The multi-level perspective (MLP) on systems of innovation is a widely adopted framework for analysing stability and change in socio-technical systems. While most empirical studies using the MLP have been conducted in developed countries, a number of researchers have recently taken an interest in examining niche up-scaling and transition processes in emerging economies. These studies have mainly been undertaken in Asia owing to the increasing contribution of countries in this region to global environmental problems, such as climate change (Rock and Angel, 2005).

Previous studies adopting the MLP framework in Asia have found that further development of the framework is needed, especially for studies of niche development in developing countries (Romijn et al., 2010). In particular, the inability of the MLP both to conceptualise and assess empirically the role of transnational linkages in niche development and transition processes has been stressed (Bai et al., 2009; Rock et al., 2009; Berkhout et al., 2010; Romijn and Caniëls, 2011). Consequently, efforts to elaborate and further substantiate the nature of these transnational linkages have recently been incorporated into the MLP framework (see e.g. Binz et al., 2012; Coenen et al., 2012; Coenen and Truffer, 2012; Raven et al., 2012). Transnational linkages take various forms, such as relationships with foreign technical experts and inter-firm partnerships with foreign suppliers of technology. By facilitating a flow of knowledge, technological and financial resources, and organisational capabilities, such transnational linkages between actors and institutions may play a key role in niche development and transition processes (Berkhout et al., 2010).

Another prevailing transnational linkage is the technical and financial support to niche development from international donor interventions, as illustrated, for example, in Bai et al. (2009), Patankar et al. (2010), Romijn et al. (2010), Verbong et al. (2010), and Jolly et al. (2012). Although the effects of donor interventions were not specifically addressed in these studies, such interventions were generally assumed to have a significant and generally beneficial influence on niche development.

While the MLP literature has thus adopted a rather uncritical perspective on donor interventions, another body of literature rooted in development sociology and anthropology and often referred to as the 'planned development literature' has developed a critical approach to analysis of donor interventions over the past twenty years (see e.g. Olivier de Sardan, 2005; Long, 2001).² This approach, which sees donor interventions as the result of a negotiation between various conflicting interests, has shed light on the complexity of donor interventions and illustrated how high levels of conflict and unpredictability in such interventions often lead to low levels of the fulfilment of stated objectives (Long and Ploeg, 1989; Mosse, 2005). This body of literature therefore contrasts with the images of predictability, harmony and success which proliferate in the grey development literature, as a result of institutions continually searching for funding (see e.g. Nygaard, 2010).

The aim of this paper is to enhance the MLP framework by bringing in the critical perspective on donor interventions mentioned above as part of the analysis of transnational linkages. This goal of enhancing the MLP framework has been accentuated by a specific interest in understanding why more than twenty years of donor involvement in the development of a palm oil biomass waste-to-energy niche in Malaysia has generated relatively limited results compared to the objectives set out in project documents, not least the widely published expectations following the launch of the programs.

In the present case of niche development in Malaysia, the amount of financial support, technical assistance, institutional capacity-building and awareness-raising campaigns channelled through donor interventions has been substantial, but as described in our recent paper (Hansen and Nygaard, 2013), despite a short and momentary period of niche development during 2002–2006, the level of niche development turned out to be far lower than expected. An analysis based on the traditional MLP approach to the niche development in Malaysia identified four main factors hindering niche development: (i) a reluctant implementation of energy policy; (ii) a rise in biomass resource prices; (iii)

² This article draws on insights from two research traditions that have studied the 'interface' between development actors and beneficiaries. The two approaches, which have developed in parallel fashion in the French-speaking and Anglophone worlds, have been termed the 'actor-oriented approach' (Long, 2001) and the 'entangled social logics approach' respectively (Olivier de Sardan, 2005).

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