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## Blind spots in environmental policy-making: How beliefs about science and development may jeopardize environmental solutions

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#### ABSTRACT

Engaging with knowledges outside of western science and questions of power is increasingly being acknowledged as an imperative for helping solve intractable environmental problems. What is unacknowledged is the difference in how this is reasoning is applied in relation to policy-making in the global North and South. While questions of power such as gender and people's participation are integral to international policy-making in the Northern development policies for the South, there is often little on these perspectives in domestic environmental policy-making. Underlying this paradox are assumptions about science and development in policy-making that preclude a discussion of environmental alternatives. These assumptions generate blind spots in environmental policy-making that need to be addressed so that environmental policy in the global North too is able to respond to environmental problems on the basis of evidence and rather than assumptions about science and about the rest of the world.

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## 1. Introduction

It is widely acknowledged that to tackle environmental problems, bridging the gap between scientifically-defined environmental problems and the experiences and values of local actors is vital (Brondizio & Tourneau, 2016; Mistry & Berardi, 2016). Scientific approaches, with their imperative for precise categorization and abstract generalization rapidly lose their ability to provide useful guidance to the general public when faced with increasingly complex situations typified by uncertainty, nonlinear dynamics, and conflicting perspectives (Mistry & Berardi, 2016). An acceptance of uncertainty and flexibility are core to working with current environmental problems. Real problems in the real world are infinitely complex, and for any given problem, science offers only part of the picture (Jasanoff, 2007). The need for participation and attention to gender in solving environmental problems are considered not only of immense importance in environmental decision-making, but also as leading to a renewal of democracy (Agarwal, 2009; Brondizio & Tourneau, 2016; Bulkeley & Mol, 2003; Mistry & Berardi, 2016). Despite this overwhelming agreement on the need to widen environmental decision-making, studies document that the integration of gender and participation into policy formation in environmental governance is far from straightforward (Arora-Jonsson, 2014; Bulkeley & Mol, 2003; Rothstein, 2013; Shrader-Frechette, 2010). Nations seldom formulate policy according to accepted principles of participation and gender equality. One of the most important questions for global environmental policy today is why that is so? While there are explanations of power, short-sightedness or institutional barriers (Ibid), the answer may lie also largely in our inability to see the blind spots of environmental policy-making, in the tendency to ignore underlying conflicts and problems in the belief that they have already been solved. These blind spots prevent us from acknowledging social relations that constrain environmental action, leading us to overestimate our ability to do what is right and to act undemocratically without necessarily meaning to do so.

The belief in scientific environmental knowledge as able to fully take account of environmental problems and taken for granted assumptions about modern, western democracy are at the heart of these blind spots. These become clear in examples from Swedish environmental policy-making. Issues of gender, power and people's participation are central to Swedish policies within development aid for countries in the global South. In contrast, despite accelerating environmental conflicts on the ground, local voices remain largely outside of policy discourses within domestic environmental policy in Sweden (Arora-Jonsson, 2013; Baker & Eckerberg, 2007). The conviction among environmental agencies in Sweden - about the primacy of science-based policy-making and that environmental officers operate in an already democratic space form the cornerstone, and incongruously the blind spots of environmental policy-making. Understanding how these operate is vital to explaining the paradoxical lack of democracy in environmental policy-making in a country that prides itself on promoting gender equality and democracy.

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### 2. Understanding the paradox

Studies on science and postcolonial thinking help to explain how beliefs in science and democracy provide structures for everyday environmental decision making in the global North. It is now widely accepted that all forms of knowledge, including scientific knowledge on the environment, is produced by socially situated actors and are value-laden (Brondizio & Tourneau, 2016; Jasanoff, 2007; Mistry & Berardi, 2016). In other words, scientific processes are social processes (Haraway, 1991; Harding, 1998). At the core of access to resources, knowledges of environments, and vulnerabilities to environmental changes are often key operations of social and political difference – including gender, sexuality, ethnicity, race or poverty. Not only do these dictate how policy-makers might think, there is also a need to recognize how policy itself is complicit in creating these divisions (Whatmore, 2002).

While the science-politics distinction is being questioned and eroded in many ways, in particular with the discussion on climate change (Jasanoff, 2007), environmental policy and practice remain firmly grounded in the pre-eminence of natural science. Environmental policy, to a large extent, continues to epitomize the vision, challenged by many, of the division of human and nature that has characterized science and modernity. Solutions to environmental problems are looked for in a narrow version of science and technology in what has been dubbed as 'ecological modernization' (Hajer, 1996). Ecological modernization approaches promise to generate economic growth and environmental sustainability through technical solutions. These solutions come from within the existing political economy paradigm that ignore social and cultural aspects of environmental problems.

The respect for science can thus work negatively. Sweden along with the other Scandinavian countries exhibits a strong public commitment and lay respect for science and a robust environmental consciousness that appears to lay the ground for enhanced cultural potential to pursue ecological modernization (Cohen, 1998). The discussions on entanglements of nature/culture crucial to solving current environmental problems do not enter domestic environmental policy-making in Sweden as much as they do in relation to Swedish development policy for the global South. Eurocentric narratives of Sweden as a leader in democracy and environmental awareness and their promotion of green technologies in the South serve to further establish the superiority of these technologies as the most appropriate environmental solutions also at home in Sweden, rather than prompt discussion on their use.

The separation of the environment from its social and cultural aspects is reinforced by the development belief that the global North has already achieved a certain level of democracy and development and these are issues to be solved in other less developed nations (Arora-Jonsson, 2013). Ideas about science are linked closely to ideas about European modernity, a legacy of the enlightenment (Chakrabarty, 2000). The global North is regarded as the model of modernity that is in several respects interchangeable with development and westernization. The image of the oppressed third world woman in contrast to that of the Northern woman as modern and developed, criticized by third world feminists (Mohanty, 2003) and ubiquitous in early development research has changed within the academia. However, it continues to permeate policy-making on the environment where the global North remains a (silent) point of reference and model for gender equality, thus disregarding actual problems on the ground.

Sweden's non-ratification of the ILO convention on indigenous and tribal people despite presence of the Sámi indigenous communities, is an example of the disregard for social and cultural differences at home while supporting indigenous rights in other countries through their development programs. Being genderequal is an important part of the national self-image and regarded as a uniquely Swedish invention in the cultural politics of transnational identities. While Swedish development programs often insist on gender perspectives in their policies, attempts by women's groups to take up issues of gendered discrimination in environmental governance in Sweden have been discarded as irrelevant or aberrations in what is considered to be a modern and gender equal context (Arora-Jonsson, 2013). Questions of gender and power are not seen to be core for the democratic and scientific functioning of environmental organizations such as the Swedish Environment Protection Agency, despite what might be seen as 'private truths' (Brunsson, 1993), that is, the experiences that officers related of their conflictual relations in environmental questions. More recently, the Swedish Environment Protection Agency has begun to advocate participation in its environmental planning. Despite these indicators of progress, there is reason for concern, and lessons to be learned.

#### 3. Consequences and lessons for policy

Policy-makers continue to treat as merely technical, matters and decisions that are actually social and political ones. The defense of modernity in the global North leaves less space for doubt or questioning of its scientific rationale or of alternative relationships, perceptions, values, emotions and knowledges that an analysis of gender and power can open up. The awareness that social lives are imbricated in environmental relations has been less possible for Swedish policy-makers to dismiss in their development aid policies for African, Asian or Latin American contexts. These are not considered as modern and where there is a grudging acceptance of the importance of culture and social differences.

Policy attitudes depend on these perceptions about the privilege of science and modernity rather than on the evidence of mounting environmental disputes and contested meanings over how to govern the environment. The preeminence of science in environmental planning and strategy elide struggles over meanings about the environment. These contested meanings get submerged in the assumption by policy-makers of knowing the environment and what is important for it. Environmental policymaking needs to seriously question its underlying assumptions about the universality of science and of models of the modern and developed global North, to be able to see the modern as inevitably contested and plural that can lead to new solutions for intractable environmental problems that have fastened in the grip of dominant positions. Environmental decision-making must take account of participation, power and gender, also in the global North, if conventional thinking is to be overcome.

The lack of understanding of these two biases – about science and development – generate blind spots that create systemic risks and uncertainties and frustrate public debate and the formation of effective policies. It is important to draw attention to the need for a discussion on democratic decision-making and equitable and long term environmental governance within the nation states and not only in international relations. Positive change can come about by acknowledging the importance of gender and power and that expert authority is no longer has the last word but is subject to discussion. We need a joint vision for the future as called for by many (Fleurbaey, 2016), but that vision needs to be negotiated and will be different in different locations.

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