

ENVIRONMENTAL HISTORIES, ACCESS TO RESOURCES AND LANDSCAPE CHANGE: AN INTRODUCTION

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ABSTRACT

This paper forms the introduction to a special issue of this journal entitled 'Environmental Histories, Access to Resources and Landscape Change', that poses challenges to the ways in which the multiple dimensions of resource degradation are understood, analyzed and acted upon in developing countries. The paper outlines a framework for understanding the complexity of land degradation processes, their impacts, and offers insights into their remediation. The framework builds on the work of regional political ecologists. It involves a widened conception of resource degradation; an explicit awareness of layered scales of analysis in both time and space; an emphasis on the mechanisms structuring and determining patterns of access to a range of resources that influence the use of the natural environment; an engagement with environmental history; and a sensitivity to the relevance and application of research effort. Copyright © 1999 John Wiley & Sons, Ltd.

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INTRODUCTION

In one of those strange convergences that occur from time to time in intellectual history, 1996 saw the publication of two books each with the title *The Lie of the Land* (Leach and Mearns, 1996; Mitchell, 1996). The books had very different audiences: the former was directed at environmental policy makers working on African issues; the latter was targeted at debates in cultural geography and cultural studies around the interpretation of landscapes. Leach and Mearns wanted, primarily, to argue that environmental policy making is plagued by the hegemony of certain orthodoxies, taking for granted certain narratives about resource degradation and its causes. The dominance of these orthodoxies, they argued, leads not only to mistaken interpretations of environmental and socio-economic change in Africa but also to bad policy choices. Mitchell aimed to show that the creation of the California landscape was as much an effect of the various forms in which migrant workers had been dominated and resisted domination, as it was an effect of the factors identified in more orthodox interpretations of the landscape.

The books' messages and deeper analytical concerns shared much in common, notwithstanding their very different audiences and their apparently different topics. They called for historical analyses of landscapes that would challenge orthodox perspectives, and they called for more penetrating interpretations of the social and institutional dynamics that structure access to and use of resources. In their different ways they called for more attention to the actions and interpretations of marginalized actors, and rather more skepticism about the accuracy and the beneficence of the interpretations produced and managed by dominant groups.

These same concerns unite the papers in this special edition of *Land Degradation & Development*. The papers address the question of land degradation, its meaning, and its impacts in different ways. Some are

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historically oriented, offering 20th century or colonial histories of resource use and landscape change (e.g. Naughton; Endfield and O'Hara; Turner) while others are most concerned with the institutions that govern contemporary resource access (Klooster; Gray). Taken together these empirically solid studies point toward core elements of an agenda for work on the links between natural resource management and landscape change – an agenda of much relevance to understanding and remediating the relationship between land degradation and sustainable resource use. In the remainder of this paper, we lay out what we see to be possible elements of this agenda: a widened conception of resource degradation; an explicit awareness of layered scales of analysis in both time and space; an emphasis on the mechanisms structuring and determining patterns of access to a range of resources which influence the use of the natural environment; an engagement with environmental history; and a sensitivity to issues of relevance in environment and development research. These are elements of a framework for linking the traditional concerns of the journal (as reflected in its earlier title of *Land Degradation & Rehabilitation*) to wider discussions of social change and the environment (as reflected in its new title *Land Degradation & Development*).¹ In doing so, the framework recovers elements of one of the very earliest papers published in the journal that laid out similar concerns, and which is indeed cited by several of the contributors (Blaikie, 1989a).

LAND DEGRADATION/RESOURCE DEGRADATION?

The first theme to emerge from these studies has to do, quite simply, with our notion of land degradation. Several past contributors to this journal have touched on the 'political, social and economic structures and processes which underlie the human practices leading to land degradation' (Neumann, 1992: 86) and have linked this to recommendations for soil conservation policy (Biot, Sessay and Stocking, 1989; Millington, *et al.*, 1989; Pretty and Shah, 1997). It would be fair, however, to say that a greater number of authors have chosen to focus on the measurement and the effects of environmental degradation, particularly of soil resources. The accurate assessment of degradation is slowly being advanced by improvements in scientific technique, and particularly with the advent of advanced remotely sensed data and new techniques to measure soil fluxes (Chappell, *et al.*, 1998; Krogh, 1997). The papers in this volume take a broader view: they provide insights into the 'multiple dimensions of degradation' in wider systems and landscapes. They deal with the interactions between people, their cultures, their institutions, and a range of biotic resources: trees, soil, water, and animals. To varying degrees, they trace out the implications of these relationships for, and their impacts on, soil degradation. Several of them also deal with some of the technical problems of measuring soil degradation. None of the papers, however, limit their concerns, and far less their explanations, to soil degradation.

This is conceptually important – for these papers come from a tradition of enquiry in geography, anthropology, and history which balks at research and even development initiatives that separate out components of land-use systems in order to deepen the analysis of that particular component.² This is not to say that they dismiss such initiatives: indeed their shared tradition of enquiry is one that is largely inclusive rather than exclusive, ecumenical rather than fundamentalist. The shared tradition here is one that focuses on synthesis, systematics and historical transformations; a 'science of the integration of parts' rather than a 'science of parts' (Abel, 1998: 6). The authors are more concerned with understanding the dynamics (and remediation) of degradation of whole systems of natural resource management and nature–society interactions rather than of single components of these systems. They tell stories about the interactions people have

¹The papers here depart from the agenda of the first Guest Editorial in LD&D where Richard Carpenter argued: '... The Journal should seek out and publish only that research which has statistical reliability and meaning. It should rigorously review the presentation of data to insure candor and warranted conclusions. It should provide leadership to better field sciences by featuring techniques, processes and methods that help overcome the formidable barriers to knowing what we are talking about' (Carpenter, 1989: 2–3).

²Farming systems research has also had the same concern, first widening its lens from crop to field and from field to farm and food system. It later incorporated concerns for institutions, landscapes, and 'lifescapes', etc. As loyal geographers we would suggest, like Jean-Yvres Marchal (1990/91) that this evolution of farming systems research has in large measure merely re-created an established tradition of human–environment and political–ecological research in geography.

with their environments, and, without excluding scientific analysis of land degradation, frame biophysical processes within systems of knowledge and the historical and spatial dynamics of landscape change.

SCALES: MULTIPLE AND NESTED

The notion that explanatory factors appear to change as the scale of analysis changes, is a long-standing one in the geographical sciences. A recent statement is Turner's (1997), who presents those working on land-use change (and thus resource degradation and remediation) with the conundrum that local analyses of resource use almost always identify social relations and institutions as key driving forces of change, yet in analyses conducted at a wider scale these factors become less important than pressure on resources created by demographic and market demand (see Gray: this issue). This collection of papers responds to the challenge of finding ways to make linkages and connections between these different 'nested' scales in our explanations if we are to devise good theory and policy. It is worth noting that while this task may be analytically forbidding, we cannot shirk the challenge on logistical and funding grounds: most of the studies in this collection are done by single researchers or small teams, and with relatively limited financial resources.

Scales Across Time

Another theme that links the papers is a willingness to work across temporal scales. The papers do this to different degrees, and with different methods. These methods include: archival work (Endfield and O'Hara; Conte; Naughton); plot level analysis of soil fertility change (Gray); oral histories from individuals regarding land use and quality (Conte; Naughton) and analyses of evolving resource management institutions (Klooster; Turner; Naughton). But beyond their methodological preference, the papers share two recognitions. First, that it is difficult to understand the dynamics of land-use change at a point in time if these are not analyzed within the context of longer histories of society–environment interactions. These contextualized histories may help debunk policy orthodoxies. Fairhead and Leach's (1996) historical study of contemporary forest 'islands' in Guinea, for example, showed these 'islands' to be markers of system improvement rather than degradation – human creations in a savanna landscape, and not the remnants of a larger forest that had been intentionally destroyed. Second, historical approaches may also help to identify factors in resource use and degradation that are consistently important across the long haul – e.g. population pressure, as Turner (1997) and Mortimore (1998) argue, or the nature of local institutions (Robbins, 1998). Conte's paper in this collection is a fine example of this, showing how the Tanzanian state and its policies have been critical in determining forest use and forest soil quality, whether the state was controlled by the German colonial authorities, the British, or the newly independent government. The nature of its impact changes across these periods, but what remains constant is the critical importance of state policy in its various guises. Turner, in his account of the interactions between herders and conservation planners in Niger, shows how government regulation of herder movements is a recent manifestation of a long-held distrust of mobile groups, and how state bodies persistently overlook the capacities of indigenous institutions to regulate herding activities.

Scales Across Space

The papers also show the importance of working across spatial scales: for two reasons. First, combining a microscale plot level analysis with macroscale analysis of land-use policies and institutions, and comparing the relationships between the two scales over time, can help to identify key driving forces of land-use change (cf. Turner, 1997; Blaikie, 1989a). Scale effects have been widely discussed in the ecological sciences, particularly as the ecosystem concept begins to be challenged by work on hierarchical, nested, but non-equilibrating systems (Abel, 1998; Allen and Hoekstra, 1990; Holling, 1998). Perhaps more interestingly, though, is that analyses conducted at different scales can generate different findings. Gray's paper argues that if we were to work only with regional scale analysis of land cover in Burkina Faso using remotely sensed data (as indeed policy makers often do, for lack of other data), then we would assume that land is steadily being degraded due to population increase. Gray goes on to illustrate, however, that a household and plot-level

analysis shows that many families in these same areas are actually improving the quality of their land and soil through manuring, tree planting, input use, and other intensification measures: a quite different finding. This juxtaposition of findings then challenges us to dig further to understand the decision-making criteria of farmers that lead them to intensify some plots and abandon others, and the spatial patterning of degradation and land use at multiple scales. Without this understanding, our policy and theory will not only be incomplete: it will be incorrect.

RESOURCE ACCESS

For Blaikie (1989a,b), perhaps the most critical set of factors determining patterns of land use and degradation are those that structure the ways in which different land managers (households, governments, corporate actors, etc.) gain access to resources. These discussions of resource access have been deepened in important ways (Carney, 1988; Berry, 1989; Okali, 1989; Ribot, 1998). The papers in this volume draw on, and elaborate, these discussions.

While much could be said about the way in which resource access might feature in an agenda for research on land degradation, several themes emerge in this volume. These are as follows: a notion of resource access that goes well beyond purely natural resources; the importance of understanding how informal and formal institutions govern access to resources; defining the relationship between the social control of institutions governing access, and the dominant ideas regarding how resources should be used; and the political economic dimensions structuring institutional and discursive influences on resource use and access.

Accessing What Resources?

Blaikie's (1989a,b) 'chain of explanation' for understanding why soil erosion occurs identifies a range of economic and political factors at global, national, and local scales as key in determining patterns of soil erosion. While subsequent attempts have found it difficult to operationalize Blaikie's framework empirically (e.g. Black, 1990; Hershkovitz, 1993; Batterbury, 1997a; Jansen, 1998), it nonetheless makes clear that the impacts of land management on land quality depend greatly on the land, labor, capital, and technological and informational resources at the land manager's disposal. Access to these diverse resources is in turn structured (and frequently constrained) by local and national policies and institutions. Thus, equally important is the access that the land manager has to those same institutions: to participate in them, to monitor them, and to define them. This can range from the simple (or not so simple) ability to participate in market chains in a way that offers the prospect of farm level accumulation processes (as opposed to exploitative processes); to participation in civic institutions that play a role in distributing land, water, forests, information, credit, etc; and to the ability to participate in institutions of the local and national state.³ Ribot's (1998) analysis of commodity chains for forest products similarly identifies the important role played by state institutions in determining who is able to use, and benefit from, forests and the sale of forest products. These institutions also help determine the functioning of the 'real' markets that Blaikie, too, identified as important determinants of land use and soil erosion. Better access, these studies show, may not lead to more sustainable land management at all – witness Conte's discussion of the forest and soil degradation that ensued in the West Usambaras following independence – but it most certainly influences how the natural resource is used, and the consequent implications for biological, chemical, and physical environmental processes.

Governing Access

The relationship between land use and resource access has been explored in work demonstrating the significance of a range of formal and informal institutions in governing such access (Berry, 1989; Scoones,

³Elsewhere, we have referred to this as access to five types of capital: produced, human, social, natural, and cultural (Bebbington, 1999; Bebbington and Perreault, forthcoming).

1998; Bebbington and Perreault, 1999). In an important early paper on this topic, Berry (1989) discussed the critical importance of kinship, gender, group, and other institutional connections in determining access to labor and land. She also emphasized the vital importance that such institutional access played in gaining political influence over, and/or benefiting from, other institutions, particularly those of the state. Among the many implications she teased out of this line of enquiry were its potential effects on the use of natural resources. These clearly vary, but in certain instances she suggested people would invest in networks and institutions rather than in natural resources, and that this could lead to their over-use (e.g. a farmer might allow herders to overgraze her/his land if this in turn gave her/him access to the resources possessed by those graziers). While the final impact of institutions on natural resource quality varies depending on other factors too, these studies emphasize that institutions are critical in determining land quality, and how this varies across social groups.⁴

The papers in this collection similarly emphasize the importance of institutions for land degradation, in both contemporary and historical contexts. A range of institutions appear as key influences: government institutions (Conte; Turner), community institutions (Klooster), market institutions (Klooster), property institutions (Endfield and O'Hara; Naughton), and so on. More generally, which institutions have more influence and which less, varies greatly across the cases and over time. Furthermore – as Robbins (1998) has recently suggested – we cannot conclude that one type of institution is always necessarily better for sustainable resource management than another. We can, however, show that their historical evolution, and their contemporary forms, greatly influence resource access and use, and also structure possible entry points for environmental policy making and implementation. In the Niger case, Turner shows how the imposition of park management for the protection of wildlife has actually closed down access to grazing resources and encampment sites for indigenous herders. Investing in local *Fule* authority structures and their capacity to regulate herd movements may help to prevent future conflicts in this conservation area.

Governing Ideas of Good Use

How land is used, depends not only on who accesses it and the bundle of resources at that land user's disposal, but also the dominant, and competing notions regarding how resources should be used. Naughton's paper on wildlife use in Uganda, and Conte's on forest management in Tanzania make this point clear. Conte presents a century of forest management in the West Usambaras as a struggle between competing notions of 'what constitutes the good forest'. This struggle counterposed an indigenous notion of 'good' forest as partially modified, diverse, multipurpose and multispecies, with a colonial notion of 'good' forest as managed, simplified and market oriented; and finally a populist, nationalist (albeit more implicit) notion of 'good' forest management as used by 'the people' for whatever they so wish. Whoever controlled the state ultimately controlled access to forests and determined dominant notions of good management, and this in turn had significant implications for long-term change in land cover and soil quality. The important message to derive from Conte's paper is less an 'indigenous resource management is sustainable versus western is not' argument (indeed this is an argument with which we need to be careful, for it is not always the case) but rather the more abstract one that 'who controls the state determines who uses the forest and the dominant policy ideas that influence that use'. This is an argument with wider resonance in recent critical discussions of the way in which power shapes our taken for granted ideas about 'development' and 'environmental management' (Escobar, 1995; Peet and Watts, 1996).

Structuring Access and Ideas of Good Use

Which actors and institutions are most critical in governing access to and use of resources depends, of course, on broader issues – the balance of power in a society and the nature of the relationships between that society and the global political economy, and so on. These are the 'higher' levels in Blaikie's (1989a,b) chain of

⁴Robbins (1998) has, for instance, recently discussed for the case of Rajasthan how grazing land held under similar circumstances to those noted by Berry is in fact the most sustainably managed land.

explanation, that cascade down his chain to influence the land user and the land cover. The multiple dimensions of the political economy both constrain, and provide opportunity for local people. Blaikie's initial formulation concentrated on the power of colonial policy to alter traditional productive relations through land appropriation and other influences. Political economic processes operating at these levels are also clearly present in the stories told by the papers in this collection. For example, such issues as patterns of colonial integration have left their marks on resource use in Uganda and Tanzania; the international cotton economy influences the resources at farmers' disposal for managing soil in Burkina Faso; the political economy of the national and international timber trade affects local forest management in Mexico. How in depth a single study can analyze these questions is problematic. However, by drawing on other work specifically targeted at these issues (and not necessarily concerned with natural resource issues) these studies locate local resource use, access, and management ideas in these wider structures. This is the least that we need to achieve if our explanations – and therefore policies – are not to be partial.

ENVIRONMENTAL HISTORIES

Taking up this emphasis on broader political–economic structures, O'Connor (1997) argues that all history 'is now environmental history', since economic development and human choices have, by the late 20th century, had direct or indirect repercussions for processes and patterns in, and the quality of, all biophysical environments. While the best-known work on environmental history is identified with stories of the environmental transformation that was shaped by settlement and economic growth in North America (Worster, 1988; Cronon, 1993), historians and geographers have also explored comparative histories in other regions and contexts (Butzer, 1982, 1996; Chapman and Driver, 1996; Griffiths and Robin, 1997; Grove, 1997; Preston, *et al.*, 1997; Mackenzie, 1998).

Historical enquiry is important for work on land degradation work in several senses. Many of the human and biophysical processes that affect natural resources move slowly or sporadically over time, such that their significance can be missed by contemporary, snapshot studies. Contemporary beliefs in resource degradation may be unfounded, and only historical analysis both of patterns of land change, as well as of the emergence of beliefs that erosion is occurring, will demonstrate that such present-day beliefs are misconceived (e.g. Preston, *et al.*, 1997). A historical approach also helps us see the environment as *agent* in development processes, and not merely as backdrop to those processes: as an agent whose forms of response influence subsequent patterns of human use of land and other resources. Environmental agency ought not be erased in accounts of the 'social construction' of nature, where the emphasis is placed more firmly on social values, beliefs, and world views. Historical analysis of the ways in which resource users have adapted to pressures on their resource base can also be very helpful in identifying those policy options with more (and less) potential (cf. Netting, 1981). Finally, although we may never get to the 'truth' of land use or land degradation histories or of why land use practices and institutions have evolved and changed (Demeritt, 1994), a historical approach can allow key propositions about the forces driving land-use change and degradation to be tested in natural experiments. Testing such propositions is critical to the elaboration of good theory and policy.

The methods available for such enquiry are various, and point to ground for very fruitful collaboration between disciplines. Meyer, *et al.* (1998) argue that history yields many analogues that permit us to understand present-day patterns of responses to environmental deterioration or hazards, and these may be studied for clues about human adaptation to resource constraints and vulnerability. Environmental history requires both solid techniques and good intuition (based on thorough knowledge of the available data), in particular because the reconstruction of the forces driving land use and degradation in past time periods can only be interpreted through secondary sources. Africa in particular is proving a fine breeding ground for comparative, historical work on landscape change, as several of the contributors show (see also Guillaud, 1993; Fairhead and Leach, 1996; Maddox, *et al.*, 1996; Dahlberg, 1996; Mackenzie, 1998).

The papers also suggest the possibility, and utility, of undertaking shorter term environmental histories that cover periods within the living memories of land users. This time-scale is particularly useful for

identifying those forces driving contemporary environmental transformation and land degradation. Constructing time-lines based on triangulations between data from oral history, landcover analysis, participatory rural appraisal techniques, and archival and other sources can help show relative changes in the intensity and importance of driving forces of change, and patterns of land-use change (Rocheleau, *et al.*, 1995; Davies, 1996; Thompson, 1997). The methods and goals of such histories are various. Endfield and O'Hara's paper involves detailed and critical archival work, while Naughton combines data from government archives with oral histories. Gray triangulates several key indicators generated using different methods in the same communities in Burkina Faso. Her short-term field histories reveal much about farmer decision making and the mismatch between scientific and lay viewpoints on recent erosion.

RELEVANCE

In the determination to speak to policy and contemporary problems of resource degradation, there is considerable pressure to tackle what are perceived as immediate problems; soil loss and deforestation being prime examples. This is understandable. Yet the very patchy successes of environmental policies and projects, particularly those based on the application of scientific principles alone, strongly suggests that new approaches are needed to develop better policy that targets the forces underlying environmental degradation, and to judge the impacts of these policies (Scoones, 1997; Holling, 1998).

There is presently a convergence around the idea that environmental management must be reconsidered as an enterprise that begins and ends with land users and their aspirations; that recognizes ecological and social differences across space and time; and considers alternative views and hidden voices. A recent volume on local sustainable development, for example, is highly critical of 'community-based' interventions to preserve natural resources, since these ignore intracommunity differences and do not distinguish between actual and 'in principle' rights to natural capital (Leach, Mearns and Scoones, 1997). And yet, exposing complexity and difference can quite easily leave policy makers cold (Edwards, 1994). This is particularly clear where conservation programs and their designers are taken to task for their poor consideration of land users and traditional livelihood systems (Naughton; Turner). If our prime audience is other academics, students, and our employers, then doing 'more and better studies'⁵ out of personal interest, social commitment or professional necessity, is a viable aim. If our aim is to influence the course of events in marginalized communities or areas – or to help retrieve a radical edge by supporting the underdog more directly – then something more may be called for. The options to increase the relevance of our work might include:

- A 'local political ecology' that is explicitly developed from an agenda set by local people, and that includes long-term advocacy work. One example in this vein is the work of land rights researcher/campaigner Charles Lane. His support for Maasai land rights in East Africa has been pursued over many years. Lane has chosen to apply very detailed knowledge of land relations and access issues in programmes of work supported by, but also critical of, the donor community in Tanzania and neighbouring countries. In so doing, Lane is an advocate of revisions to the exclusionary conservation ethic guiding Maasai evictions from the Ngorongoro crater in Tanzania. At the same time, he has engaged the state, donors, and activists in meetings and discussions that are edging toward accommodation of the principles of 'multiple use' in East African conservation areas. More recently, Maasai and Aboriginal people from northern Australia have shared their experiences of land alienation on study tours and in meetings (Lane, 1998).
- Partnership research, conducted in, and with, development actors and organizations that have the power to effect change and to adopt key recommendations.⁶ A number of projects conducted by students of political ecology in recent years (including our own) have been carried out from within contemporary development organizations. They offer the potential for critical reflection carried out right in the heart of

⁵The phrase is Judith Carney's.

⁶For example, see the many studies conducted by the International Institute for Environment and Development, London (<http://www.iied.org>).

these organizations themselves, and at the same time they permit observation of development 'in practice'. Of course, such work also brings certain limitations: project affiliations affect the conduct and outcomes of research (Batterbury, 1997b). A reflexive awareness of these limitations, however, may allow such affiliations to become a means for making work relevant.

- The *selective* application of rigorous and widely comprehended scientific methods, which are understood by many policy makers, in order to illustrate the viability of certain threatened livelihood systems or the genesis of particular resource use trends. Paul Sillitoe's 'hybrid' work in Papua New Guinea, again conducted over many years, is helping to remove much of the blame for lowland soil erosion from upland subsistence farmers in that country (Sillitoe, 1998).
- Participation in user-led studies that unfold at a slower pace than standard academic or development projects. Ndione, *et al.* (1995) report on the way in which ENDA-Graf, an NGO consisting of sociologists and other development professionals, works in Senegal. The organization's expertise was called on by *villagers* who determined how to spend their own development budget, and called the team in to participate in land-use decisions about river access and a dam-building venture, over many years. Villagers also wrote up their own social and environmental history, rather than trusting outsiders with this task. The normal 'development process' was reversed, with researchers taking a back seat.
- More advanced research dissemination procedures, including those that sit on the borders between research and policy where the potential clash between academic researchers and development actors is staged in a productive way. These include workshops, meetings, exchanges, and field visits. Training workshops on participatory learning and action techniques, for example, have had a sobering effect on bureaucrats, development workers, and urban professionals who encounter and are forced to recognize the richness of rural peoples' science and worldviews (see Thompson, 1995; Chambers, 1997).

International development assistance has been reprofiled and slimmed down in the 1990s. There is a new willingness on the part of planners and policy makers to shore up sustainable development initiatives with the latest approaches and supportive research findings, and to make funding go further. This provides many new opportunities for researchers to apply their analytical skills and local knowledge in ways that can improve the quality of development interventions, as well as to support those we identify as marginalized or disadvantaged by those same actions. The compromises that academics are forced to make in engaging with these audiences might be too great for some, but the potential rewards make this strategy worthy of consideration.

ELEMENTS OF A RESEARCH FRAMEWORK

This collection of papers thus leaves us with a call for a framework for research on land degradation that combines careful assessment of resource use and change at a range of scales, with analysis of the ways in which access to land and other resources affecting land use is structured by the institutions that govern access, and by dominant ideas about how land should be used. The dominance of these ideas is closely related to the question of who controls the institutions that govern access (Thompson, 1993; Scoones, 1998). Furthermore, collectively the papers appeal for analyses of these relationships between institutions, access, ideas, use and environmental conditions over extended historical periods, and across different geographic scales – in order to better understand the dynamics of these relationships. Such an inclusive framework can help to minimize errors of interpretation and of policy choice that can emerge when we only look at the here and now: no matter how carefully and well we look at it. Echoing the perhaps apocryphal worlds of J. M. Keynes, it is a call for approaches to land degradation that might generate findings that are 'approximately correct rather than exactly wrong'.⁷

Rather than constituting a radical break, this framework instead represents an expansion of the framework offered by Blaikie (1989a). Since that time, subsequent research has improved our understanding

⁷Thanks to Robert Chambers for this reference.

of environmental histories, and of the workings of different types of institutions governing access to the resources that Blaikie identified as critical. This collection represents a further contribution to improving our knowledge of issues identified or implied by Blaikie, asking us to be more specific in understanding land degradation in terms of landscape change, and vice versa. In doing so, it challenges us to take little for granted when it comes to understanding and interpreting land degradation.

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