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Downstream management practices of transnational companies in institutionally vulnerable countries: Export and use of hazardous products

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ABSTRACT

Analyses of social and environmental management in transnational product chains focus often upstream on suppliers in socially and institutionally vulnerable countries and these suppliers' hazardous processes. Furthermore focus is on transnational companies' responsibility when they source from such suppliers. On the contrary, not much focus has been on transnational companies' downstream export of hazardous products to vulnerable countries and the product use in those countries. The article uses pesticides as case of hazardous products and identifies mechanisms in the downstream social and environmental management of a Danish pesticide company in vulnerable countries and especially in Brazil. The identified mechanisms are: the transnational company's on-going interpretation of the regulatory and ethical obligations for development and use of its hazardous products in vulnerable countries, path dependency and path creation in the business strategy, geographical and organisational coverage of the management systems and practices, the willingness of the company to address social and institutional vulnerability in use countries, and the roles of users and other actors in development and facilitation of more sustainable practices. The mechanisms are discussed with reference to other analyses. In the conclusion the mechanisms are presented as themes in future research and civil society organisations' activities and as guidance in businesses' development and assessment of more sustainable management practices. The benefits of transnational research cooperation for this type of research are also discussed.

1. Introduction

The recent 10–15 years there has been increasing focus on corporate social responsibility (CSR) of transnational companies (TNCs) in institutionally vulnerable countries (IVCs), not least in relation to when TNCs source materials and products from companies, which apply hazardous processes like in the textile industry (Roberts, 2003; Robinson, 2010). Castleman (2015) discusses within this perspective what he calls "export of hazardous industries" when a TNC has production facilities in IVCs that are not allowed in the TNC's home country (for example production of asbestos).

In this article, we define IVCs as newly industrialised countries and other peripheral countries. One aspect of TNC practices in IVCs concerns whether and how a TNC tries to benefit from weaker national regulation in IVCs or the TNC shows the same level of social and environmental responsibility in the IVCs as in its home country (Crane and Matten, 2010; Hansen and Kuada, 2006).

In contradiction to the increased focus on sourcing in IVCs, there has not been much focus on TNCs' downstream export of hazardous products to IVCs and the product use in these countries. Also within this topic, different TNC practices can be expected. Weaker national regulation, trade unions, environmental organisations etc. in IVCs may imply lower demands to health and environmental in relation to for example chemical products than in Western countries, which a TNC might try to benefit from. However, a TNC might improve social and environmental protection in an IVC, for example if social conflicts in an IVC or in the TNC's home country force the company to improve its practices in IVCs (Siqueira and Levenstein, 2000).

The objective of this article is to identify and discuss mechanisms in the shaping of the social and environmental practices of TNC export of hazardous products to IVCs and the use of the products in IVCs through a longitudinal case study of a specific

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Danish TNC, Cheminova, focusing on its export and sales of pesticides to IVCs and especially to one specific IVC, Brazil. The background for the choice of Cheminova and Brazil is *both* that Cheminova twice during 2006–2008 was criticised for its health and environmental management in Brazil (Thomsen, 2006 and 2008a, b, c)), *and* the changes during the following years of Cheminova's practices in Brazil. By mainly focusing on one use country we can get more in depth with the institutional framework in this country. The assumption behind the analysis is that Cheminova's practice in Brazil has been shaped by interactions between Danish and Brazilian social dynamics. We see analyses of the use of pesticides in IVCs as important due to the environmental and health impacts from them, but the analyses can inspire studies of export and use of other products with hazardous properties in IVCs.

The article is combining theories and concepts from different theoretical areas:

- The concept of social and institutional vulnerability.
- Supply chain management theory and development studies.
- Organisation theory about the dynamics of norms and values in organisations.
- Sociology of technology and the concept of 'script' for comparison of imagined and actual social practices with products.

The article is based on dialogue with Brazilian civil servants and Cheminova employees in Denmark, combined with desk research of public regulation of pesticides, newspaper articles, scientific articles, and Cheminova's CSR reports and annual reports. The article does not include the take-over in 2015 of Cheminova by a US company (Cheminova, 2015), but has its focus on the mentioned conflicts 2006–2008 and the subsequent changes until 2014 in Cheminova's social and environmental practice in relation to the use of their products in general and especially in Brazil.

The article is structured like this: Section 2 presents the applied theoretical and methodological approaches. In section 3 public regulation of development and use of pesticides are described in order to understand the regulatory frames for the practices of Cheminova. Section 4 gives an overview of Cheminova's organisation, strategy and social and environmental practices in general and especially in Brazil. Section 5 discusses the shaping of Cheminova's practice and identifies important mechanisms in the shaping of export and use of hazardous products in IVCs. Finally, the conclusion in section 6 summarises the findings and suggests how the identified mechanisms can be applied as themes in similar future research and also can be applied by businesses, civil society organisations and governmental authorities.

2. Theoretical and methodological approaches

This section introduces the theoretical approaches and methodologies applied in the article.

2.1. Theoretical approaches

According to de Souza Porto and de Oliveira Fernandes (2006), global dynamics produce historical configurations that influence the local level where risky situations and events occur through interaction with vulnerable populations and institutions. Changes at local level (development of social movements, management practice, etc.) can also influence global levels by transforming patterns of risks and public policies (de Souza Porto and de Oliveira Fernandes (2006)).

The literature presents two main types of vulnerabilities: social vulnerability and institutional vulnerability. Social vulnerability relates to social groups, who are vulnerable because of particular characteristics, like class, gender, age, or race, which make them more likely not to be able to resolve problems they face (Freitas et al., 2001). This type of vulnerability can be understood as reduced capacity of social groups to survive, resist, or recover from risk situations and events (de Souza Porto and de Oliveira Fernandes (2006)). Social vulnerability is easily identifiable in relation to pesticides, which are hazardous products that should be used under strict procedures. The practices found in IVCs indicate that the real-life application differ from the assumed ones (see for example Waichman et al., 2007).

In addition to social vulnerability, institutional vulnerability must be considered when discussing hazards products. Institutional vulnerability concerns how a society develops and uses its juridical frameworks, technical knowledge and human resources to deal with policies, decision-making and imbalance of forces (Freitas et al., 2001).

When using the concept of institutional vulnerability to analyse use of pesticides, several aspects are relevant. In many IVCs, governments are unable to perform their own research on for example product ecotoxicology, due to lack of human and financial resources, and have to rely on information from companies (Ecobichon, 2001). As these countries neither have adequate laboratories, they cannot assess impacts like pesticide residues in food (Dinham, 2003). Despite the recent economic development, Brazil still shows vulnerability in relation to environmental and health policies (Yapp, 2011). An example is the role of legal instruments created by the national Pesticide Act like the requirement for an agronomist prescription for pesticide purchase. This demand has been ineffective due to inappropriate monitoring and enforcement (Waichman et al., 2007).

Jørgensen and Forman (2009) describe four types of network relations of companies as important in analyses of the shaping of their environmental management practice: product chains, regulatory networks (including civil society's activities focusing on business ethics), innovation networks, and local networks. Hansen and Kuada (2006) describe public regulation, sector dynamics, product chain structures, and individual TNC practice as important in the shaping of a TNC's cross-border environmental management. Hansen and Kuada refer to two types of product chains involving TNCs: management of controlled affiliates and management of non-controlled foreign entities (organised through franchising, licensing, subcontracting or strategic alliances). They describe four types of corporate cross-border environmental management practices with different roles of the regulation of the so-called host country (where an affiliate or a non-controlled entity is located) and of the home country (where the TNC has its head quarter):

- Decentralised environmental management where the TNC adapt to the local regulation practice in a host country.
- International compliance where all regulation and standards nationally and internationally are met.
- Centralised environmental management where the home country's legislation and the same standards and criteria are applied worldwide.
- Globally integrated environmental management where focus is on internationally oriented TNC standards where adaptation to local conditions in other countries are allowed if the level of protection is within the TNC's corporate principles.

Corporate Social Responsibility (CSR) focuses on the social and environmental obligations and commitments of a company (Crane and Matten, 2010). The increasing focus on TNC's CSR practices has its background in: