

**Social Movements, Environmental Governance, and Rural Territorial Development: An  
International Perspective**

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## Executive Summary

This state-of-the-art literature review document provides theoretical, comparative, and international background for the RIMISP research project on the relations between social movements, environmental governance, and rural territorial development. It surveys and synthesizes a large body of existing social scientific literature drawn from several academic disciplines in order to establish the necessary conditions for answering a series of working questions, including: Do new institutions and organizations environmental governance established as a result of the actions of social movements contribute to processes of rural territorial development which coincide with the elimination of poverty, the overcoming of socioeconomic, gender, and ethnic inequalities, as well as the conservation of natural resources and the environment? What are the characteristics of social movements which have successfully constructed new institutions and organizations of environmental governance? To what extent have social movements contributed to generating environmental governance? Which specific instruments of environmental governance have most effectively institutionalized meaningful citizen participation? Which forms of environmental governance include strong forms of collective action and territorial identity?

A survey of theoretical literature on social movements reveals the essentially contested nature of this key concept. Incommensurable definitions of social movements, as well as collective action, civil society, social capital, and a range of other key terms of reference, reflect the irreducibly ideological nature of much contemporary social movement research. As a result of this confusion, this document suggests that future research should selectively adapt theories and methods drawn from political sociology in a way that allows researchers to ‘triangulate’ external factors (structures of opportunity, including relations with states at a time of radical restructuring in environmental governance at international, national, and local levels) and internal factors (social composition of movements and organizations, organizational forms, formation of collective identities, and the development of repertoires of protest and collective action) in a realistic and dynamic working model applicable to existing social movements. Care should be taken to locate grassroots organizations and social movements in the arena of ‘contentious politics’ rather than in the ‘third sector’ of established non-governmental organizations.

Careful analysis of the global environmental movement leads to the conclusion that it qualifies in generic terms as a social movement, but reveals that beneath the surface it comprises several distinct tendencies which need to be analyzed independently. Northern conservation objectives and Southern livelihood and development objectives are only tenuously linked in the discourses and practices of contemporary environmentalism. As a result, this document suggests that future research should attempt to clarify the conditions under which the environment is politicized by differentiated social actors in specific ecological and social contexts. The distinctive politics of environmental marginality, which impact upon the poorest and most resource dependent rural populations with particular acuity, should be afforded special attention.

Gender is a central preoccupation in much contemporary research into the political economy of environmental change and environmental protest. Women, environment, and development and ecofeminist approaches rely too heavily on idealized definitions of the category ‘woman’ which obscure essential issues such as the differentiation of women and the dialectical character of gender relations in rural communities. Feminist environmentalism and feminist political ecology provide useful tools to researchers concerned with identifying the reasons that

women engage in environmental activism. To delineate women's motivations and opportunities for participating in environmental social movements, future research should attempt to ground gender analysis in actual material and social conditions.

The concept of governance is itself the product of a specific historical and political conjuncture. Environmental governance is shaped by contradictory global imperatives for localization and globalization, which in turn raise important theoretical and practical questions of scale and interaction. Locally felt uncertainties are particularly significant in this context. The concrete institutionalization of mechanisms of participation should be assessed according to precise criteria of inclusion and deliberation. At the local level, especially, the democratic form and content of decentralization, devolution, and participation remains open to debate and requires further investigation.

Rural territorial development might be regarded as a missing term or absence in the existing literature. Rural territorial development's emphasis on the articulation and coordination of productive transformation and institutional development within a defined rural territory runs counter to the strong tendency for localization in environmental governance, which fragments and isolates locally-based initiatives. Future research should be conscious of this fact, and tools and methods of investigation should be developed to overcome it.

Common property resources theory provides a useful means to assess the viability of community-based forms of environmental governance. Both 'thin' formal modeling of institutions-as-rules and 'thick' ethnographic descriptions of community provide compelling explanations for the success and durability of institutions and organizations of environmental governance. However, common property resources theory does not articulate an adequate vision of rural territorial development. Environmental entitlements analysis, in contrast, makes it possible to investigate the impact of environmental governance on structures of rural poverty and socio-economic, gender, and ethnic stratification. If one of the aims of rural territorial development is to systematically expand the set of environmental entitlements available to poor and marginalized rural populations, then environmental entitlements analysis is a good way to assess the impact of environmental governance. Future research should look for ways to integrate these perspectives and apply them to empirical case studies of social movements and environmental governance.

An extended case study of joint forest management in India provides some important lessons for students of social movements, environmental governance, and rural territorial development. Where traditions of subaltern collective action have been strongest, joint forest management has led to significant environment and development improvements. However, the failures of joint forest management raise important issues for comparative analysis. Because there is a conflict between rights gained from membership in community-based organizations and more robust social and citizenship rights, many social movements have pursued alternative models of rural territorial development. Notably, activists associated with the Chipko movement, which provided the impetus for the implementation of joint forest management, have pursued an alternative model of rural territorial development, namely the creation and development of an autonomous state government, as a means to concretized their vision of sustainable and equitable development. Women's organizations and social movements throughout India have tried to advance women's environmental entitlements by mobilizing within the inadequate institutional parameters of joint forest management, while others have attempted to circumvent joint forest

management altogether. Future research should attempt to address this sort of informal collective action alongside the more formal and institutionalized structures of environmental governance.

# **Social Movements, Environmental Governance, and Rural Territorial Development: An International Perspective**

## **Introduction**

This state-of-the-art literature review document is designed to provide some general comparative and international background for the ongoing RIMISP research project on social movements, environmental governance, and rural territorial development in Latin America. Its first, most basic objective is to provide a general bibliographic survey of the available international literature, both theoretical and empirical, on each of the three key concepts under investigation. Its second, more challenging objective is to begin to identify intellectual resources with which the theoretical articulations and empirical relations between these three key concepts can be systematically investigated in future research.

The guiding research question for this project is: Does environmental governance established as a result of the actions of social movements contribute to processes of rural territorial development which coincide with the elimination of poverty, the overcoming of socioeconomic, gender, and ethnic inequalities, as well as the conservation of natural resources and the environment? More specifically, the project seeks to identify the following: the organizational and ideological characteristics of social movements which have successfully constructed new institutions and organizations of environmental governance; the degree to which social movements have contributed to generating environmental governance, broadly conceived; which specific instruments of environmental governance have most effectively institutionalized meaningful citizen participation; and, lastly, which forms of environmental governance include strong forms of collective action and territorial identity.

The answers to all of these questions will necessarily be multidisciplinary or interdisciplinary in character, as they all engage with research agendas, theories, and methodologies that have traditionally been regarded as the exclusive disciplinary territory of researchers and analysts in sociology, political science and international relations, institutional economics, human geography, anthropology, and applied ecology, among many other fields of investigation in the human and natural sciences. For this reason, the present state-of-the-art literature review document not only surveys the existing specialized disciplinary literature on these topics, but also aims to selectively identify fertile points of interdisciplinary contact, complementarity, and conflict. It outlines the most promising research questions, the most illuminating theoretical approaches, and the most useful methodologies that can be drawn from each of these disciplinary fields, as well as those emerging more recently in interdisciplinary fields such as political ecology and feminist environmentalism.

At the moment, these research questions remain provisional approximations subject to revision. They will likely change as the RIMISP project unfolds, but the major challenge currently appears to be identifying ways in which to define, to conceptualize, and ultimately to measure the concrete causal relationships between the three variables in real world situations. Therefore, this state-of-the-art literature review document not only analyzes the historical development and contemporary relevance of each of these three concepts individually, within its own specific terms of reference; the document also aims to identify research questions, theories, and methodologies with which the complex relationships between social movements, environmental governance, and rural territorial development can be analyzed most productively and informatively within the confines of the RIMISP project. Ultimately, the document seeks to

identify the most promising areas of investigation and useful methods of evaluation available to researchers who want to clarify the conditions under which new institutions of environmental governance created as a result of social movement activism can contribute to processes of rural territorial development, linking productive transformation with institutional development, which do the following: conserve natural resources; protect bio-physical diversity in the natural environment; sustain or improve rural livelihoods; alleviate or reduce rural poverty; and reduce social inequalities based on class, socioeconomic status, gender, and ethnicity.

This document is divided into three substantive sections. The first section examines the general relationship between social movements, environmental governance, and rural territorial development in the contemporary global political economy. It seeks to clarify the three key concepts and provide reasonably precise working definitions for each. First, it begins with a general theoretical discussion of social movements, then goes on to flesh out a rudimentary analysis of the actual social composition of the global environmental movement, highlighting the distinct interests and diverse levels of power, influence, and capacity within it. The section reviews the idea of a politicized environment, and explores the implications of the existence of multiple dimensions of the politicized environment for the study of grassroots environmental organizations. Second, the section goes on to explore research on gender and the political economy of environmental social movements. Third, the section investigates the restructuring and rescaling of environmental governance, highlighting the complex and contradictory impact of simultaneous pressures for globalization and localization. It also investigates the paradoxical role of participation in environmental governance at international, national, and local levels of political authority and decision-making. Fourth, the section addresses the notable lack of available research into the impact of social movements and environmental governance on processes of rural territorial development in the contemporary South, finally suggesting ways in which future research may begin to remedy this absence.

The second section is primarily concerned with the most influential contemporary theoretical and methodological approaches to environmental governance. The section's initial focus is the theory of common property resources, which has emerged as the dominant approach to designing and analyzing community-based organizations and institutions of environmental governance throughout the South. Although the common property school provides some important insights, its theoretical framework, based on static and ahistorical models of institutional choice and community, is often too abstract and restrictive to be of use as more than a heuristic device. Alternative approaches to the analysis of environmental governance, including stakeholder analysis and environmental entitlements analysis, are reviewed and their potential contributions assessed. These methodologies, it is argued, offer more potential to researchers concerned with rural territorial development generally, and issues of social, ethnic, and gender equity specifically, in emerging institutions of environmental governance based on principles of decentralization, devolution, and participation.

The third and final section moves from general theoretical considerations of social movements, environmental governance, and rural territorial development to investigate a specific model of environmental governance, Joint Forest Management (JFM), as it has been implemented throughout the Indian sub-continent. JFM is an especially relevant and interesting case study of environmental governance in practice because it emerged as a direct response to a marked increase in the number of environmental protests and in the visibility of environmental social movements throughout India, a country whose massive ecological, political, and social diversity is comparable to that found in Latin America. First, the section outlines the emergence

and spread of JFM in the late 1980s and early 1990s. Second, it investigates JFM's practical track record; JFM has proven successful in some instances, generating ecological and livelihood improvements in areas with strong traditions of community organization and collective action, but significant obstacles to equitable and sustainable implementation of JFM and associated participatory rural development projects have been identified. Third, the section addresses the complicated issue of gender equity, which has been extensively studied. This issue is subjected to a lengthy analysis, in the hope that it will yield valuable insights into gender issues for students of social movements, environmental governance, and rural territorial development in diverse Latin American contexts.

## **1. Social Movements, Environmental Governance, and Rural Territorial Development in the Age of Sustainable Development: Multiple Actors, Multiple Interests, Multiple Scales**

### **Introduction**

The aims of this introductory section are straightforward. Its purpose is to answer some basic questions, such as: How does the environment become politicized? How and why do social movements organize and mobilize over environmental issues? How are marginalized groups such as women impacted by environmental degradation and what does this mean for the organization and social composition of environmental social movements? How and why does the environment come to be regarded as something in need of governance? And what are the effects of institutions and organizations of environmental governance on the broader political-economic patterns and processes of large-scale change associated with rural territorial development? At first glance, the answers to these questions appear simple, but none can be taken for granted. Careful interrogation of each of the three key concepts reveals complexities and ambiguities which need to be recognized. In the interests of conceptual clarity and analytical precision, a careful, disaggregated approach to social movements and environmental governance is necessary.

This section is divided into four sub-sections, which treat social movements, gender and the environment, environmental governance, and rural territorial development, respectively. The first sub-section begins by surveying some relevant contemporary debates in social movement theory, and then outlines the objectives, strategies, capacities of different kinds of environmental organizations, concentrating on the motivations of different social actors for engaging in organized political and social struggles over environmental issues. The second pays specific attention to the relationship between gender relations, the production of environmental marginality, and the composition of organized social movement struggles over the environment. The third sub-section traces the restructuring of environmental governance institutions at international, national, and local scales, and then explores new opportunities for democratic participation, as well as emergent sources of conflict and uncertainty, in the evolving international architecture of environmental governance. The fourth sub-section, on rural territorial development, addresses a striking absence in existing social scientific literature on the relations between the first two key concepts and the third, rural territorial development. Possible reasons for this absence are explored, as are potential ways to more fully incorporate analysis of rural territorial development into existing research questions, theories, and methodologies.

## 1.1. Environmental Social Movements and the Politicized Environment

Social movement research is a lively and controversial area of social scientific inquiry, in large part because its central terms of reference (civil society, social movements, non-governmental organizations, collective action, etc.) are exceedingly difficult to pin down with firm and widely accepted working definitions. Contemporary social movement research is inextricably bound up in a long political and analytical debate on the meaning and substance of civil society, which pits two distinct and largely incommensurable paradigmatic theoretical traditions against each other. This problem of incommensurability leads to a widespread confusion between formally constituted membership-based associations, interest groups, and non-governmental organizations, defined as a generic ‘third sector’, on one hand, and social movements defined more loosely and expansively, as a form of resistance to modern capitalist rationality, on the other.

In the first instance, there is a primarily Anglo-American tradition, dating back at least to Ferguson and Tocqueville, which associates the rise of civil society with the growth of liberal capitalism and the emergence of a public sphere, separate from the political space of the state, populated by possessive, atomistic, and self-determining individuals. Thus, in the influential formulation of Ernest Gellner, civil society is a realm of ‘voluntary associational life’ based on values of individual freedom and pluralism, as opposed to the bonds of kinship and authority which ensure social cohesion in ‘traditional’ societies (Gellner 1994). This is clearly a eurocentric idea of civil society, based on a geographically and historically specific set of experiences. It often leads to a microscopic focus on ‘engineering’ associational life and promoting the development of ‘social capital’ in a liberal pluralist form. As Claus Offe has argued, this project attempts to resolve a fundamental tension between individual accumulation and social cohesion by remedying ‘the insufficiencies of social coordination that remain even after money-driven market mechanisms, democratically legitimated law, and theoretically validated, systematized and formalized knowledge are combined and deployed’ (Offe 1999: p. 43). Coordination depends upon social cooperation, and the latter depends on upon ‘the presence of perceptions, dispositions, and expectations that induce agents to cooperate’ (Offe 1999: p. 43).

For most Northern donors and many Northern social scientists, the social bases for these perceptions, dispositions, and expectations are to be found in the voluntary membership-based associations, interest groups, and non-governmental organizations that have spread throughout the global South over the past several decades. Further refinement of an ambiguous concept like an environmental social movement would be regarded as unnecessary in this tradition, because this is held to be more or less co-extensive with formally constituted membership-based non-governmental organizations and interest groups whose *raison d’être* are tied to environmental issues. The internal dynamics and interactions of the organizations matter little. The idea of a ‘third sector’ of civil society institutions and organizations is paramount.

This liberal and pluralist view of environmental organizations and their relationship to institutions of environmental governance is widespread. A chapter on civil society in a recent report prepared by the World Resources Institute (WRI), co-published with the UN Environment Program (UNEP), the UN Development Program (UNDP) and the World Bank, begins with the following optimistic statement about the growing global influence of environmental organizations on institutions of environmental governance:

Governments and businesses no longer have a monopoly on environmental decision-making. A third force -- civil society -- is changing the power balance. Citizen groups of all sorts now routinely participate in decisions about the environment and development. The growing influence of these organizations is one of the most dynamic changes in environmental governance today, lending a stronger voice to the individuals, interest groups, and communities that must live with the consequences of environmental decisions (UNEP/UNDP/World Bank/WRI 2004: p. 65).

To support this claim, the report's authors trace the growth of environmental organizations over recent years, citing the existence of more than 100, 000 environmental non-governmental organizations (ENGOs) by 1990 -- more than half of which were established during the previous ten years (Runyon 1999: p. 13). This growth is explained by the convergence of two factors: a growing 'demand for opportunities to participate' created by environmental degradation and an increasing 'supply' of such opportunities created by the spread of liberal democracy and the restructuring of environmental governance along increasingly multilateral lines (UNEP/UNDP/World Bank/WRI 2004: p. 70).

In contrast to this Anglo-American tradition of theorizing civil society, there is a more radical and critical Continental tradition based in the writings of Hegel, Rousseau, Marx, and Gramsci. The alternative genealogy of civil society begins by counterposing resources of social cohesion, mutual aid, and solidarity to the modern rise of possessive individualism and capitalist accumulation. Civil society is regarded as not simply a sphere of social life apart from the state and the market economy, but as an evolving, relational site of social action where individuals and groups pursue their interests. In this view, civil society is not just a realm of voluntary association, but an arena where fundamental social conflicts are played out: as Marx and Engels once put it, civil society is the 'theatre of all history' (Howell and Pearce 2001: pp. 31-37).

This critical tradition of theorizing civil society was revived in the 1960s and 1970s in response to the perceived 'legitimation crisis' of the welfare state and the concurrent rise of 'new social movements' (Habermas 1976; Offe 1984). Here, social movements are treated as significantly more than the sum of their collected parts. While the notion of a social movement implies some degree of permanent organizational cohesion and ideological continuity, this is not attributed to formal associational ties based on up-to-date membership lists, weekly meetings, regular payment of dues, and the like. Rather, a social movement exists primarily as an informal aggregation of individuals who act in unison on the basis of shared identities, beliefs, and perceptions. The goals of social movements are typically regarded as transformative, as in Alvarez, Dagnino, and Escobar's argument that the Latin American social movements of the 1980s pushed to 'expand the boundaries of institutional politics [and] resignify the very meanings of received notions of citizenship, political representation and participation, and, as a consequence, democracy itself' (Alvarez, Dagnino and Escobar 1998: p. 1).

The global environmental movement clearly qualifies as a social movement when defined in this loose and expansive way. Environmentalism is widely regarded as a paradigmatic example of a 'new social movement', as distinct from the 'old' workers' movement, because it articulates a range of 'post-materialist' demands and radically challenges the productive and technological basis of modern industrial society. Furthermore, environmentalism conceived in this way offers a challenge to prevailing institutions, beliefs, norms, and values. This approach to environmental social movements is reflected both in theoretical discussions of environmentalism

and in the self-perceptions and self-representations of many green activists themselves (Gorz 1980; Lipietz 1995). Here, environmentalism is often presented as a vague and generalized form of resistance to globalization (Paterson 1999). This often involves projecting a simplified and undifferentiated image of 'global civil society' as a counterweight to the globalized market and globalizing structures of government (Finger 1994).

There is a vast and growing literature, based in several academic disciplines, which situates the growing global environmental movement in one of these two theoretical traditions (Yearley 1994; Wapner 1995; Haynes 1999; Gemmill and Gamidele-Izu 2002). Although interesting within their own terms of reference, neither theoretical tradition provides the analytical tools needed to delineate the precise causal relationships between social movements, environmental governance, and rural territorial development as defined within the framework of the present RIMISP project.

To accomplish this objective, it may be necessary to turn to the methods of social movement analysis provided by contemporary political sociology. Although much classical social movement analysis has been disabled by particularism, focussing on the trajectory of a single social movement in a single country, and by internecine debates between political process theorists, resource mobilization theorists, and new social movement theorists, among others, the elements of a comprehensive and synthetic approach to social movement research are emerging in the work of writers such as Sidney Tarrow.

Two important features of Tarrow's approach stand out. First, he emphasizes the need to locate social movements within the domain of 'contentious politics', a phenomenon that occurs 'when ordinary people... join forces in confrontations with elites, authorities, and opponents' (Tarrow 1998: p. 2). That is, social movements are made up of 'people who lack regular access to institutions, who act in the name of new or unaccepted claims, and who behave in ways that fundamentally challenge others or authorities' (Tarrow 1998: p. 3). Thus, in this view, it is not the ability of states, donors, or intermediary NGOs to direct collective action in ecologically or economically desirable ways that matters. Instead, it is the development of self-directed and autonomous organizational, ideological, cultural, and political capacities among poor and marginalized people that should be regarded as the central object of analysis. Otherwise, researchers risk confusing mobilization 'from above' for movement 'from below'.

A second feature of Tarrow's approach that stands out is his emphasis on the dynamic nature of social movements, in which he holds that social movements are neither fixed, self-contained, nor narrowly bounded in space, time, or social composition. This dynamism can only be captured by a complex theoretical 'triangulation' of collective identities, structures of political opportunity, and evolving discourses and cultures of political action. Four interrelated analytical principles emerge from this view:

First, both meaning and structure are important for understanding movements' internal dynamics, their external contexts, and the interaction between the two... Second, meaning and structure are mutually constituted and cannot be understood separately... Third, movements' internal dynamics interact with their external contexts... Fourth, systemic inequalities of gender, race, class, and sexuality shape both movements and the institutions they confront (Whittier 2002: pp. 292-295).

This triangular method of social movement analysis is especially useful for analyzing the global environmental movement, which is particularly diverse in terms of organizational structures and cultural attitudes; operates on a highly diverse terrain of institutions and political opportunities at international, national, and local levels; and, despite its potentially universalist claims about the environment, remains highly stratified along North-South and class, gender, and ethnic lines.

Accumulated experience shows that the global environmental movement is very heterogeneous. Although its many composite parts share a certain common orientation toward the environment, the movement is divided by numerous interests and ideologies and an uneven distribution of power and organizational capacity. The dissatisfaction expressed by many Southern environmental organizations after the first UNCED Earth Summit in Rio (Chatterjee and Finger 1994) and the controversy generated by Northern NGO complicity in damaging projects involving 'coercive conservation' (Peluso 1993; Schroeder and Neumann 1994; Roue 2003), in particular, have highlighted a substantial gap between competing conceptions of the meaning of environmental protection and sustainable development.

No single classificatory scheme can capture all the global environmental movement's diversity, but it might be useful to distinguish between three broad categories of environmental non-governmental organizations (or ENGOS) within it: advocacy organizations (or AOs); grassroots support organizations (GSOs) together with service organizations (SOs); and grassroots organizations (GOs) (Bryant and Bailey 1997: p. 136; Clark 1991: pp. 40-41). AOs may be regional, national, or international in scope, but the most influential category are truly transnational. They are often large and highly professional and engage primarily in traditional pressure politics, such as publicity campaigns and lobbying governments and multilateral institutions. The most influential AOs are based in the North, but some have actively sought members in the South through affiliation. GSOs/SOs, which account for the bulk of the recent growth of ENGOS worldwide, are typically made up of skilled professionals in fields like forestry, agronomy, or economics. The role of GSOs/SOs is normally to aid or initiate locally-based projects, and they often act as intermediaries between local communities and higher-level agencies of environmental governance. GSOs/SOs vary widely according to capacities and interests, but most include some commitment to popular participation in their mandate. The number of autonomous environmental AOs and GSOs/SOs based in the South has increased significantly in recent years, especially in countries with growing middle classes like India (Gadgil and Guha 1994) and in 'ecological hotspots' where donors and big transnational AOs have actively sponsored their development, including Malaysia and Indonesia (Eccleston 1996a), Brazil (Barbosa 2003; Silva 1994), and Central America (Meyer 1996; Utting 1994).

Finally, there are an innumerable number of environmental grassroots organizations (GOs). In the South, GOs are typically made up of community members joined together to act on environmental issues which directly impact local livelihoods. These organizations are highly differentiated according to size, structure, organizational skills and capacities, motivations and goals, ideological and cultural orientations, and legal status. GOs can be formally constituted membership-based NGOs with clear structures of leadership and accountability or, alternatively, they can take the form of social movements with more fluid structures of membership and participation. Many important and vital groups in the latter category are not captured in the official data and may be excluded from formal recognition and opportunities for participation as a result (Bryant and Bailey 1997: p. 136). It is these organizations which conform most closely to the contentious model of collective action outlined by Tarrow. This contentious approach is not the result of some natural predilection, but reflects the fact that grassroots environmental

demands are not always easily incorporated into existing structures of power and property and also 'because [GOs] lack the stable resources -- money, organization, access to the state -- that [AOs and GSOs/SOs] control' (Tarrow 1998: p. 5).

There are obvious commonalities that link a largely informal network of AOs, GSOs/SOs and GOs into a more or less coherent global environmental movement, but there are some truly salient differences and barriers to transnational cooperation that are relevant to any systematic study of the relations between social movements and environmental governance in the contemporary world. In particular, it has become clear to many observers that the objectives of the most influential and well-funded transnational AOs and GSOs/SOs, which are primarily based in the developed North, often diverge significantly from those of environmental social movements and GOs based in the developing South. It is no longer appropriate to assume an unproblematic identity of interests between environmentalists in the North and grassroots actors in the South (Watts and Peet 2004; cf. Schroeder and Neumann 1995).

As Michael Redclift notes, the objective of the environmentalist movement in the developed North is broadly 'to secure, or preserve, access to pleasant and safe residential and recreational areas' (Redclift 1987: p. 135). The Northern environmentalist movement remains overwhelmingly white and middle class in its social composition and it is primarily concerned with the aesthetics of conservation and with large scale environmental risks, although more attention has recently been afforded to patterns of environmental inequality and injustice shaped by class, race, and gender in the developed countries of the North (Szasz and Meuser 1997; Bullard and Johnson 2000). At the global level and in Southern contexts, the dominant objectives of Northern environmental organizations are conservation of genetic and biophysical diversity and reversing or attenuating global processes of environmental degradation such as global warming (Taylor and Buttel 1992; Yearley 1994). Tactically, the Northern environmental movement has more or less settled on a course of pragmatic reformism, so its organizations are more likely than their Southern counterparts to maintain close links with states, multilateral institutions, and corporations -- sometimes at the cost of their scientific credibility and political independence (Chartier and Deleage 1998).

In contrast, environmental organizations and social movements based in the developing South are much more likely to express direct concern with daily livelihood and development issues. Environmental movements in the developing South have two distinguishing characteristics: 'they are supported by people engaged in a livelihood struggle, and this struggle is linked to sustainable objectives' (Redclift 1987: p. 170). In the Southern environmental movement, the environmental dimensions of daily livelihood struggles tend to take priority over the Northern environmental movement's more abstract and aestheticized concerns with conservation: 'Where poor peoples' livelihoods are at stake, environmental movements will incorporate conservation objectives only within the context of basic needs' (Redclift 1987: p. 170). For Michael Redclift, this emphasis on livelihood struggles precludes 'appealing to idealism or altruism to protect the environment' (Redclift 1992: p. 26), meaning that environmental protection and economic development cannot be dissociated from each other.

While Southern grassroots environmental organizations are usually organized around livelihood and development objectives, they often mobilize in pursuit of non-economic goals and frame their claims around moral and cultural themes which are not purely utilitarian in content. Several writers have emphasized the role of alternative epistemologies and cultural understandings of ecological processes in the politics of Southern environmental movements.

Immediate livelihood strategies often contribute to a sophisticated understanding of the potential of environmental resources and the operation of local ecological processes, which is 'embodied in the development of complex institutional arrangements regulating the use and management of resources' (Bryant and Bailey 1997: p. 160). The struggle to have these arrangements protected or supported is often framed around claims about the value of indigenous scientific and ecological knowledge. Furthermore, there are often religious grounds for mobilizing to protect sacred or culturally significant areas whose exploitation might otherwise have some direct economic value. Therefore, material and cultural objectives are often bound up in complicated and non-linear ways in the discourses and practices of Southern environmental movements and organizations. In some cases they are complementary, but in others they conflict.

It may be possible to clarify some of the distinctive logic of grassroots environmental activism in the South by distinguishing between different dimensions of the politicized environment, or the different ways in which the environment comes to be regarded as an object of political mobilization. The three dimensions of the politicized environment have been identified as: 1) risk; 2) vulnerability; and 3) marginality. The major analytical implication of this typology is that each dimension has specific ecological and social impacts on differentiated individuals and groups and therefore generates distinctive forms of political action and opportunities for alliance formation (Bryant and Bailey 1997: pp. 28-33).

At the highest level of generality, systemic environmental changes such as pesticide concentration, groundwater contamination, and irreversible loss of biodiversity produce environmental risk. This class of environmental changes tends to effect all members of a given community equally. Perceptions of environmental risk can serve as the basis for cross-class and transnational alliance formation and fairly consensual forms of environmental governance. Some writers have argued that the matrix of laws and conventions instituted in the post-UNCED era -- governing climate change and biodiversity, for example -- reflects a concern with the potentially universal politics of risk (Forsyth 1999; cf. Guha and Martinez-Alier 1998).

At the intermediate level, episodic environmental incidents such as flooding, drought, industrial accidents, and outbreaks of water-borne disease produce environmental vulnerability. These incidents, especially in their most severe manifestations, tend to have a general impact, but the poorest and most resource-dependent members of a community are typically most vulnerable. Vulnerability is unevenly distributed and highest in the South and among the poor, but the potential for alliance formation at the local or national level is still extensive. Often, the politics of vulnerability bring local communities into confrontation with powerful state and corporate interests involved in environmentally destructive activities like logging, mining, or oil exploration and extraction. However, developing shared understandings of environmental problems and negotiating institutions of environmental governance framed around perceptions of vulnerability are relatively straightforward.

At the most basic level, everyday manifestations of environmental change and degradation such as erosion, deforestation, and salinization contribute to environmental marginality. These processes are generally slow and typically highly unequal in their impact on local livelihoods; costs are borne most intensively by the poorest and most resource-dependent members of any given community (Bryant and Bailey 1997: pp. 28-33; cf. Blaikie 1985; Blaikie and Brookfield 1987; Redclift 1992). Environmental marginality tends to produce a vicious cycle in which the combined effects of enclosure and deterioration of natural resources force marginalized actors into degraded and potentially fragile areas, which they are in turn compelled

to over-exploit in order to sustain their livelihood. Thus, as Blaikie and Brookfield conclude, '[environmental] degradation is both a result of *and* a cause of social marginalization' (Blaikie and Brookfield 1987: p. 23). The perverse logic of this vicious cycle can be seen among socially marginalized groups like pastoralists, shifting cultivators, and colonists especially, but it is also played out every day among more established peasants caught in a simple reproduction squeeze that prevents them from investing in environmentally sound agricultural practices and technologies.

Marginality is by far the most complex dimension of the politicized environment. Research into the politics of marginality has tended to rely on 'strategic simplifications' (Li 2002), representations of rural communities as either 'buffeted by forces beyond their control, and helplessly watching as their own activities contribute to the destruction of their chances for a better life in the future' (Ghai and Vivian 1992: p. 11) or, alternatively, as undifferentiated corporate units with shared perceptions of environmental problems, shared knowledge of local ecology, consensual systems of conflict management, and common material interests in preserving natural resources (Li 1996; Agrawal and Gibson 1999). Neither image is particularly informative. The simplified image of poor and marginalized people as the direct cause of environmental degradation does not square with numerous findings on the causes of deforestation (Dove 1993; Klooster and Masera 2000), soil erosion (Blaikie 1985; Blaikie and Brookfield 1987), and environmental degradation more generally (Angelsen 1997; Duraiappah 1998; Swinton, Escobar and Reardon 2003). On the other hand, the simplified image of marginalized people and communities as inherently oriented towards conservation and egalitarianism with respect to natural resources, although it serves a rhetorical purpose, may obscure the ways in which environmental marginality is produced within communities and, in the case of gendered access and allocation of natural resources, even within individual households (Leach, Mearns and Scoones 1999). For this reason, research strategies have slowly moved toward more refined analysis of the social composition and concrete goals of grassroots organizations and social movements motivated by the politics of marginality (Watts and Peet 2004).

Grassroots organizations motivated by the threat of environmental marginality are certainly growing in number, but some researchers have suggested a cautious assessment of their capacity to directly shape institutions of environmental governance (Fisher 1993). The most successful social movement campaigns motivated by the livelihood-based politics of marginality include the campaign for the establishment of extractive reserves in Brazilian Amazonia (Keck 1995; Brown and Rosendo 2000), the Chipko movement in India (Guha 1989; Gadgil and Guha 1994) and, most recently, the global movement against the World Bank's sponsorship of potentially destructive dams (Fox and Brown 1998; Khagram 2000; Dubash et al. 2001). These social movements have been distinguished by their capacity to make links with transnational advocacy organizations and build alliances with other social actors. In contrast to these high profile grassroots environmental movements, however, there are many other grassroots movements and organizations that are comparatively isolated or invisible. For instance, the politics of marginality often find expression in individualized strategies of adaptation to environmental change or in hidden forms of everyday resistance, rather than through coherent social movements and formal organizations (Bryant and Bailey 1997: pp. 168-174; cf. Taylor 1995). In addition, the growing number of grassroots environmental organizations worldwide includes many 'self-help' organizations which, as Livernash reports, 'are usually small in scale and may therefore have limited impact and limited interest in scaling up their activities or influencing government' (Livernash 1992: p. 222). Self-help organizations are never entirely

apolitical, of course, but they often have a complicated relationship with other political actors: they can either reinforce or undermine local structures of authority based on gender, caste, or ethnicity; they can accept or reject the overtures of GSOs/SOs and other ENGOs; and they often prefer withdrawal from relationships with the state and multilateral organizations to engagement in participatory attempts to capture and direct autonomous grassroots environmental initiatives. As a result of all of these factors, in assessing the viability of grassroots organizations' contributions to institutions of environmental governance and their capacity to help overcome inequality, poverty, and marginality in rural communities, sensitivity to the complexity of local conditions, awareness of the multiple motivations for environmental activism, and concrete analysis of the social composition of environmental social movements are all vital.

## **1.2. Gender, Environmental Marginality, and Environmental Social Movements**

To acknowledge that environmental marginality is worst among poor, resource dependent, and socially marginalized groups is also to open up the possibility that some within this broad category are impacted more acutely than others. Women, in particular, have been identified as particularly susceptible to the vicious cycle of environmental marginality. It is widely recognized that women around the world, as a result of gendered divisions of labour within households and communities, typically bear disproportionate responsibility for reproductive activities. This, in turn, leads women to form especially close material relationships with the environment in the course of their daily activities, including collecting fuel, fodder, water, and food, much of which is derived from potentially fragile ecosystems that are susceptible to degradation. As a result, women's concrete environmental interests, forms of environmental knowledge, and perceptions of environmental problems often diverge significantly from those of men, even those located within their household, community, class, or ethnic group. This has led many analysts to investigate the particular relationship between women and the environment, generating three distinct approaches to gender and environmental issues. These are: 1) the women, environment, and development approach; 2) ecofeminism; and 3) feminist environmentalism or feminist political ecology. Each of these three theoretical approaches provides its own explanation for women's involvement (or lack thereof) in environmental social movements, and each establishes different priorities in the formulation of participatory mechanisms of environmental governance on this basis. Therefore, the differences between them are important.

The women, environment, and development (or WED) approach emerged in the 1980s in recognition of women's special role as the main users and managers of natural resources and the environment within rural communities (Dankelman and Davidson 1988; Rodda 1991). The rapid ascension of WED within institutions such as the World Bank reflected a *zeitgeist* that has been called the 'development and other' period. That is, by linking women, the environment, and development, WED filled an institutional need for bold and expansive new approaches at time when traditional development priorities were receding in the face of neoliberalism (Angeles 2004). According to a critical appraisal written by Susan Joeke, Cathy Green, and Melissa Leach, the starting point for WED is the gendered division of labour in rural communities:

Women's responsibilities make them closely dependent on, and give them distinct interests in, natural resources... Women are also acknowledged to have deep and extensive knowledge of natural resources, deriving primarily from their intimate daily experience of them. By extension, it is argued that their interests lie in sustainable environmental management and resource conservation. Women's

interests are thus identical to, or at least complementary with, those of environmental programmes and projects (Joekes, Green and Leach 1996: p. 28).

WED often assumes that women in rural communities are natural allies in conservation and natural resource management projects conceived and executed by states, donors, AOs, and GSOs/SOs, even where women are not visibly organized into movements and organizations in pursuit of such projects. WED presents women not only as the primary victims of environmental degradation and enclosure, but also as expert managers of natural resources, thus instrumentalizing knowledge of local ecology derived from women's material interactions with the environment for conservation and development objectives they might not necessarily be inclined to support.

Ecofeminism offers a more radically essentialist account of women's relationships with the environment, but it follows in the tradition of WED. For ecofeminists, women's ability to reproduce and to nurture children is viewed as naturally complementary to the environment's ability to create and sustain life. Both are viewed as manifestations of the 'feminine principle', in opposition to the 'masculine principle' represented by modern science and technology, the rational bureaucratic state, and capitalist development writ large. Women are therefore viewed in ecofeminism as close to nature in both a material sense, as a result of their dependence on natural resources and the environment, and also in a spiritual or conceptual sense, because of their organic, holistic connection to nature (Shiva 1988). Most ecofeminists are highly critical of contemporary forms of green developmentalism, including those advanced by environmental movements and organizations, which they regard as insufficiently radical and deeply compromised by an instrumental and masculinist view of nature as something to be subdued, managed, and governed (Shiva 1993). While many ecofeminists reject the notion of development altogether, because it is seen as inherently masculine and necessarily destructive of women and the environment, others propose an alternative model of development based on feminine principles of nurturance, subsistence, harmonious and symbiotic interactions with nature, and self-sufficiency (Mies and Shiva 1993).

Both WED and, more surprisingly, ecofeminism have enjoyed considerable influence among environmental organizations and development policymakers alike. However, the idealized view of women and the environment they convey has proved unsustainable in light of contrary evidence, fueling critical reconsideration of their major propositions. In looking at the gender composition of environmentally oriented social movements and organizations, women are not represented in anywhere near the numbers that WED and ecofeminism might lead investigators to expect. In assessing the motivations of women activists in environmental social movements, the WED and ecofeminist proposition that women are innately linked to the environment does not hold up to extensive evidence that women's participation in these movements very often reflects a desperate struggle for access to natural resources in a context where they are denied other opportunities for income and livelihood security.

The institutionalization of WED and ecofeminist recommendations in projects of natural resource management and environmental governance has produced surprisingly poor results overall. An astounding number of such projects

[appropriate] women's labour, unremunerated, in activities which prove not to meet their own needs and whose benefits they do not control. New environmental chores have been added to women's already long list of caring roles. Women have

sometimes been treated, in effect, as a source of cheap labour for environmental projects. The tasks women are given to do are often low status without any technical or managerial content. It is assumed that women as resource users have the incentive to do the work, whereas the situation is often that work schedules are badly designed and women lack the authority within the project context to modify procedures for the better (Joekes, Green and Leach 1996: pp. 31-32).

In addition, the democratic institutional structures of participatory community councils and other decision-making bodies, which often mirror the composition of environmental social movements and organizations, often exclude women. These bodies 'can act against women's interests [and] can actually serve to worsen instead of improve women's position' (Joekes, Green and Leach 1996: p. 32). Women's environmental vulnerability and marginality may therefore be caused by factors that are independent of their nominal membership in recognized community-based institutions and organizations, even those that are instituted as the result of social movement action.

These shortcomings in the WED and ecofeminist approaches to gender, environmental social movements, and environmental governance have prompted critics to develop alternative theories and methodologies, such as those proposed in Bina Agarwal's environmentalist feminism (Agarwal 1992; 1997a) and Cecile Jackson and Dianne Rocheleau's feminist political ecology (Jackson 1993; Rocheleau 1995). These approaches urge a more careful and refined approach to gender and the environment than the one popularized in WED and ecofeminism, one rooted in specific materialist analysis of women's interactions with the environment. In this view, it is important to remember that women's participation in environmental social movements may be a rationally calculated response to circumstances instead of the expression of a deep attachment to the environment. Apparently gendered differences in the form and content of organized political responses to environmental degradation are conditioned by gendered divisions of labour, gendered intra-household allocation of assets, and gendered patterns of legitimate political authority, and these are all legitimate objects of social scientific analysis.

The central insight of feminist environmentalism and feminist political ecology is that '[n]ot all women have the same stake in environmental protection, nor do women alone have such a stake' (Agarwal 1997a; p. 36). In the first instance, feminist environmentalists and feminist political ecologists point out that women are not a unitary and undifferentiated social group. WED and ecofeminist approaches are criticized for presenting an incomplete picture of social stratification and lumping all women together by virtue of their sex. WED and ecofeminist approaches that prioritize the role of women's organizations in environmental social movements and environmental governance neglect the fact many of these organizations represent relatively privileged groups of women, such as those who are in a position to take advantage of income-generating opportunities provided by eco-tourism or small-scale handicraft production, and exclude the poorest and most resource dependent women, typically widows and single women as well as those without access to land and waged employment, whose immediate interests are in securing access to natural resources for subsistence purposes. Furthermore, gender relations are overlaid with generational relations within households. Older women, who have more authority in community organizations, may be able to devolve many responsibilities to younger women in the household, and therefore have less interest in securing access to fuel, fodder, and water (Jackson 1995). Thus, the poorest and most resource dependent women's environmental demands are rendered invisible in many of the social movements and grassroots organizations championed by writers in the WED and ecofeminist traditions (Agarwal 1992: p. 125).

In the second instance, feminist environmentalists and feminist political ecologists have sought to highlight the complementary, relational, and co-evolutionary character of gender relations as they are expressed in environmental social movements and environmental governance. With regards to women's specific environmental knowledge and expertise, it has been noted that men's and women's bodies of knowledge are subject to change and assimilation. In situations where household livelihood strategies are diversifying, especially, men and women often exchange this knowledge according to shifting needs and priorities, undermining the notion that women's innate ecological sensibilities and beliefs are somehow unique (Rocheleau 1991). With regards to women's particular material interests in environmental conservation and securing access to natural resources, these can only be rendered intelligible with reference to the specific processes of bargaining Amartya Sen has described as 'cooperative conflicts' (Sen 1990). Thus, women's particular environmental interests and livelihood strategies, including their decisions to participate in environmental social movements and environmental governance institutions, can only be understood in the context of environmental change and processes of economic restructuring which impact both men and women in particular ways, altering the dynamics of intra-household bargaining, divisions of productive and reproductive labour, and allocation of assets and income. Therefore, feminist environmentalists and feminist political ecologists argue, gender and environment research cannot simply highlight women and ignore men, but needs to examine their interactions around environmental issues (Chant 2000; Cleaver 2000).

Relevant lessons derived from this discussion of gender, environmental marginality, and social movements are as follows:

- 1) As a result of gendered divisions of productive and reproductive labour, women throughout the world typically have responsibilities that make them closely dependent on, and give them distinct interests in, natural resources and the environment.
- 2) Women's political action around environmental issues will in some measure reflect their distinctive responsibilities and susceptibilities to the effects of environmental degradation and enclosure.
- 3) Women's environmental action cannot be read off as an unmediated product of their sex or an innate feminine attachment to the environment. Women's motivations need to be contextualized within a materialist analysis of their current environmental responsibilities, but these should not be confused with their needs, their interests, or their desires.
- 4) Women's interests in environmental protection and their motivations for participating in social movements and organizations with this objective are not uniform. Class, marital status, ethnicity, and generation all serve to differentiate women's motivations for engaging in organized political action around environmental issues while conditioning their ability to do so.
- 5) Environmental activism is not the exclusive concern of women. Women's gender roles in relation to the environment are dyadic, relational, and inextricably bound up with men's, so gender analysis needs to include analysis of men's distinctive roles as well.

### 1.3. The Restructuring and Rescaling of Environmental Governance

Contemporary social scientific debates on environmental governance are heavily influenced by the emergence and spread of sustainable development as a guiding principle in environmental and developmental policy making even before its formalization at the first United Nations Conference on Environment and Development (UNCED) Earth Summit in Rio de Janeiro in 1992 (WCED 1987; cf. Redclift 1987; Adams 1990). As the official decade of sustainable development, the 1990s produced vast quantities of popular, official, and social scientific literature on the relationship between economic development and the environment. Optimistic international projections, ambitious national objectives, and bold local initiatives all promised a world in which ‘development could continue, now on a truly global base, without the risk of the complete exhaustion of natural resources or of other major environmental catastrophes’ (de Campos Mello 2000: p. 31). Numerous statements of intent have been released in the past dozen years, most advocating some combination of government decentralization, devolution of responsibility for natural resource management, and community participation in environmental governance as solutions to the manifest inability of states and markets to balance the objectives of generalized economic development and environmental protection (Leach, Mearns and Scoones 1999; Ribot 2002). At virtually every level of environmental governance, then, the goal of substantive social movement participation in sustainable development has been formally recognized and incorporated into bureaucratic structures. Whether that positive commitment to the principle of participation has yielded measurable environmental and developmental improvements remains an open question subject to much debate.

It is widely recognized that the post-UNCED consensus on the principle of sustainable development represents a break with previous models of environmental governance, but there has been considerable debate over how to interpret that break (Rowlands 1992). Some authors have described the spread of the idea of sustainable development as an example of ‘ecological modernization’ (Spaargaren and Mol 1992; Mol 2002). Others have used constructivist concepts to describe sustainable development as an example of ‘norm diffusion’ rooted in the progressive construction of a transnational ‘epistemic community’ dedicated to environmental conservation (Haas, Keohane and Levy 1993). Others have described sustainable development as a technocratic form of ‘managerialism’ (Sunderlin 1995a; 1995b). Still others have described sustainable development as a new form of ‘eco-governmentality’ which is creating regimes of environmental governance ‘marked by new global forms of legality and eco-rationality that have fragmented, stratified, and unevenly transnationalized Southern states, state actors, and state power’ (Goldman 2004: p. 167).

Cutting edge research on the political economy of sustainable development is increasingly emphasizing the complex, multilayered, and sometimes contradictory restructuring of global environmental governance. This emerging research agenda is based on a recognition that environmental governance is going through a process of rescaling (Swyngedouw 2000). Rescaling refers to simultaneous processes of localization, which decentralize and devolve responsibility to sub-national administrative units and NGOs, and globalization, which create new forms of international regulation and diffuse new models of environmental governance. Through rescaling, the complex dynamics of cooperation and conflict between states, multilateral organizations, and social movements in designing institutions of environmental governance are being radically restructured, presenting GOs and other ENGOs in the South with unprecedented new opportunities for participation.

But, on the other hand, the rescaling of environmental governance also creates new challenges for social movements as they move from directly confronting national states and local structures of authority towards a more complex and differentiated terrain where they must operate on multiple scales and engage with multiple actors (including multilateral institutions, development agencies, multinational corporations, etc.). For researchers, mapping the consequences of the rescaling of environmental governance presents many difficulties. As representatives of the Environment Group at the Institute of Development Studies in Brighton have recently written, the ‘increase in the challenges facing environmental governance, combined with contradictory tendencies in environmental resource management... leads to overlapping and conflictual institutional arrangements, increasing locally felt uncertainties’ (Mehta et al. 1999: p. 5). The authors contend that neat analytical distinctions between international, national and local levels of environmental governance are no longer tenable as a result of rescaling. Therefore, research needs to move toward a fuller appreciation of the complex interaction and interpenetration of environmental governance regimes which operate simultaneously at multiple scales.

The irreducible complexity and uncertainty of environmental governance in the contemporary period is compounded by the paradoxical role of participation in contemporary discourses and practices of sustainable development. The rhetoric of participation and the real practice of constructing participatory regimes of environmental governance are often strikingly at odds. The concept of participation is essentially contested (White 1996; Saxena 1998) and in practice often gendered (Mosse 1994; Cornwall 2000), meaning that its implementation has very different implications for different groups of social actors. At all levels of environmental governance, then, formal participation can be a source of bureaucratic legitimization and substantive exclusion as much as a source of genuine democratization. As White contends with regard to the concept of participation more generally:

Participation must be seen as political. There are always tensions underlying issues such as who is involved, how, and on whose terms. While participation has the potential to challenge patterns of dominance, it may also be the means through which existing power relations are entrenched and reproduced. The arenas in which people perceive their interests and judge whether they can express them are not neutral. Participation may take place for a whole range of unfree reasons. It is important to see participation as a dynamic process, and to understand that its own form and function become a focus for struggle (White 1996: p. 6).

The emergence of community participation as a normative principle has led to the creation of formal mechanisms of cooperation and consultation in many institutions of environmental governance at all levels, but this should not be confused with a linear, cumulative progression toward equitable, democratically administered environmental and development policies. Rather, researchers in applied ecology and cognate social science disciplines have begun to emphasize the tremendous difficulty of incorporating truly inclusive and deliberative mechanisms of participatory decision-making into even the most basic levels of environmental research and management, calling the substance and quality of formal, legally recognized mechanisms of participation into question (Holmes and Scoones 2000; Ribot 2002).

In this context, prediction of outcomes in a linear way is impossible. Participation in environmental governance is currently structured in a way that privileges certain actors and tends toward the conservation and reproduction of dominant political and economic structures, but the

directions of change in regimes of environmental governance constructed according to principles of participation are not wholly pre-determined. Concrete and empirically informed situational analysis of structures of participation in environmental governance at different scales is therefore absolutely necessary.

One way to disaggregate the expansive category of participation and make it more relevant for analytical purposes, suggested by Tim Holmes and Ian Scoones of the Institute for Development Studies, is to separately measure inclusion, which refers to the breadth of legitimate decision-making authority, and deliberation, which refers to the depth of decision-making processes (Holmes and Scoones 2000). The authors suggest that the substance and quality of participation at international, national and local scales of environmental governance can be usefully evaluated according to this framework. This is especially important in a global context where many -- maybe most -- of the available opportunities for social movements and grassroots organizations to participate in institutions of environmental governance are engineered from above by Southern states, multilateral organizations, and Northern ENGOs. Although many of these structured opportunities for participation demonstrably fail to meet criteria of inclusion and deliberation, they have contributed to the creation of important new political spaces that are worth analyzing in some detail.

Notwithstanding the overwhelming attention paid in the literature on social movements and environmental governance to locally-based institutions and organizations, these initiatives are themselves embedded in international and national structures of governance which have a strong impact on their daily operation. For this reason, it is important to analyze participation in environmental governance on all three of the relevant scales -- international, national, and local.

The internationalization of environmental governance has received a great deal of attention from researchers. Nominal commitment to participation at the international level has increased in part because of the limited capacity of individual national governments to address environmental problems that are innately global in reach (Mische 1989; Conca and Lipschutz 1993; Hurrell 1994) and the perceived need for effective international coordination and harmonization of various political and legal mechanisms of nationally-based environmental governance (Young 1989; Sand 1995; Auer 2002). The UNCED Earth Summits in Rio de Janeiro and Johannesburg are widely regarded as exemplars of the participatory approach, but according to Peter Willetts the consultative mechanisms for NGOs incorporated into the process are 'grossly overstated' (Willetts 1996; cf. Chatterjee and Finger 1994; Petkova, Maurer, Henninger and 2002; UNDP/UNEP/World Bank/WRI 2004). The Global Environmental Facility (GEF) has been vulnerable to many of the same criticisms leveled at the World Bank's general lack of accountability (Streck 2001; Young 2003; Goldman 2004). It is perhaps ironic that many of the broadest imperatives for local participation, such as the Local Agenda 21 initiative (Freeman, Littlewood and Whitney 1996; Selman 1998), have been formulated primarily by international institutions of environmental governance that do not themselves meet criteria of inclusion and deliberation.

One promising exception to the rule of social movement exclusion at the international level of environmental governance can be found in the growth of international social movement networks that aim to coordinate locally-based initiatives with activist involvement in global environmental negotiations. Social forestry networks, for example, have emerged as a way to pool scarce resources and make links with transnational advocacy organizations and grassroots support organizations in order to maximize input into global environmental governance.

According to a recent report prepared for the Center for International Forestry Research (CIFOR), an ENGO based in Bogor, Indonesia, these networks still face many internal obstacles to substantive participation and egalitarian cooperation, but local grassroots organizations are beginning to play a central role within them, slowly reversing the highly unequal relationship between Northern and Southern ENGOs (Colchester et al. 2003).

Research on international environmental social movements and international environmental governance far outpaces comparative analysis of nationally-based environmental movements with discrete national agendas. The intermediate national level is often excluded. This is striking because, in general, inclusive and deliberative processes of participation in environmental governance have been implemented more successfully at the national level than at the international level (Zazueta 1995; Holmes and Scoones 2000). Experiences are extremely mixed, of course, but studies tend to show that the most robust opportunities for inclusive and deliberative social movement participation in environmental governance have arisen recently in countries successfully moving towards substantial democratization. In Latin America, for instance, Eduardo Silva argues that the success of locally-based environmental initiatives has depended strongly on the positive predisposition of key actors located within the national state apparatus towards building strong pro-grassroots political coalitions (Silva 1994). Similarly, David Potter and Annie Taylor conclude that the impact of environmental social movements in Africa and Asia is largely determined by the vulnerability of states to environmental claims built around credible demands for government accountability (Potter and Taylor 1996). These examples suggest that progress on environmental issues is in some measure dependent on broader progress towards substantial representative democracy and genuine respect for basic rights of citizenship.

The popular image of state involvement in environmental governance as parasitic and inefficient certainly has some basis in reality. There are many historical studies of governments in the South using natural resource management and environmental conservation as an excuse to secure elite access to a lucrative natural resource base, to exclude local communities via enclosure, and to assert authority in remote areas via strategies of territorialization -- interventions that have usually been environmentally counterproductive, violently coercive and extremely damaging to local livelihoods (Guha 1989; Neumann 1998; 2004; Peluso 1992; 1993; Vandergeest and Peluso 1995). State bureaucracies are widely mistrusted as a result of these ill-informed interventions, and this often undermines the credibility of state-led mechanisms of participation in environmental governance in the eyes of local communities throughout the South (Dove 1995; Sarin and SARTHI 1996).

Suspicious of state motivations in instituting participatory forms of environmental governance are well founded, but it would be a mistake to assume that state institutions are entirely invulnerable to pressure applied from below by social movements and GOs. In particular, the increasing professionalization of state environmental bureaucracies and the spread of cutting edge methods of evaluation are slowly opening up space for more genuinely collaborative forms of day-to-day environmental decision-making in many states of the developing South (Sayer and Campbell 2003; 2004; Daniels and Walker 1999; Holling and Meffe 1996; McDougall and Braun 2003; Martin and Sutherland 2003; Wollenberg, Edmonds and Anderson 2001; Kaimowitz 2002). Furthermore, better understandings of environmental policy processes and decision-making cycles are highlighting the presence of numerous opportunities to effect incremental change in state-led environmental governance (Keeley and Scoones 1999; Hampton 1999; Steinberg 2003). The fascinating insights of an 'enlightened'

forestry officer in the Indian state of Himachal Pradesh, published by the International Institute for Environment and Development in London, show that environmental bureaucracies, especially those staffed by conscientious scientists and public servants, are rarely monolithic (Sood 1996).

Reform of environmental bureaucracies in the South is certainly necessary to institutionalize meaningful participation in environmental governance, but since the budgets of these departments are vulnerable in the bureaucratic conflicts that are inevitably associated with austerity measures, in the current macroeconomic climate they are more likely to be cut than substantially reformed. This is worthy of attention because there are many environmental social movement demands that inevitably call for state intervention in some form: to mediate between locally articulated demands for livelihood security or rural territorial development and international demands for environmental conservation; to adjudicate between overlapping or competing proprietary claims over natural resources and ecologically sensitive areas (Heltberg 2002); to formally recognize and legally protect alternative, locally-based institutions of environmental decision-making (Pinkerton 1992); and, most significantly, to provide the administrative means to scale up and generalize successful models of community-based natural resource management (Farrington and Boyd 1997). These are all functions that ENGOs presently lack the capacity or legitimate authority to fulfill.

The post-UNCED approach to environmental governance relies heavily on a set of policy instruments including state decentralization, devolution of responsibility for natural resource management to local communities, and institutionalized community participation in day-to-day environmental administration (Holmberg, Thompson and Timberlake 1993). All of these policy prescriptions are based in general ideas of co-management, or appropriate sharing of responsibility between states, NGOs and local communities (Berkes 1995; Baland and Platteau 1996; Borrini-Feyerabend 1996; Shackleton et al. 2002). In its abstract conception at least, decentralization has 'sought to... support and empower peoples' own initiatives in self-management of natural resources that are key to local livelihoods' (Mehta et al. 1999: p. 10). In reality, the motivations for decentralization have been considerably more complex. It has been pursued as a legitimation strategy by states weakened by debt and austerity, as a response to demands for democratization and local or regional autonomy, and as a means to reduce the economic reach of national states.

As a result of this move to decentralization and devolution, there has been a veritable explosion of experiments in community-based natural resource management (CBNRM) and integrated conservation-development projects (ICDPs) throughout the developing world. CBNRM projects aim for comprehensiveness and often actively seek to balance cultural factors with more tangible legal and institutional structures of environmental governance and natural resource management (Bromley et al. 1992; Colchester 1994; Gibson, McKean and Ostrom 2000). By contrast, ICDPs are narrower interventions, generally introduced by outside ENGOs, which typically use material incentives, derived from sources such as ecotourism, to encourage environmental conservation (Ostrom 1998).

The tremendous popularity of CBNRM and ICDPs has generated a vast interdisciplinary literature. In addition to the vibrant theoretical debates covered in the next section, there is a wealth of empirical studies of local experiments in CBNRM and ICDPs. Case studies of individual CBNRM and ICDPs cover Latin American countries including Mexico (Klooster 2000a; 2000b), Guatemala (Reddy 2002), Nicaragua (Larson 2002; 2004), Colombia (ravnborg and Guerrerro 1999; Serje 2003) and Bolivia (Kaimowitz et al. 1998; Pacheco 2004); India

(Blair 1996; Ahluwalia 1997; Agrawal and Yadama 1997; Farrington and Lobo 1997; Mascherenas 1998; Poffenberger, McGean and Khare 1996; Shepherd 1995; Sood 1996; Martin and Lemon 2001; Ballabh, Balooni and Dave 2001; Kumar 2002) and Nepal (Agrawal and Ostrom 2001; Lachappelle, Smith and McCool 2004); Southeast Asian Countries including Indonesia (Resosudarmo 2004), the Phillipines (Gauld 2000) and Thailand (Johnson and Forsyth 2002); and a diversity of African regions and countries including Southern African dry zones (Woodhouse 1997), the West African Sahel (Toulmin 1991) and forest zone (Leach 1991), as well as Cameroon (Oyono 2004), Zimbabwe (Metcalf 1997; Campbell et al. 2001; Nemarundwe 2004) and Tanzania (Songorwa 1999).

The generally optimistic tenor of research conducted into CBNRM in the early 1990s is being revised in light of mixed practical experience and unanticipated levels of complexity in these locally-based forms of environmental governance. Early research into these participatory or decentralized forms of environmental governance often succumbed to what Jessica Vivian calls the 'magic bullet syndrome' (Vivian 1994). That is, researchers and practitioners simplified complex local dynamics to fit generic models; minimized the conflictual dimensions of struggles over sustainability, livelihood security, and development within local communities; overstated success where more detailed analysis (or alternative criteria of evaluation) would indicate ambiguities, trade-offs, and even outright failure; and projected evidence from theory, often substituting assumptions for unreliable, absent, or ambiguous data.

The practical grassroots implementation of CBNRM and other decentralized forms of environmental governance has faced three primary challenges. First, it has been exceedingly difficult to determine the actual ecological impact of these interventions. Indeed, there is very little scientific evidence to support the widespread idea that CBNRM is more environmentally sound than the other 'integrative buzzwords' it replaced (Sayer and Campbell 2004: p. 4). Second, decentralization of responsibility for environmental governance and natural resource management has been halting and partial, resulting in a democratic and administrative deficit. Processes of decentralization have typically failed to fully devolve discretionary powers to the local level, to ensure that decision-making processes are genuinely deliberative and inclusionary, and to provide local community-based institutions of environmental governance with financial, administrative, and scientific support (Ribot 2002). Third and most significantly, CBNRM has been shown to consistently favour relatively powerful and privileged members of local communities. There is a significant difference between devolving authority over environmental decisions to social movements, grassroots organizations, and representative local governments, as CBNRM is theoretically supposed to, and devolving authority to interest groups, NGOs, or customary authorities who are not subject to democratic restraints. As Jesse Ribot argues, '[p]luralism without representation favours the most organized and powerful groups. It favours elite capture' (Ribot 2002: p. 1). The goal of truly democratic decentralization is an elusive one (Larson and Ribot 2004).

#### **1.4. Environmental Governance and Rural Territorial Development**

In surveying the literature on social movements, environmental governance, and rural territorial development, there is a perceptible shortage of serious, high-quality studies which explicitly investigate the third concept under consideration in its relations with the other two. Rural territorial development might be regarded as a missing term or absence in the existing literature. This might be because the concept itself addresses a scale or level of political-economic integration and coordination that, at present, is weakly institutionalized and runs

counter to the predominant tendencies of restructuring and rescaling in environmental governance. Rural territorial development's operational principles or guidelines emphasize the need for simultaneous processes of productive transformation and institutional development, based in an expanded conception of the rural which considers the potential for agricultural, non-agricultural, and migratory routes out of rural poverty, identifies a defined territory as distinct and diverse, and provides a complex institutional architecture for linking local governments, economic and civil society organizations, all designed and managed with medium and long term temporal horizons in mind.

This view of rural territorial development differs sharply from that implicitly advanced in most contemporary studies of social movements and environmental governance, which is closely linked to the project of rescaling. Where rural territorial development envisions an intermediate space of coordination between local communities and national or international structures of governance, the overwhelming focus within contemporary research on these issues is on global civil society and global environmental governance, on one hand, and CBNRM and other local environmental initiatives, on the other, which leaves very little room for this intermediate scale or level of analysis.

The absence of a coherent conception of rural territorial development in many studies of environmental governance reflects the design of these interventions themselves. The emphasis on localism and project-based aid in environmental governance creates artificially small boundaries. These boundaries are social constructs, of course, but they have real impacts. The privileging of local community-based forms of environmental governance in the official and academic literature may represent a potentially dangerous fallacy of composition, in which it is presumed that the successes of isolated and atomized interventions can somehow be replicated without taking into account the questions of scaling and coordination that are central to any project of rural territorial development.

Further studies into the articulation of social movements, environmental governance, and rural territorial development will need to carefully identify the reasons for this absence of a coherent conception of rural territorial development and then elaborate a methodological approach sufficient to overcome it in further empirical work. One way to avoid repeating the fallacy of composition alluded to above would be to break with the comparative ethnographic method of investigation, which compares highly detailed but small scale investigations of individual community based institutions, without taking into account the vital questions of scale and coordination, of generating distinct territorial identities, and of sustaining environmental governance institutions over a longer time frame. One way to move beyond this model of investigation would be to purposively seek out social movement activists (and possibly government officials and development workers) whose objectives are clearly linked to a territorial identity or a territorial project. This would help to overcome the myopic perspective of the vast majority of available research into organizations and institutions of environmental governance.

## **2. Theoretical Perspectives on Community-Based Natural Resource Management and Participatory Environmental Governance**

### **Introduction**

Prior to the emergence of sustainable development as a guiding principle for environmental governance in the developing South, discussion of the relationship between natural resources and development was dominated by theories based on the metaphorical idea of a tragedy of the commons. The tragedy of the commons was popularized as an explanation of environmental problems by Garret Hardin, who argued that ecological degradation would be the inevitable and logical consequence whenever individuals shared common access to resources (Hardin 1968). This paralleled Mancur Olson's influential theory of collective action, which challenged the idea that members of a collectivity could cooperate to advance a common interest or preserve a public good (Olson 1965). Assuming users of natural resources to be rational -- i.e. self-interested and utility-maximizing -- agents operating in an open-access environment free of credible and/or enforceable constraints on individual behaviour, Hardin attempted to show that all users would be compelled by circumstance to treat scarce or exhaustible natural resources as if they were actually in unlimited supply: 'Therein is the tragedy... Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons' (Hardin 1968: p. 1244). The result, he concluded, was 'too horrifying to contemplate' (Hardin 1968: p. 1247).

Critics have long noted that the tragedy of the commons theorem is logically contradictory and its empirical basis in any identifiable real world situation is debatable. It most notably failed to distinguish between common property regimes, which are regulated collectively, and open access regimes, which are entirely unregulated (Ciriacy-Wantrup and Bishop 1975; cf. Bromley and Cernea 1989: p. 11). However, the simplicity and intuitive appeal of the tragedy of the commons made it a popular 'folk and academic explanation' (McCay and Jentoft 1998: p. 21) for a wide variety of environmental governance dilemmas. It provided a parsimonious explanation of diverse processes of environmental degradation, making it an attractive guide for technocratic and bureaucratic solutions to environmental problems (cf. Taylor 1992: pp. 633-634). For years, a broad consensus existed around the proposition that resource-dependent communities 'could not be expected to manage these resources in a sustainable manner since... they were helpless to prevent individual users from overexploiting the resource' (O'Neil and Thomas 1999: p. vii).

The policy implications of the tragedy of the commons framed in this manner were clear. Some form of externally imposed discipline -- provided either by government alone or by a combination of the invisible hand of the market backed by the state's coercive powers -- was needed. A superordinate authority of some type would be needed to intervene in order to 'impose an outside solution' in one of two ways, 'either to manage the resource directly... or to facilitate private-sector management of the resource by establishing individual, exchangeable property rights in the resource' (O'Neil and Thomas 1999: p. vii). In either case, the customary and mostly informal rights of rural community members to access and exploit natural resources in support of their livelihoods was defined as the central cause of the problem of environmental degradation, rather than as part of the potential solution. In recent years, this view has been radically reversed, and most researchers now reject the tragedy of the commons metaphor as a guide to policy.

The remainder of this section addresses contemporary theoretical approaches to environmental governance, with a special focus on their application to practical projects of CBNRM in the South. It is divided into two sub-sections. The first covers the dominant school of thought among contemporary social scientists working on issues of environmental governance, the common property resources (CPR) school. It begins by outlining the concepts and methods of analysis which unite researchers working in this theoretical tradition, then goes on to highlight some of the important differences of emphasis and interpretation that continue to spark lively debate between CPR theorists. Of these debates, the one between theorists who rely on minimalist formal analysis of institutional choice and those who insist on the need for thicker anthropological conceptions of community is given special attention. The second sub-section focusses on alternative conceptual approaches to CBNRM, namely stakeholder analysis and environmental entitlements analysis, which explicitly address the questions of power, gender, and social differentiation that research in the CPR school tends to neglect. It then proceeds to a discussion of the environmental entitlements approach's implications for concrete assessment of CBNRM and other forms of decentralized and participatory environmental governance.

### **2.1. From The Tragedy of the Commons to Common Property Resources**

Towards the end of the 1980s and into the early 1990s, theoretical and empirical analyses of natural resource management systems began to challenge the tragedy of the commons and, by extension, to critique the set of environmental and developmental policy prescriptions it had informed for decades. This research program originally had several sources of inspiration but it has ultimately converged around a critique of both state control and privatization of natural resources in the developing world. Driven by the growth of the new institutional economics, by a spate of fieldwork-based studies of autonomous forms of community organization around environmental concerns, and by a general dissatisfaction with the practical environmental and economic consequences of state control and privatization of natural resources, a distinct common property resources (CPR) school of analysis has gradually emerged as the dominant approach to questions of natural resource management and environmental governance since the end of the 1980s (Wade 1986; 1988; Feeny 1986; Runge 1986; Korten 1986; McCay and Acheson 1987; Fortmann and Bruce 1988; Berkes 1989; Berkes and Farvar 1989; Berkes et al. 1989; Acheson 1989; Gibbs and Bromley 1989; Brox 1990). Collectively, the first generation of CPR researchers have inverted Hardin's conclusions about an inexorable tragedy of the commons and contributed to rehabilitating the concepts of common property and community-based environmental management in academic and policy circles (Feeny et al. 1990; Ostrom et al. 1999).

CPR analysts vary greatly in their disciplinary loyalties, preferred methodologies, and areas of emphasis, but many have seized upon empirical evidence of functioning common property systems in various times and places to question the tragedy of the commons thesis. Ultimately, CPR theorists agree that:

a diversity of societies in the past and present have independently devised, maintained, or adapted communal arrangements to manage common-property resources. Their persistence is not an historical accident; these arrangements build on knowledge of the resource and cultural norms that have evolved and been tested over time (Feeny et al. 1990: p. 13).

This, in a highly stylized form, is the CPR school's ultimate rationale for endorsing the implementation of decentralized, participatory, community-based environmental governance and natural resource management.

CPR theorists have dramatically shifted the focus of research into environmental governance: rather than the tragedy of the commons, they emphasize the environmental and livelihood damage caused by state appropriation and private enclosure of natural resources. This fundamental reformulation of the theoretical and analytical problems of environmental governance has had a significant impact on the policy community. In an influential and widely circulated paper written for the World Bank in 1989, for example, Daniel Bromley and Michael Cernea argue that environmental degradation is not, as previously assumed, the product of a tragedy of the commons but, in marked contrast, 'actually originates in the dissolution of local-level institutional arrangements whose very purpose was to give rise to resource use patterns that were sustainable' (Bromley and Cernea 1989: p. 7).

Many CPR theorists, especially economists and political scientists, use the individualistic methods of conventional American social science. For researchers working in this tradition, the implication of the existence of sustainable CPRs throughout recorded history is as follows: since CPRs appear to emerge with predictable regularity as spontaneous, endogenous solutions to collective action dilemmas encountered by users of natural resources, then their generic qualities can be modeled formally with the increasingly popular rational choice-theoretic methods of the new institutionalism (cf. Bardhan 1993; Seabright 1993; Baland and Platteau 1996; Nugent and Sanchez 1998; Turner 1999; Heltberg 2001). The American political scientist Elinor Ostrom has done more than any other individual CPR theorist to formalize CPR analysis along these lines. In her considerable body of work, Ostrom deploys many of the same rational choice-theoretic methods used by public choice theorists such as Mancur Olson but comes to a diametrically opposed conclusion about the inevitability of the tragedy of the commons. She concludes that with an appropriately crafted mix of institutional safeguards, CPRs can be viably and sustainably managed virtually in perpetuity (Ostrom 1987).

To demonstrate this as a logical possibility, Ostrom first uses formal hypothetical-deductive techniques to model a number of possible alternative solutions to the collective action dilemma that forms the basis of Hardin's tragedy of the commons. Ostrom then assembles a small but representative sample of long-enduring common property resource management systems from around the world. From these cases, she derives eight generic design principles, each 'an essential element or condition that helps to account for the success of these institutions in sustaining the CPR and gaining the compliance of generation after generation of appropriators to the rules in use' (Ostrom 1990: p. 90). In her analysis, the eight minimally necessary institutional elements for a viable system of community-based natural resource management are as follows:

- 1) Clearly defined boundaries: Individuals or households who have rights to withdraw resource units from the CPR must be clearly defined, as must the boundaries of the CPR itself.
- 2) Congruence between appropriation and provision rules and local conditions: Appropriation rules restricting time, place, technology, and/or quantity of resource units are related to local conditions and to provision rules requiring labour, material, and/or money.

- 3) Collective choice arrangements: Most individuals affected by the operational rules can participate in modifying those rules.
- 4) Monitoring: Monitors, who actively audit CPR conditions and appropriator behaviour, are accountable to the appropriators or are the appropriators.
- 5) Graduated sanctions: Appropriators who violate operational rules are likely to be assessed graduated sanctions (depending on the seriousness and context of the offense) by other appropriators, by officials accountable to these appropriators, or by both.
- 6) Conflict-resolution mechanisms: Appropriators and their officials have rapid access to low-cost local arenas to resolve conflicts among appropriators or between appropriators and officials.
- 7) Minimal recognition of rights to organize: The rights of appropriators to devise their own institutions are not challenged by external governmental authorities.
- 8) Nested enterprises: Appropriation, provision, monitoring, enforcement, conflict resolution, and governance activities are organized in multiple layers of nested enterprises (Ostrom 1990: p. 90).

While the actual attributes of CPRs admittedly vary considerably across time and space, according to many CPR theorists they all share this sparse underlying structure in common. It is therefore possible to speak analytically of the CPR as an abstract ideal type. For Ostrom and her numerous collaborators, the value of common property systems of natural resource management is that they can consistently minimize the multiple forms of risk and uncertainty inherent in complex ecological and social systems regulating natural resource use while maximizing trust and predictability through the implementation of regularized norms and rules of conduct. Within the confines of any given CPR, the behaviour of individual resource appropriators is conditioned and enabled by an internally consistent matrix of normative behavioural principles, material incentives, predictable and credible penalties and disincentives, as well as sanctioned guarantees of reciprocity and mutual responsibility among community members. Successful CPRs will affect appropriator's incentives so that they 'will be willing to commit themselves to conform to operational rules devised in such systems, to monitor each other's conformance, and to replicate the CPR institutions across generational boundaries' (Ostrom 1990: p. 91). The endurance of CPRs is attributed to the internalization and transmission of functional institutionalized rules as a coherent set of cultural norms shared by all members of a community. In this view, a successfully crafted CPR will produce a kind of equilibrium in which political, social, ecological, economic, and cultural factors are harmoniously balanced (Gardner, Ostrom and Walker 1990).

In perfect conditions, then, CBNRM, ICDPs and other locally-based institutions and organizations of environmental governance will conform to this ideal type. Most importantly for writers in the CPR school, formal, legally recognized institutions of environmental governance should correspond to the greatest extent possible to more informal cultural systems of community and kinship-related norms regarding natural resource use (Korten 1986; Berkes et al. 1989). In such a situation, concrete institutional design principles and the intangible attributes of community will come together to form a durable and mutually reinforcing system of incentives and disincentives that links environmental sustainability, livelihood security, and local development (Singleton and Taylor 1992; Mckean 1992; Ostrom 1992). This school of thought has clearly contributed to post-UNCED sustainable development policy prescriptions such as

devolution, decentralization, and community participation (cf. Holmberg, Thompson and Timberlake 1994; Jeanrenaud 2002).

Although analysts are united in their belief that the logic of CPRs is a fertile area of investigation, there is considerable internal debate among theorists within the CPR school over how best to answer questions such as: Why do some, but not all, CPRs successfully sustain resources and promote local development? How and why do CPRs come into being? How do CPRs change and adapt over time? And, most importantly, how can the success, viability, or failure of CPRs be assessed according to a reasonably neutral set of measures? On all of these questions, CPR theorists are essentially divided between those who emphasize the formalistic aspects of the theory of institutional choice, on one hand, and those who emphasize the necessity of thicker, more anthropological conceptions of community, on the other. The first group focusses on analyzing institutions as coherent systems of property rights and rules which reduce the conflict between rational, self-interested economic behaviour and the well-being of a collectivity (Bromley 1992; Agrawal and Gibson 1999). The second group takes a broader view of cooperation and its determinants, preferring to conceive of institutions in expansive terms, as broad complexes of epistemologies, normative principles, and cultural attitudes toward nature and society, all rooted in specific times and places but sharing a certain underlying logic of reciprocity and mutual responsibility (Berkes and Farvar 1989; McCay and Jentoft 1998; Singleton and Taylor 1992).

The first group of CPR theorists, who emphasize institutional choice, caution against relying too heavily on idealized and unrealistic conceptions of community in designing and assessing actual systems of CBNRM (Agrawal and Gibson 1999; Brosius, Tsing and Zerner 1998). According to Arun Agrawal and Clark Gibson, for instance, community is a contested and analytically fuzzy concept of limited value to serious social scientists. Furthermore, placing excessive faith in the innate regenerative potential of community diverts attention from important issues of institutional design, which can lead to lazy analysis and bad policy. They argue that institutional analysis and design would profitably be directed towards other, clearer, and more immediately realizable priorities, including: designing effective systems of checks and balances between various actors in CBNRM (grassroots groups and communities, ENGOs, states, and multilateral aid agencies); crafting federated community user groups that have the organizational capacity to engage with states and other actors on something closer to equal footing; creating reasonable, inclusive, and representative decision-making bodies and processes rather than fixating solely on conservation and development outcomes; and, lastly, providing direct funding to community groups so that they actually have the capacity to take advantage of opportunities to participate in CBNRM (Agrawal and Gibson 1999: pp. 640-641).

Writers in this tradition of the CPR school tend to concentrate on technical questions, such as the impact of group size and community homogeneity on monitoring mechanisms in CBNRM and other kinds of CPRs (Agrawal and Goyal 2001), the impact of socioeconomic inequality and informational asymmetries on the effective functioning of institutionalized checks and balances within CPRs (Baland and Platteau 1997; 1998; 1999), and on how state-society synergies and communities' stocks of social capital might be usefully harnessed in order to make CBNRM systems more effective (McKean 1992; Seabright 1993; cf. Runge 1986). These researchers are particularly concerned with uncovering generic institutional mechanisms and the statistically regular empirical attributes of communities in successfully implemented CPRs. They have consistently concluded that smaller, more homogenous, and more egalitarian community organizations will have greater capacity to act collectively in the interests of conservation,

livelihood security, and rural territorial development, but insist that institutional choice provides a more robust explanation for degrees of success and failure within CPR systems such as CBNRM than other theoretical approaches do (Agrawal 1994; Ostrom and Gardner 1993).

Other researchers working within the CPR school contend that the institutional choice approach, which currently dominates American debates on natural resource management and environmental governance, is limiting. While all theories require some kind of contextual simplification, there is a case to be made that the CPR ideal type, based as it is on individualistic assumptions about collective action and the origin of institutions, is an extreme case of oversimplification. These five criticisms of the institutional choice paradigm, outlined by Dan Klooster of Princeton University, are especially pertinent:

First, [institutional choice] is contextually thin. It minimizes or eliminates considerations of history and processes outside the community of resource users. Second, it stints on the complexity of tenure practices, and overlooks the issue of environmental perception, a social process in which people determine what their commons problems are, if any. Third, it obscures consideration of community as something that might have gestalt characteristics relevant for commons management. Fourth, it confronts problems concerning the relationship between individual incentives, the autonomy of individual motivations in the context of community, and the nature of institutions as something more than rules. Fifth, it faces problems relating individual choice to institutional change, which often requires attention to factional struggles and issues of cultural change (Klooster 2000b: p. 3).

Some CPR theorists have argued that ‘thicker’ analyses of the moral and ethical qualities of communities involved in CBNRM projects and other forms of local environmental governance are necessary. In the words of two prominent advocates of this approach to CPR analysis, Bonnie McCay and Svein Jentoft:

Communities are symbolically constructed, not just geographical and social entities. As repositories of meaning and referents of identity and belonging, they are more than the coalitions and transactional relationships they become in many “thin” analyses. Reliability and loyalty result from involvement and commitment, not just from calculations of self-interest. People remain members of communities and adhere to shared norms and values not necessarily because it pays or from fear of sanctions but also because they feel morally committed (McCay and Jentoft 1998: p. 23).

In versions of CPR theory that embrace this view of community, environmental governance is viewed as a means to restore a traditional cultural orientation towards the environment that has been eroded by the forces of modernization, namely the state and the market. In the words of Berkes and Farvar, ‘[c]ommunalism is an important mode of thinking and of managing resources throughout the world... It is no accident that traditional resource management systems are often community-based’ (Berkes and Farvar 1989: pp. 3-5). Therefore, the purpose of environmental policy interventions such as CBNRM and ICDPs is ultimately to ‘create enabled settings’ where these communal values can flourish (Korten 1986).

The first generation of CPR analysis has several notable achievements to its credit. First, CPR analysis has established the fact that CBNRM and other forms of locally-based environmental governance can indeed work in certain circumstances and under certain conditions. It has therefore helped to confirm the possibility that environmental social movements and grassroots organizations can contribute to the creation of environmental governance institutions and organizations which secure livelihoods and advance processes of rural territorial development. Secondly, by systematizing the experiences of successful CPRs throughout history, CPR theorists have contributed a great deal to advancing a shared understanding of relevant issues of institutional design and the place of cooperation in environmental governance. Thus, the approach may provide a useful guide for designing incentives and collective systems of resource monitoring in CBNRM and ICDPs. However, CPR theory in both of its most influential versions has some inescapable shortcomings. Most notably, the main strands of CPR theory provide very few criteria with which to evaluate actually existing CBNRM systems and their contributions to processes of rural territorial development which stimulate productivity, attack the causes of poverty, and reduce socioeconomic and gender inequalities within rural communities. The next sub-section expands on these criticisms and explores alternative approaches to analysis and assessment of local institutions of environmental governance.

## **2.2. Addressing Power, Inequality, and Conflict in Environmental Governance: Stakeholder Analysis and Environmental Entitlements Analysis**

In recent years, the CPR school has been subjected to extensive criticism by ecologists, political economists, feminists, and other students and practitioners of rural development. In general, the CPR school's models are criticized for treating the interaction of ecological, political, and social systems as static and essentially tending toward equilibrium. In the first instance, CPR analysis is widely viewed as unsatisfactory because it relies on outdated homeostatic understandings of ecosystems and nature-society interactions inherited from human ecology (Zimmerer 1994; Batterbury, Forsyth and Thomson 1997). Also, CPR theory is criticized because it decontextualizes and depoliticizes the localized practices of natural resource management and participatory environmental governance, treating each individual community involved in CBNRM as an autonomous unit isolated from outside ecological, political, economic, and social forces. According to a team of researchers from the Environment Group at the Institute for Development Studies:

it has become apparent that the ways these perspectives conceive of institutions and their operation frequently fail to match realities. First, formal institutional theories which specify rights, rules and regulations are inadequate in treating resource management situations characterised by complex, overlapping and ambiguous local relationships and practices. Second, these approaches have tended to assume non-interactive divides between formal and informal institutions, and local, national and international arrangements. Yet evidence suggests that natural resources are actually managed amidst a mix of institutional types and arrangements which transcend these divides and tend to be messy, overlapping and power-ridden. Finally, some of the more conventional approaches have tended to view institutions as static and ahistorical, and are unable to account for how they may respond dynamically to risks and uncertainties (Mehta et al. 1999: p. 13).

These are not merely theoretical issues. In particular, critics argue, the win-win scenarios of convergence between institutions and communities modeled by theorists in the conventional CPR school tell us very little about vital problems such as how community organizations might be prepared to deal with incursions into protected areas by powerful outside appropriators, or how community institutions might be crafted in such a way as to address the impact of outside sources of environmental degradation. These are especially important questions in a period marked by major restructuring and rescaling of environmental governance worldwide. The CPR school's optimistic view of local community-based institutions of environmental governance as adequate guarantors of environmental sustainability, livelihood security, and rural development is therefore now regarded as partial and potentially misleading by many researchers (cf. Brechin et al. 2002).

Even more importantly, the CPR school is criticized for not looking within communities to uncover the ways in which realizable rights to command and use of environmental goods are distributed and how responsibilities for day-to-day administration of environmental conservation are divided. The failure to integrate gender into analysis of environmental governance, in particular, has been widely noted; this neglect of gender is striking, given the mainstreaming of gender analysis into most other fields of development research and policy (Joekes, Green and Leach 1996; Rocheleau 1995; Rocheleau and Edmunds 1997; Agarwal 1992; 1997a; 1997b; Meinzen-Dick et al. 1997; Cleaver 1998; 2000; Jackson 1998). According to these critics, neither the minimalist theory of institutional choice nor expansive conceptions of community address the highly differentiated ways in which peoples' livelihoods are impacted by institutions of environmental governance, or the ways in which incentives and disincentives for sustainably managing natural resources are mediated by unequal rules of tenure, exclusionary property rights, and gendered cultural norms of responsibility and reciprocity.

If institutions regulate access to and control over natural resources, then it is necessary to recognize that institutions:

make for marked differences, even within very small communities, in the abilities of different people, social groups, or individuals to use and draw benefit from environmental resources. Furthermore, actualisation of their use rights depends on the political leverage that groups or individuals can exercise in defence of nominal claims under those social rules (Joekes, Green and Leach 1996: pp. 1-2).

Social differentiation within communities of natural resource users has important practical consequences for the viability and sustainability of environmental governance institutions and their ability to contribute to equitable patterns of rural development. In particular, to the extent that land-poor and landless households and individuals, and women especially, are often the most resource-dependent members of any given community, then their potentially unique contributions to environmental governance need to be purposively assessed. So, too, do the potentially adverse impacts that any change to the institutionalized rules governing their access to those resources may cause.

Although explicitly political approaches to the study of nature-society interactions have been criticized for being 'unscientific' and for not yielding useful practical conclusions that can be applied concretely to environmental management and governance (Vayda and Walters 1999), even Northern-based transnational NGOs oriented towards conservation goals have now recognized the necessity to incorporate these concerns into environmental interventions at the

local level. The practice of stakeholder analysis has been adopted by organizations as diverse as the World Wildlife Fund (WWF), the Center for International Forestry Research (CIFOR), and the International Institute for Environment and Development (IIED) (Sayer and Campbell 2004a, 2004b; Jeanrenaud 2002; Salafsky and Wollenberg 2000; Shackleton, Campbell, Wollenberg and Edmunds 2002). One of the main premises of stakeholder analysis is that there are multiple potential users for every natural resource, whose individual interests can and should be systematically mapped in designing and assessing the viability of various institutional arrangements for environmental governance (Antona and Babin 2001; Baviskar 2001; Ramirez 2001; Wollenberg, Edmunds and Anderson 2001).

There are at least two distinct strands of environmental stakeholder analysis. The first is primarily techno-centric or eco-centric in orientation. It can easily be used as a means to reconcile a preconceived managerialism with the practical challenges posed by disinterest and conflict, or to deflect attention from the overriding influence of states, multilateral institutions, and corporations in new forms of environmental governance. Grimble, Chan, Aglionby, and Quan propose that stakeholder analysis 'can improve prediction of outcomes, reduce the risk of unforeseen resistance, and generally facilitate informed policy-making' (Grimble, Chan, Aglionby and Quan 1995: p. 3). This approach to assessment is designed as a supplement, not a substitute, for conventional models of environmental governance, meaning that participation is inherently restricted within a pre-conceived set of limits (cf. Grimble and Chan 1995; Hemmati 2001). In some cases, therefore, stakeholder analysis may simply contain, co-opt, or deflect the demands of environmental social movements and grassroots organizations, rather than actually advancing them.

The second, socio-centric, strand of stakeholder analysis is based on a recognition that environmental interventions which do not provide tangible benefits to local populations will be irrelevant or counter-productive. Stakeholder analysis of environmental governance institutions is potentially an activist exercise which can serve to promote the interests and objectives of social movements composed of environmentally vulnerable and marginalized groups such as women, the poor, and indigenous peoples. According to Carol Colfer of CIFOR, effective stakeholder analysis research needs to purposively identify vulnerable and marginalized affected groups and individuals, because relations between social actors and natural resources are conditioned by proximity, pre-existing rights, resource dependency, indigenous knowledge, cultural attitudes toward nature, and power deficits (Colfer 1995). Since various groups' potential to contribute to environmental intervention tends to be inversely proportional to their levels of political power and capacities for autonomous organization, practices of design and assessment need to actively seek out people who are vulnerable and marginalized because of their class, socioeconomic status, gender, or ethnic identification.

The recognition that the interests of relevant stakeholder groups may sometimes be in conflict suggests that stakeholder analysis, if done competently, can support more participatory and democratic environmental interventions. Ricardo Ramirez, for example, shows that stakeholders have different levels of power; that their claims are legitimated or delegitimized according to a variety of legal and juridical criteria; and that the environmental claims of different groups vary in terms of perceived authority. Where decentralization and participation are only partially institutionalized, claims Ramirez, 'the process of stakeholder identification and boundary and problem definition will be distorted and manipulative' (Ramirez 1999: p. 107). The objective, then, is not merely to contain or manage conflict, but to first recognize that

conflict is inevitable in environmental governance and then provide credible, democratic means to adjudicate between competing claims to legitimacy and authority among stakeholders.

This approach to stakeholder analysis is especially worthwhile in evaluating systems of governance for large and complex biophysical environments that are subjected to multiple and competing claims, such as forests, rangelands, and watersheds, or where the risk of violent conflict between stakeholders is particularly high (Bush and Opp 1999; Warner and Jones 1998; Tyler 1999; Eberlee 1999). At the same time, however, there are some conceptual limitations to stakeholder analysis when it is designed in this way. It tends to reproduce both the idealized interpretations of community and the technocratic interpretations of institutional design that are endemic to the CPR school, as discussed above. It pays specific attention to the sources of inter-community conflict but, as a result, tends to minimize the potential impact of intra-community differentiation and conflict on attempts to construct equitable and sustainable institutions of environmental governance at the local level.

Environmental entitlements analysis, which applies Amartya Sen's entitlements approach to questions of natural resource management in the South, represents the most robust attempt so far to address systematic patterns of intra-community differentiation and conflict, and their impact on community-based institutions of environmental governance (Joekes, Green and Leach 1996; Leach, Mearns and Scoones 1997a; 1997b; 1999; Environmental Entitlements Research Team 1997; Jenkins 1997; Mehta et al. 1999). For researchers in the environmental entitlements school, the existence of such conflict does not justify a wholesale rejection of participatory, community-based approaches to environmental governance and natural resource management. However, it does mean that these environmental policy interventions need to be designed and evaluated much differently than they are in most contemporary CBNRM projects.

The environmental entitlements approach attempts to map people's legitimate and effective command over material benefits derived from natural resources. Researchers in this school expand upon Sen's idea of 'entitlement mapping' (Sen 1981; 1984). Key concepts in their analytical toolbox include endowments, which covers the initial sets of rights and resources individuals possess, and entitlements, which covers legitimate effective command over alternative commodity bundles. The key concept of environmental entitlements analysis, environmental entitlements, technically refers to:

alternative sets of utilities derived from environmental goods and services over which social actors have legitimate effective command and which are instrumental in achieving well-being. The alternative set of utilities that comprise environmental entitlements may include any or all of the following: direct uses in the form of commodities, such as food, water, or fuel; the market value of such resources, or rights to them; and the utilities derived from environmental services, such as pollution sinks or properties of the hydrological cycle (Leach, Mearns and Scoones 1999: p. 233).

These entitlements, in turn, are seen as enhancing individuals' capabilities, which are 'what people can do or be with their entitlements' (Leach, Mearns and Scoones 1999: p. 233). At any given moment in time, it is theoretically possible to map the entire environmental goods and services-endowments-entitlements-capabilities circuit, in order to figure out how an individual can effectively derive benefits from a natural resource. So, to cite a widely used generic example, a researcher could conceivably track an individual's ability and right to collect firewood from a

protected watershed and use it to heat their home, to cook food, to exchange for other commodities, or to sell, thereby sustaining or improving their livelihood and enhancing their capabilities.

In this perspective, legitimate effective command over environmental goods and services is not determined solely by natural endowments or formally recognized legal property rights (embedded in a state, private, common, or open-access property regime). Instead, the ability to regularly transform physical access and property rights over natural resources into actual environmental entitlements is mediated by variety of complex, interactive, and contextually specific natural and institutional factors. These operate at multiple scales in a context of dynamic ecosystem change and restructured and rescaled institutions of environmental governance. Consider the firewood example again. First, the individual's ability to collect firewood will depend on the health of the watershed in question; natural ecosystemic factors, modified by human activity, will directly effect the distribution, quantity, and quality of available firewood. Then, the right to collect firewood from the watershed will be shaped by international and national structures of environmental governance. Relevant questions include: Is the watershed a protected area under state control? If so, is it covered under internationally recognized conventions on biodiversity? Is it adjacent to a concession controlled by a multinational logging or mining company? Is it co-managed by the state and the local community? Or is it effectively under exclusive local control? Are multilateral aid or environmental agencies, transnational ENGOs, or intermediary GSOs/SOs present in the area? All of these will help determine the individual's right and ability to collect firewood as a member of the local community.

Next, within a CBNRM system, the ability to transform this initial endowment of firewood into effective, legitimate command will depend on a variety of intra-community factors. For instance, is the watershed reserved for other purposes, such as logging, to the exclusion of firewood collection? Or is it perceived as so delicate that it is off limits altogether? Are the more accessible lower slopes of the watershed individually owned, or are they perhaps exclusively reserved for land-owning households? What effective property rights do widows and divorced women, or members of ethnic minorities and other disadvantaged groups have over the watershed? Can powerful individuals violate formal restrictions on access and use with impunity? Or do more affluent households cook with gas, and therefore give firewood collection by poorer households and individuals a low priority when balancing conservation and livelihood concerns in community meetings? The answers to all of these questions will be determined by cultural norms as well as political processes of competition, collaboration, and bargaining between community members.

Lastly, the individual's ability to use their entitlement over firewood to sustain or improve their livelihood will depend on intra-household dynamics. How are responsibilities for reproductive labour like firewood collection divided between men and women, adults and children? Does cash derived from the sale of firewood get appropriated by a male head of household, kept by whoever collected it, or shared? To what extent does time spent collecting firewood detract from that devoted to other livelihood activities? All of these will seriously effect the ultimate distribution of environmental entitlements within the household and, by extension, within the community.

This example demonstrates two strengths of environmental entitlements analysis over the predominant CPR approach to designing and assessing environmental governance institutions at the local community level. Firstly, the complexity of this very simple example proves the limited

utility of overly simplified and decontextualized models of institutional choice and community. Environmental entitlements analysis conducted in this way highlights the interpenetration of environmental governance institutions. This framework unravels the interplay of multiple scales and levels of analysis in a dynamic model that links ‘a disaggregated (or “micro”) analysis of the distinctive positions and vulnerabilities of particular [individuals] in relation to the “macro” structural conditions of the prevalent political economy’ (Jenkins 1997: p. 2).

Secondly, this example shows how micro-, meso-, and macro-level structures of environmental governance can differentially influence the resource claims and management practices of individual resource users differentiated according to socioeconomic status, gender, and caste or ethnicity. Typically, individuals and households with the weakest legitimate and effective command over environmental goods and services are also the poorest members of any given community -- landless and land-poor households, widows, divorced women. These households are usually most susceptible to environmental risk, vulnerability, and marginality. Focussing on communities as corporate units ‘leaves begging the central question of who is enabled or constrained: whose economic circumstances or security of tenure is at stake’ (Leach 1991: p. 18). Similarly, privileging ‘traditional’ and ‘communal’ forms of environmental governance, while potentially empowering for some communities, may also exclude many of the world’s poorest rural residents from consideration altogether. Indeed, as Jeffrey Leonard has emphasized, the people most susceptible to the effects of environmental degradation are distress migrants to marginal areas with little or no discernible community cohesion (Leonard 1989).

In conclusion, then, it is clear that the different theoretical frameworks used to assess the contribution of social movements to the formation of community-based institutions of environmental governance and natural resource management will reflect very different preoccupations and priorities. In particular, if the object of analysis is the degree to which environmental governance can reduce poverty and inequality based on socioeconomic status, gender, and ethnicity, then more focussed criteria of assessment, such as those provided by environmental entitlements analysis, will be necessary. The next section of this literature review uses some of these concepts to explore the implementation of community-based forest and watershed management programs in India.

### **3. Community-Based Environmental Governance in Practice: Lessons From Indian Joint Forest Management**

#### **Introduction**

In some respects, India presents an ideal testing ground for theories of social movements and environmental governance, of participatory natural resource management, and of their role in promoting rural development, improving agricultural productivity, alleviating poverty, and reducing socioeconomic, ethnic, and gender inequalities. A large segment of the rural Indian population continues to depend on forest resources for fuel, fodder, food, medicinal plants, building materials, and many other products (Jodha 1992). The country’s large rainfed agricultural sector is closely tied to the seasonal rhythms of the hydrological cycle, so many farmers have a direct interest in regenerating degraded watersheds as a way to defend against drought, prevent soil erosion (which not only reduces natural land productivity but clogs irrigation ponds and canals with silt), and improve dry-season output (Kerr 2002). One of the world’s best-known and widely celebrated grassroots environmental social movements, the Chipko movement, was founded in the Indian state of Uttar Pradesh in the late 1970s. Made up

primarily of women and the poor, Chipko expressed a strong territorial identity and pushed for a synthesis of economic development and environmental conservation policies (Guha 1989; Rangan 2004). In the years since Chipko's initial emergence, conflicts over the environment have steadily increased in frequency and intensity, making India home to a huge network of environmental social movements organized around issues like forest management, the Narmada dam projects, declining coastal fish stocks, pesticide contamination, and rising levels of urban and industrial pollution (Gadgil and Guha 1994). At the same time, the Indian central government has aggressively pushed individual state governments to devolve and decentralize environmental governance to local communities (Blair 1996). As a result of these factors, the Indian case can provide many instructive lessons for researchers looking into the interaction of social movements, environmental governance, and rural territorial development in other countries and regions of the South.

This section examines the recent Indian experience with one form of CBNRM, namely joint forest management (JFM), and ICDPs closely aligned with it, especially participatory watershed development initiatives. It is divided into three sub-sections. The first provides a brief narrative account of the origins and growth of India's numerous and diverse environmental social movements, then outlines the national government's rationale for implementing JFM and associated rural development programs. The second sub-section looks at preliminary evidence regarding the success and failure of locally-based JFM initiatives in various states and regions of India. It focusses on some of the sources of organizational cohesion in successfully managed JFM institutions, and then outlines some of the reasons that JFM and associated rural development initiatives have failed to provide ecological sustainability and livelihood security for poor rural people in India. The third and final sub-section assesses claims that JFM has consistently excluded and disadvantaged women, looks at the growth of women's movements organized in and around JFM institutions, and outlines ways in which JFM may be reformed in a more inclusive and participatory direction.

### **3.1. Environmental Social Movements and the Emergence of Joint Forest Management**

In the years immediately following independence in 1947, vast tracts of the Indian forest were brought under state ownership and management, modeled on the restrictive and extractive practices of colonial scientific forestry. Rural peoples' traditional rights of forest access declined precipitously as a result. Clashes between state forest department authorities and local communities were a common occurrence throughout the immediate post-colonial period (Guha 1991; Gadgil and Guha 1992). After independence, central government control over Indian forests increased substantially, and thereafter many access and usufruct rights that were once legally recognized were progressively circumscribed, downgraded to discretionary privileges, or completely extinguished. Nearly a quarter of the country's forest was controlled by the state by 1980, and the rights of nearly 300 million forest resource users were left in an ambiguous and tenuous state (Arnold 2001: p. 164).

At the same time, the country's innumerable common property resources, whose use was customarily regulated by traditional village-based system of control, were progressively eroded. In Narpat Jodha's invaluable study of village commons throughout India's semi-arid zones in the early 1980s, it was found that the area of land held as common property within individual villages had declined by an average of 42 percent since independence (Jodha 1986; 1990). Reasons for this decline included land reforms which favoured privatization, encroachment of forest lands for expanded commercial and subsistence uses, and the commercialization of

products, such as wool, dairy, and timber, which intensified demands on common resources. Just as importantly, customary community-based controls over use of commons, which included coordinated systems of rotational grazing and seasonal restrictions on resource extraction, enforced by fines, levies, fees and village patrols, were gradually extinguished. Jodha's study found that, of the communities that had used these natural resource management and environmental governance tools in 1950, only ten percent continued to exercise them in 1980, while some community-based governance instruments, such as graduated penalties, taxes, and fines, had completely disappeared (Jodha 1986). Thus, as Michael Arnold observes, the 'much-reduced remaining areas of village lands were typically heavily degraded and under open access usage, and the range, quality, and quantity of products collected had often been sharply reduced' (Arnold 2001: p. 165).

In the mid-1970s, the Chipko movement responded to particularly acute processes of environmental degradation in the northern, mountainous part of the Indian state of Uttar Pradesh. The word Chipko literally means 'to stick to', referring to the movement's members' practice of hugging trees in state-managed forests to prevent them from being cut down by migrant workers hired by commercial logging companies (Guha 1989). Chipko is widely claimed by ecofeminists and post-development writers to have been a nature-centred, traditionalist movement completely opposed to development and its environmental consequences. However, as Haripriya Rangan and others have shown, Chipko's primary goals were to restore access to forest lands for small-scale, community-based forestry enterprises and subsistence activities, and to pressure the Uttar Pradesh government to provide more substantial state assistance to the underdeveloped Himalayan region (Rangan 2000). Thus, although far from homogenous in its social composition, Chipko had a clear and regionally specific rural territorial development program (Mawdsley 1998).

Since the rise of Chipko, other high profile environmental social movements, such as the movement opposed to the Narmada dam, have emerged in India (Dwivedi 1998). Rural peoples' livelihood concerns figure prominently in the vast majority of these movements. As Ramachandra Guha, a prominent Indian historian of the environment and social movements, the Indian environmental movement is still fundamentally 'a peasant movement draped in the cloth of environmentalism' (Guha 1989). The movement's concerns, broadly speaking, are in improving the material conditions of environmentally vulnerable and marginalized people. As Guha and co-author Madhav Gadgil emphasize:

Broadly speaking, these conflicts have set in opposition, on the one side, social groups who have gained disproportionately from economic development whilst being insulated from ecological degradation... and on the other, poorer and relatively powerless groups... whose livelihoods have been seriously undermined through a combination of resource flows biased against them and a growing deterioration of the environment (Gadgil and Guha 1994: pp. 119).

India, as is widely recognized, is a country with weak central government and very loosely federated states. The central government has responded to the environmental crisis and the growth of environmental conflict by devolving and decentralizing environmental governance structures which were already very regionally diverse. In the case of Chipko a new state, Uttaranchal, was eventually carved out of those regions of Uttar Pradesh where the movement was most active. This, it is hoped, will enable more focussed and responsive regional development planning (Mawdsley 1998; Rangan 2004). Countrywide, the national government

has aggressively pursued a participatory, community-based forest management policy since 1988. The Indian National Forest Policy, enacted that year, emphasizes 'meeting the requirements of fuelwood, fodder, minor forest produce and small timber of the rural and tribal populations' and calls, with distinctly populist overtones, for the creation of 'a massive people's movement, with the involvement of women, for achieving these objectives' (Government of India quoted in Sarin 1995: p. 83). The central government seized upon the example of regionally specific co-management institutions such as the *Van Panchayats* (VPs) of the Himalaya and Forest Protection Committees (FPCs) of West Bengal (Ballabh, Balooni and Dave 2002). These more or less informal institutions of environmental governance were formally recognized, and a system of Joint Forest Management (JFM) officially adopted. JFM guidelines centre on devolution of everyday forest protection, management, regeneration, and development responsibilities to local governments and other community-based organizations (Kumar 2002: p. 765). By 1994, 15 state governments had adopted JFM, with something like 10, 000 community organizations managing roughly 1.5 million hectares of forested land (Sarin 1995: p. 83; cf. Colchester 1994). By 2001, 26 of 28 state governments had officially committed to JFM, with some 44, 943 officially recognized community organizations controlling 11.63 million hectares (Kumar 2002: p. 765). These are impressive figures, and the reach of JFM is still growing rapidly. Its concrete practical effects for rural communities -- and especially their most environmentally vulnerable and marginalized members -- is addressed in the following two sub-sections.

### **3.2. Power and Participation in Joint Forest Management: Explaining Successes, Understanding Failures**

According to Nandini Sundar, there are basically three categories of JFM institution in the emerging Indian system of community-based environmental governance. The first category consists of grassroots organizations that emerged out of autonomous initiatives, such as the many village committees, found throughout India, that protect and manage village commons and forests (Sundar 2000: p. 258). In these communities, the Indian government's JFM policy explicitly attempts to build upon a long tradition of autonomous community management of common property resources in rural India, and addresses the demands of spontaneously organized social movement attempts to sustainably manage the country's forest and village common resources (Poffenberger, McGeen and Khare 1996; Poffenberger 1996; Agrawal and Yadama 1997; Conroy, Mishra and Rai 2002). The second category consists of organizations and institutions of environmental governance created out of government initiatives. These are typically initiated by the government forestry department, usually in states and communities with extensive donor-sponsored commercial forestry projects and weak traditions of local collective action (Sundar 2000: p. 258). The third category of JFM institutions and organizations is much larger and more heterogeneous; it consists of mixed initiatives. Some mixed initiatives come about as a result of community-based organizations and GSOs/SOs stepping in to revive defunct or inefficient state natural resource management institutions and development projects at the local level (Agarwal 1997a: p. 16). Others are initiated and administered by NGOs (Colchester 1994; Sarin and SARTHI 1996). These are only rough categories; according to Sundar, 'the distinction between between externally-initiated and autonomous groups is often one of degree rather than of rigid category' (Sundar 2000: p. 258). In practice, many JFM institutions operate within a confusing network of vague, indistinct, and overlapping political-legal rights and regulations.

The most successful JFM institutions are clearly those which build upon autonomous initiatives, where forest conservation and regeneration is guided by pre-existing objectives and a cohesive sense of community organization. Indeed, many JFM institutions and organizations recognized by state governments are really little more than traditionally administered common property resources. JFM has been particularly successful in the areas populated by India's *adivasis*, or tribal peoples, who are generally the most directly forest-dependent people in the country. As Madhu Sarin reports, effective community-based organizations in JFM usually possess some of the following characteristics: high forest dependency, perception of resource scarcity or outside threats, geographical proximity to the forest, prior or current formal or informal rights, prior presence of indigenous resource management institutions, traditional socio-religious forest values, and strong local leadership. Most importantly, argues Sarin, viable JFM organizations build upon existing traditions of collective action, as in the self-initiated forest protection groups found in the eastern Indian states of Bihar, Orissa, Karnataka, and West Bengal, all of which have significant tribal populations (Sarin 1996: pp. 166-173). Some of these groups have officially registered with the government, but many remain autonomous and operate with no authority save tacit community approval (Agarwal 1997a: p. 16). The characteristics of many of these groups conform almost perfectly to the CPR school's abstract ideal type, which is promising. However, they are comparatively rare within the legal and political patchwork of India's emerging JFM system.

The majority of JFM institutions and organizations fall into the category of mixed initiatives. Mixed JFM initiatives are a perfect example of the ways in which the restructuring and rescaling of environmental governance produces complex and often contradictory effects. The central government provides general guidelines for co-management, including detailed provisions for sharing forest produce; specification of rules regarding membership, duties, and benefits; a preference for micro-planning guided by local forestry authorities; and official recognition of the key role played by NGOs in designing and administering rural development projects associated with JFM (Sundar 2000: p. 266). Intermediary NGOs are typically entrusted with day-to-day management and, according to Sundar, they often 'find common cause with donors keen to reduce the powers of a centralized state' (Sundar 2000: p. 257). The scope for genuine community participation varies widely, but it is usually restricted to some degree by the prior objectives of central and state governments, donors and aid agencies, and intermediary NGOs.

It is crucial to understand that, although co-management through JFM is theoretically preferable to bureaucratized state control or unrestricted private appropriation of forest resources, the emerging mixed initiatives are definitely more restrictive and potentially more exclusionary than India's historical common property systems. Bina Agarwal draws out the following crucial distinctions:

In one sense the new initiatives represent a move toward re-establishing some degree of communal property rights. But unlike the old communal property systems which, in one way or another, recognized the usufruct rights of all residents of the village, the new ones represent a more formalized system of rights dependent on membership in the emergent institutions. In other words, under the new initiatives, membership rather than citizenship has become the defining criterion for access to these resources (Agarwal 1997a: pp. 2-3).

Whereas access to forests, watersheds, rivers, fallow fields and other common property resources in pre-colonial South Asia was traditionally regulated according to long-standing customary recognition of a complex network of usufruct rights and reciprocal responsibilities held in common by all villagers as citizens, the new systems of CPR management recognize a more limited range of rights and responsibilities which are bestowed on villagers as members of a legally recognized formal community organization. Such definitions of the terms and conditions of community membership may be necessary to exclude predatory and/or destructive exploitation of forest resources by non-members and reduce boundary conflicts between neighbouring JFM communities, but they also raise unavoidable questions about participation and equity within the boundaries of these legally recognized community organizations. The question of membership is therefore an important one.

The common practice of treating village communities as homogeneous units has clearly led to some problems with JFM. Although virtually all rural households use common property resources to some degree, they are especially vital to sustaining the livelihoods of the landless and land-poor, accounting for between 9 and 26 percent of annual income, more than 90 percent of fuel, and between 69 and 89 of fodder for landless and land-poor households, as opposed to only 1 to 4 percent of annual income and negligible fuel and fodder for non-poor households with access to more than two hectares of privately held land (Jodha 1986). Using a sophisticated social cost-benefit analysis of JFM in the state of Jharkand, Sanjay Kumar of the University of Cambridge evaluates claims that JFM is hampered by a systematic trade-off between effective forest conservation and the pursuit of a pro-poor rural development policy. Taking into account the high degree of socioeconomic differentiation between landowning and landless households, he finds a significantly unequal distribution of costs and benefits within Jharkand's JFM initiatives. Landowning households place much higher demands on JFM forests and accrue disproportionate benefits from forest produce. Landless and land-poor households, on the other hand, are much more likely to see their access to forest resources decline, while their share of the benefits of JFM is relatively small. Without compensatory mechanisms or a concerted redesign of JFM, he expects this gap to widen (Kumar 2002).

In a comparative study of Forest Protection Committees (FPCs) in Uttaranchal and West Bengal, Vishwa Ballabh, Kulbushan Balooni, and Shibani Dave find distressing evidence that these mixed initiative JFM institutions are already beginning to decline in some areas. The perception that devolution and decentralization are only partial, allowing the state to maintain effective control over forest use, has been a key factor in this pattern of decline (Ballabh, Balooni and Dave 2002). More significantly, researchers find marked differences between FPCs in relatively homogenous and egalitarian communities, as opposed to those marked by high levels of socioeconomic inequality. Commonly, FPCs are divided over distribution of benefits from forest produce, as well as over competing management priorities, such as whether to emphasize conservation and regeneration or to aggressively pursue commercial objectives by planting high value tree varieties. These conflicts often follow ethnic, caste, or socioeconomic class lines. As an official from West Bengal observes:

The most effective FPC is when a single village is involved in the management of the forest, its ethnic composition is tribal, a majority of the households in the village become members of the FPC and . . . forest land is allowed to regenerate rather than afforested with plantations. In contrast, the least effective FPC is one which is managed by several villages, has a mixed population of tribes and castes, only a few households in the villages become FPC members, and the forest land is

put under plantation rather than natural regeneration (quoted in Agarwal 1997a: p. 19).

Many such conflicts cannot be resolved effectively without some kind of outside intervention and adjudication. As Ballabh, Balooni, and Dave argue: 'It is... clear that [FPCs] need the support of the public agencies to resolve some of the conflicts they face in the collective action situation and to protect themselves from the uncertainty generated by other social aggregation devices and collusions' (Ballabh, Balooni and Dave 2002: p. 2165). Otherwise, elite capture of fundamentally undemocratic institutions and organizations will likely be the norm in JFM, as Harry Blair points out (Blair 1996).

Despite these serious institutional limitations, some mixed initiative JFM communities have successfully linked conservation and development goals in a way that equitably improves local livelihoods. The presence of intermediary NGOs with coherent projects and commitment to participatory design and appraisal appears to be one of the key factors in this success. For example, JFM is sometimes linked to participatory watershed management projects that attempt to balance forest conservation and regeneration with the provision of productivity-enhancing improvements to traditional irrigation techniques for rainfed agriculture. Some of these have been initiated by bilateral or multilateral development agencies, but many are supported by local intermediary NGOs based in India (Shepherd 1995; Farrington and Lobo 1997; Mascharenas 1998; Kerr 2002; Kolavalli and Kerr 2002; Saxena et al. 2003). There are still many potentially counter-productive resource conflicts within these communities, especially between landowning farmers in low-lying areas and poorer households who have to collect fuel and fodder on the upper slopes of watersheds. For example, John Kerr of Michigan State University finds that landless herders in a sample of Maharashtra communities with watershed management projects were much more likely than landowners to report being harmed by restrictions on their access to protected tracts of land (Kerr 2002). However, anecdotal evidence suggests that conservation and livelihood goals can be balanced equitably where the input of the poorest members of a community is actively solicited through participatory rural appraisal, stakeholder analysis, or environmental entitlements analysis. For example, in a case study of the Himalayan village of Khaljuni, where poor villagers had resisted prior World Bank-sponsored rehabilitation attempts through sabotage and other forms of hidden resistance, K.G. Saxena and his co-investigators discovered significant forest regeneration beginning after the local NGO conducted purposive surveys of one male and one female from each household to gauge their conservation and development priorities. Species for replanting were chosen on the basis of indigenous knowledge and livelihood needs, rather than the preferences of environmentalists, NGO leaders, and the state forestry department. Remarkably, this process of regeneration took place mostly outside of the official structures of the local FPC, which was widely regarded as corrupt, insular, and dominated by the community's wealthiest and most powerful members (Saxena et al. 2003).

Elsewhere in India, similarly impressive regeneration of forests under JFM has been noted. In the state of West Bengal, which has a long history of social movement activism and a sympathetic progressive state government which has been more willing to fully devolve powers to local community and grassroots organizations, environmental and developmental success stories with JFM abound (Poffenberger 1990; Poffenberger, McGean and Khare 1996). In the states of Orissa and Gujarat, where villagers have been united by fears of absolute resource scarcity resulting from severe environmental distress, community-based collective action coordinated by NGOs has regenerated many badly degraded forests (Sarin 1996; Sarin and SARTHI 1996; Conroy, Mishra and Rai 2002). Case studies conducted in Gujarati JFM

communities show some impressive biodiversity and livelihood gains resulting from the creation of user groups, such as tree growers' cooperatives, under NGO sponsorship (Arul and Poffenberger 1990). The activities of the Aga Khan Rural Support Programme (AKRSP), a large rural development NGO which has coordinated participatory wasteland regeneration projects in isolated tribal communities throughout the state of Gujarat, are particularly noteworthy (Arul and Poffenberger 1990; Shah and Shah 1995; Agarwal 1997a).

In sum, it is probably too early to pass definitive judgment on JFM's overall success. Based on some preliminary evidence, it is clear that JFM has been implemented quite easily and has had significant positive ecological and livelihood impact in some cases. These are typically in relatively socially and economically homogenous communities, such as the *adivasi* areas, and communities with extensive NGO presence. Success seems to be clearly linked to communities' prior histories of collective environmental action and the persistence of strong egalitarian traditions of natural resource management and local environmental governance (Hobley and Shah 1996). In general, however, systematic barriers to equitable and participatory implementation of JFM are apparent. Failure of JFM initiatives seems to be related disinterest, to mistrust of government forestry departments, and to intractable patterns of inter- and intra-community conflict. These appear to be mutually reinforcing problems. Because the number of intermediary NGOs with the willingness and capacity to implement meaningful participatory mechanisms into JFM remains small, future progress will probably be contingent on serious reform of the government forestry departments to cut down on arbitrary and self-interested actions that undermine trust in JFM institutions (Kovallali and Kerr 2002).

Despite significant variation in degrees of overall environmental, livelihood security, and developmental success of JFM, women's opportunities for substantial participation appear to be uniformly low across autonomous, government, and mixed categories of JFM initiative. Even successful participatory JFM projects have apparently excluded women from many benefits and burdened them with particularly heavy responsibilities. This is the subject of the next subsection.

### **3.3. Gender, Environmental Entitlements, and Joint Forest Management**

The popular image of Indian women as naturally or culturally tied to the environment is now widely contested (Agarwal 1992; Shah and Shah 1995). However, women's disproportionate dependence throughout India on natural resources for vital livelihood needs is clear. Within landless and land-poor households, especially, patterns of natural resource use are heavily determined by gendered divisions of productive and reproductive labour. Women typically have less direct access to private property resources and assume more responsibility for collecting fuel and fodder than men. In poor rural households headed by women with little or no male support, day-to-day dependence on access to natural resources for meeting basic needs is especially acute. Women are also major productive actors in the Indian forest economy, especially as producers of goods like rope, baskets, silk, oil, and medicines made from non-timber forest products. These products account for roughly 40 percent of forest department revenues and roughly 75 percent of net forest export revenues (Sarin 1995: p. 84). For this reason, JFM's particular impact on women has been extensively studied. There is substantial concern within India that JFM has actually begun to negatively impact women because it fails to adequately represent their specific interests. As Bina Agarwal concludes, 'without women's effective participation in all aspects, the emergent [JFM] initiatives will have serious adverse

consequences for social equity and programme efficiency, and will further disempower women' (Agarwal 1997a: p. 3).

The official structures of participation in JFM have been characterized as a form of 'participatory exclusion' (Agarwal 2001). As Madhu Sarin explains, because JFM's structures of participation typically take the individual household as the basic unit of organization, it 'is effectively equating men's participation with community participation [and assuming] men adequately represent the needs of all household members' (Sarin 1995: p. 83). Women's capacity to participate in JFM is widely constrained by the formal rules governing membership in local FPCs. In several Indian states, FPC membership is restricted to one adult per household. This is almost invariably a man (Agarwal 1997a: p. 25). Where JFM is grafted onto existing organizations at the community level, women are often explicitly excluded by traditional norms of membership in public decision-making bodies. Thus, for example, women might not be called to conflict resolution meetings even when they are directly involved in the conflict in question (Sarin 1995).

Women's exclusion from formal structures of participation is widely reflected in the conservation and development decisions made by local FPCs. In one instance, an NGO-supported autonomous initiative in Gujarat prioritized protection of the forest, using all-male community patrols to prevent all extractive activities, including women's firewood collection. As a result, local women had to travel further to collect firewood, which detracted from other livelihood activities and provoked major intra-community conflict between men and women (Sarin 1998). This type of conflict appears to be widespread. According to Bina Agarwal:

in many villages in Gujarat, West Bengal, Bihar, and Orissa, when protection began women were barred from any form of collection, even of dry twigs. Where the land was barren anyway this caused no extra hardship. But where women were earlier able to fulfill at least a part of their needs from the protected area, the ban on entry imposed by all-male protection groups has made it necessary for women to travel to neighbouring unprotected areas, spending many extra hours and also risking humiliation as intruders (Agarwal 1997a: p. 20).

Because these sorts of restrictions prevent women from carrying out their normal daily chores, women have to travel extraordinary distances and exercise considerable caution when gathering fuel and fodder, or else risk criminalization and threats of abuse (Sarin 1995: p. 89).

In some JFM communities, male violence against women has increased systematically. Elsewhere, seemingly minor and well-intentioned restrictions reflecting the collective decisions of all-male FPCs have had unintended negative consequences for women. For example, a community involved in a community-based watershed management project in the state of Rajasthan instituted a rule stipulating that only one member of each village household could access the protected common area per day. This restriction was designed to promote equity by erasing distinctions between households differentiated by caste-based occupational specializations, class and socioeconomic status, and family size. However, it forced many households to make tough daily decisions between typically male productive activities like timber harvesting, on one hand, and typically female reproductive activities like firewood collection, on the other. Owing to power imbalances within households, women were often forced to travel outside the community to perform this unavoidable daily chore (Ahluwalia 1997).

Critics argue that truly equitable and participatory JFM initiatives cannot simply accommodate themselves to existing gendered distributions of power and property within rural communities, but need to explicitly address patterns of gender inequality in access to and dependence on common property resources. This is unlikely to occur on a large scale unless affirmative steps to include women in JFM are implemented. Madhu Sarin proposes a series of directives, which would have to be enforced by central and state governments, to redress women's exclusion from community-based environmental governance institutions and organizations. First, she suggests dispensing with the household as the unit of membership. All adult women and men should be guaranteed rights to participate in environmental governance at the community level. Second, she suggests clear guidelines for specifying women's independent entitlements to remedy consistent and widespread male misappropriation of JFM benefits within households. Lastly, she proposes regular monitoring of women's environmental entitlements, mapped through participatory rural appraisal processes, as a way to ensure gender equitable distribution of costs and benefits in all JFM systems (Sarin 1995: pp. 90-91).

Although many of these formal mechanisms for ensuring women's participation in JFM have not been institutionalized yet, women's organizations throughout India are currently pushing to increase women's informal profile in the institutions of local environmental governance and natural resource management. In some JFM communities, women's participation is treated instrumentally. As Tinker writes for a similar program in neighbouring Nepal, 'women's productive roles not their needs provide the justification for including them in forestry programmes' (Tinker 1994: p. 371). Thus, for instance, women will be enlisted to police other women's natural resource use. Elsewhere, however, women's autonomous activism around JFM appears to be robust. In one Bihari village, for example, an all-female FPC was founded after the previous all-male FPC declined due to disinterest. It was so successful that the state forestry department eventually recognized it as the official local JFM organization (Agarwal 1997a: p. 28). This activity is highest in areas where cultural restrictions on women's participation are weakest, where gender-sensitive NGOs are present, and where women have strong traditions of autonomous organization. The role played by Mahila Mandal Dals, or village women's associations, in sustaining particularly robust local JFM institutions throughout India is indicative of the special contribution to environmental governance made by autonomous organizing among women (Agarwal 1997a: pp. 28-30). According to Meera Kaul Shah and Parmesh Shah, progress towards women's full participation in environmental governance at the local level will probably be slow and incremental, building upon women's autonomous social movement organizing. To generalize gender equity in environmental governance in the future, the key will be to uncover 'ways in which women can institutionalise the few bargaining strengths they have, and in working out leverages and incentives that would ensure a voice and space for the most marginalised groups within decision-making processes' (Shah and Shah 1995: pp. 81-82). This will require improving women's formal representation in official institutions of environmental governance, but it will also require recognition of women's informal and spontaneous efforts to sustain and improve their environmental entitlements within existing institutional frameworks.

## Conclusion

The goal of this state-of-the-art literature review document has been to clarify some basic methodological issues in the study of social movements, point to the most promising research strategies for analyzing environmental governance institutions, and suggest some useful criteria for assessing their contribution to processes of rural territorial development in future research. In relation to the specific research questions for this project, the provisional responses gathered here remain inconclusive. Environmental governance established as a result of the actions of social movements has the potential to contribute to processes of rural territorial development which coincide with the elimination of poverty, the overcoming of socioeconomic, gender, and ethnic inequalities, as well as the conservation of natural resources and the environment. However, further research will be needed to determine under which conditions this is so. A document of this type does not easily permit firm, definite, or comprehensive conclusions, but it is possible to draw some lessons and make some suggestions for further research into the relations between social movements, environmental governance, and rural territorial development in Latin America. These follow sequentially below:

- 1) Existing approaches to social movement research have too often mixed normative and analytical considerations, projecting idealized versions of civil society and social movements in place of careful situational analysis. For the purposes of the present project, contemporary methods at the cutting edge of political sociology will likely be most useful. Chief among these is the method of triangulation, which links collective identities, structures of political opportunity, and evolving discourses and cultures of political action in a dynamic model of social movements.
- 2) The notion of the global environmental movement as a unitary whole is insufficient. For the purposes of the present project, analytical tools to distinguish the distinctive characteristics of various environmental organizations will be necessary. Organizationally and tactically, advocacy organizations, grassroots support organizations and service organizations, and grassroots organizations represent unique forms of collective action, and they operate under very different structures of opportunity.
- 3) The objectives of Northern and Southern social movements and organizations often diverge significantly. Northern conservation objectives and Southern livelihood security or economic development objectives should not be presumed to be complementary in all cases. Conflicts between these objectives, whether actual or potential, should be identified clearly and their implications investigated.
- 4) Environmental activism in the South is motivated by a diversity of factors. The politicized environment has three dimensions -- risk, vulnerability, and marginality -- which differentially impact individuals on the basis of class, ethnicity, and gender. Sensitivity to the complexity of local conditions, awareness of the multiple motivations for environmental activism, and concrete analysis of the social composition of environmental social movements are necessary if the organized political actions of the poorest, most resource dependent, and most environmentally marginal populations are the object of analysis.
- 5) Women's motivations for social movement activism are determined by gendered divisions of labour and by gendered patterns of legitimate political authority. Not all women have an interest in environmental conservation, and men's interests are significant as well, because gender

relations are double sided. Therefore, future research into women's roles in environmental social movements should be rooted in a contextualized materialist analysis of women's interactions with the environment.

6) The contemporary restructuring of environmental governance is characterized by a complex process of rescaling, in which environmental governance is both globalized and localized. Environmental governance institutions at local, national, and international levels operate simultaneously, so it will be necessary to address questions of scale and interaction in future research.

7) The institutionalization of participation is not an end in itself. Participation is incompletely institutionalized at the international level, it is frustrated by contradictory imperatives for democratization and austerity at the national level, and the form and content of opportunities for participation at the local level are very unevenly distributed. Participation generates new structures of opportunity for social movements, but the depth and breadth of these opportunities should definitely be assessed.

8) Decentralization does not equal democratization. Community-based natural resource management and other forms of decentralized environmental governance require the support and intervention of democratic and accountable national states and bureaucracies, and they are often implemented in ways that favour undemocratic and unaccountable local authorities. Future research will need to address the relations of social movements and states, as well as their internal composition, in order to determine their democratic potential.

9) There is a glaring lack of studies which address rural territorial development in a coherent manner. Most studies of environmental governance suffer from a myopic localism, which obscures vital questions of scale and articulation. Future research should avoid the conventional small-scale case study method and look for ways to map the territorial implications of social movements and environmental governance beyond the boundaries of individual local communities.

10) Common property resources theory provides a valuable ideal type with which analysts can gauge the effectiveness of environmental governance institutions. The eight relevant elements of a common property resource are: clearly defined boundaries; congruence between appropriation and provision rules and local conditions; collective choice arrangements; monitoring; graduated sanctions; conflict resolution mechanisms; minimal recognition of rights to organize; and nested enterprises. However, the limitations of this ideal type need to be recognized. Common property resources theory is static, atomistic, ahistorical, and apolitical. It is a useful heuristic, but future research will need to employ more refined analytical tools as well.

11) Institutions of environmental governance have an unequal impact on the abilities of individuals and groups to use, access, and benefit from environmental goods and services. This is important for a research project concerned with analyzing the ways in which environmental governance can help in overcoming poverty and social, gender, and ethnic inequalities. Environmental entitlements analysis, which maps individuals' abilities to derive benefits from environmental goods and services, may be a useful tool in future research into these issues.

12) As the case study of joint forest management in India demonstrates, generic models of environmental governance can produce very different effects at the local level. Success or failure

in achieving conservation and development objectives depends crucially on local context, especially local traditions of social movement activism and collective action. The key question appears to be in defining the boundaries and conditions of group membership and in identifying which kinds of collective identity produce which sorts of outcomes. Future research may also need to ask what this portends for communities and territories without strong social cohesion or with highly inegalitarian social structures.

13) The case study of joint forest management in India also demonstrates that, without women's effective participation in institutions and organizations of environmental governance, these can have severe adverse effects on women's livelihoods and well-being. Because formal integration of women appears insufficient to redress this, future research should also investigate women's informal and unrecognized strategies and organizations for securing access to environmental goods and service. These may represent a repertoire of environmental collective action not addressed in conventional theories of social movements and environmental governance.

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