

The Role of Development Discourse in the Construction of Environmental Policy in Africaⁱ

Allan Hoben
African Studies Center
Boston University

I. Introduction

Recent scholarship has begun to illuminate the critical and costly role of untested and sometimes unrecognized assumptions inscribed in the discourse of development agencies, governments and non-government organizations (NGOs). These assumptions are encoded in simplifying concepts, such as "trickle-down" or "the tragedy of the commons," labels such as "the small farmers" and "women," buzz words such as "participation" and various types of "received wisdom."¹

In development discourse these elements, and their key implicit and explicit assumptions, are often embedded in narratives like that of "desertification" and the "tragedy of the commons," discussed below, stories with a beginning, a middle, and an end that purport to describe and explain a problem to be addressed and to imply a solution (Roe 1991; Hoben 1995).²

Development narratives are usually enhanced through the incorporation of the donor nation's dominant symbols, and

ⁱ The research upon which this article is based was supported by grants from the MacArthur and Ford Foundations to the Global Development and Environment Institute at Tufts University.

ideologies as, for example, those associated with Christianity and expulsion from the Garden of Eden. Frequently they are grounded in the real or imagined historical experience of Western donor nations. This may be an experience as broad as the industrial revolution, which provided the narrative of post-Second World War Western development initiatives, or it may be very specific, as with American experience with rangeland enclosure or rural electrification. In this sense, development narratives, their components and their sub-texts, are culturally constructed. They reflect the hegemony of Western development ideas and often of other interests as well.

To the extent that a particular development narrative, with its associated assumptions, becomes influential in donor community development discourse, it becomes actualized in specific development programs, projects, packages and methodologies of data collection and analysis. This process is exemplified by experience with development initiatives addressing desertification and wood fuel issues considered below. Over time, development discourse thus comes to be exemplified by past programs and projects. Through the agency of these exemplars, known to professionals in the field, development discourse becomes not merely a set of beliefs or a theory, but a blueprint for action as well. Elsewhere I have referred to these well-established cultural models of and for action as cultural paradigms (Hoben 1995).

The use of cultural paradigms and narratives in decision making is not peculiar to development planning. Indeed, they play a fundamental role in all social action. In most general terms, they represent uniquely human symbolic condensations of past experience that enable people to respond appropriately to complex situations with which they have not had previous personal experience, since they at once classify and describe a situation and prescribe or suggest what should be done about it. In addition to their puzzle-solving role, they have important social, communicative, political-economic, and expressive integrative functions which are often not fully recognized by the actors. They are, to a greater or lesser extent, grounded in the general cultural beliefs — the values, logic, and symbolic forms — of their adherents and therefore provide intellectual, normative and aesthetic coherence to decision-making processes. Because they are institutionally and culturally situated or embedded, those cultural paradigms that are central to the

interests and activities of their adherents are not easily challenged, discarded or replaced.

Nevertheless, cultural paradigms of the type I am glossing as development discourse play an especially prominent and dominant role in the actions of international donor agencies of all types. In part this is because they enable development agency, government, or NGO personnel working under severe information and time constraints to produce a steady supply of projects and programs, consistent with current policy trends and funding availability (Hoben 1989; Tendler 1975). Development discourse simplifies and speeds up the process of program and project design. In part it is because development activities must make sense to donor personnel and constituencies, rather than to third-world officials, let alone low-income intended recipients. This creates serious problems as, for many types of development assistance, there is virtually no "unfiltered" feedback from intended beneficiaries to first-world constituencies or their elected representatives. For both of these reasons, development paradigms tend to dominate country- and site-specific information, transforming local landscapes and problems to fit general donor policy. For the same reasons, they follow periodic "fads" sweeping across development organizations.

Policy narratives have a number of distinctive characteristics. Whatever their origins in religion, myth or Western scientific findings, they emerge from and represent the views of articulate first-world experts or first-world domestic constituencies. They come to play a central role in policy and project-level decision making. They do this by structuring options, defining what are to be considered relevant data, and ruling out the consideration of alternative paradigms from the outset. They are robust, exercising great influence at the pre-attentive stage of choice, thus discouraging scientific research that can discredit them. They do this by defining the parameters of legitimate research methods and what is to be considered credible data in both first- and third-world research communities.³ They are hard to challenge and slow to change, even in the face of mounting evidence that does not support them. In sum, they influence what it is "reasonable" to think and say and do.

Regardless of their merit, policy narratives and their specific assumptions and assertions are transferred to aid recipient countries through donor-sponsored training, institution building and investment. These activities attract and create

elite interest groups which, in turn, become their constituencies, making them politically difficult to discard.

Donor development discourse is also infused into urban and rural national culture through formal education and media campaigns, which seek to associate it with national symbols and political figures. It also permeates to local-level development discourse, as community leaders learn what to say to get assistance, even if it is in stark contradiction to their experience and knowledge of local conditions (Leach and Mearns 1996, pp. 25-28). Narratives thus become culturally, institutionally, and politically embedded in developing countries.

For all of these reasons, the influence and durability of a dominant development policy narrative is not necessarily related to its economic, social or environmental consequences. The narrative — and resource flows associated with it — becomes hard to challenge and may remain current in the aid recipient nation, even if it loses its currency in the donor community. This has happened recently and is illustrated in the discussion of desertification in this essay.

The relationship between development discourse and practice is far more complex and interesting than I have suggested in this brief introductory overview. There are four main reasons for this. First, variants of the same discourse are used at many levels of planning, including broad statements such as donor sector strategy statements, country-level analyses, and country-specific policies, programs and project documents. At the lower and more specific end of this continuum the discourse is tied to what is purported to be data about country-specific and local circumstances. At all levels, dominant elements in current discourse are most prominent in planning documents, which, in effect, are advocacy documents since one of their main functions is to stake a claim on financial resources from the home office. They are less dominant in project and program evaluations and other in-house documents, which are often surprisingly frank and detailed about difficulties that have been encountered in implementation.

Second, to a greater or lesser extent, depending on the individuals and the context, it is recognized by agency officials that the currently dominant discourse, which always differs from that of the past, is a meta-language to be used to simplify and stylize the presentation of country-specific complexities in advocacy documents. Indeed, in day-to-day working contexts,

donor officials working in developing countries discuss a wide range of country-specific political issues that they know they will not present frankly, if at all, in writing. Usually there is a conscious effort to package proposed activities in the language of the most recent policy guidelines so as to make them more acceptable. Thus, for example, in the early 1970s United States Agency for International Development (AID) missions in Africa relabeled road projects under the rubric of rural development and virtually all agricultural projects were "targeted" on the "rural poor," despite the fact that many of the activities budgeted were not new. Nevertheless, dominant discourse, its jargon and its embedded assumptions do influence what is considered and what is done, especially when it makes sense to the professionals carrying out development work. Furthermore, regardless of what individuals working in agencies may think, development discourse exerts a powerful influence on the allocation of development assistance by providing a common framework of what it is reasonable and acceptable to do.

A third source of complexity is that the elements of development discourse and particular narratives are sometimes separated, rearranged or recombined in new ways.

Pastoral livestock discourse, which originated early in the colonial period, appropriated the "tragedy of the commons" narrative when the latter was articulated by economist Garrett Hardin (1968). Similarly, the "desertification narrative" discussed below was combined with the "fuelwood crisis" narrative when the latter rose to prominence when the Arab oil embargo focused attention on energy. Long-popular discourse about the value of local participation was inserted into discourse on agro-forestry and natural forest preservation.

A fourth source of complexity is that there are often competing forms of discourse and narratives, along with their competing assumptions, methodologies and "facts" that can be used to apprehend, interpret and deal with the same objective situation. This is exemplified below in relation to desertification. Competing paradigms may be used by the same individual in different contexts, as in the case of Tanzanian officials I met who expressed a low regard for peasant farmers' creativity in formal meetings but a high regard for the abilities of their rural relatives in informal, one-on-one conversation.

More significantly, competing narratives may be associated with different professional groups, such as range management experts and anthropologists, within a single agency or within

different offices, for example, health and agriculture, in the same agency. They may be associated with different national government ministries, as is the case today in Zimbabwe in regard to the role of local control championed by the CAMPFIRE project (Rihoy 1995), or with different elites and special interest groups in the wider society.

Competing discourses may be to a large extent institutionally insulated from one another, as is often the case with academic and government institutions in Africa. What are far more interesting and important, from the perspective of this paper, are the decision-making arenas in which different groups and stakeholders use competing discourse to further their personal, economic, political or professional interests. The study of processes of contestation that take place in these arenas is very illuminating and, I believe, represents the cutting edge of research on development discourse in action.

In this introduction I have tried to lay out a framework for analyzing development discourse in relation to development practice. It represents a tentative first step, a beginning. And it raises more questions than in answers: Where do narratives and discourse come from? How are they grounded in the general culture and imagined history of their adherents? How do they incorporate and draw power from dominant symbols, myths and images? Under what circumstances and through what processes do they become institutionalized in development organizations and discourse? How are they elaborated into recommendations for specific policies and projects? How are they transmitted? How do they attract constituencies in both the developed and the developing world? Why do they appeal to certain groups? How do they enable their adherents to explain their apparent failures? Why do some persist longer than others? What kinds of strategies do competing interest groups use to establish the legitimacy and primacy of their discourse? How are they challenged, changed and replaced and what is the role of science and politics in these processes?

I have found it useful to ask these questions about donor and NGO assistance to Africa in all "sectors" (and, indeed, about the very notion of sectors), including agriculture and rural development, energy, education and health. None of them illustrate the power and problems of heavy reliance on development discourse more clearly than environmental policy.

In the remainder of this essay I explore some of these questions, and the usefulness of this approach. The discussion is

in three parts. The first introduces, in schematic form, the underlying narrative that has informed environmental policy in sub-Saharan Africa from the colonial period to the present. The second describes the institutionalization of key elements of the narrative in the environmental policies of donor agencies and African governments. The third examines the coalescence of the desertification narrative, its institutionalization and its influence on the actions of development agencies, in the wake of the Sahelian drought.

II. Paradise lost

Nowhere is the power of policy narratives demonstrated more clearly than in policies intended to protect the environment and promote better natural resource management in sub-Saharan Africa. In one way or another they are grounded in narratives that tell us how things were in an earlier time when people lived in harmony with nature, how human agency has altered that harmony, and what the calamities are that will plague people and nature if dramatic action is not taken soon. It is not surprising that the narratives remind us more or less explicitly of the fall from Eden and are neo-Malthusian.

Following the seminal work of Blaikie (1985) we can piece together the key elements of the narrative:

Before the coming of the white man, Africans practiced a subsistence economy in harmony with nature, based on shifting agriculture and herding. They did, however, suffer the effects of drought, pestilence and warfare, which limited their numbers. Under beneficent colonial rule Africans and their livestock multiplied. Soon human and animal populations began to exceed the carrying capacity of the land. This resulted in environmental degradation, including soil erosion, the deterioration of the range and deforestation. These changes, in turn, reduced the retention of water and rainfall, and increased the frequency of drought and famine. This downward spiral is accelerating, ending in human and environmental disaster unless appropriate actions are taken. These actions are primarily technical measures, such as terracing, bunding, closures and tree planting, and

regulatory, such as enforced reduction in stocking levels. Both types of action require strong state intervention, as local people do not have the knowledge, organizational skill or will to take them on their own.

Before independence colonial experts and officials (often the same individuals played both roles) became concerned with what they saw as soil erosion, rangeland degradation and deforestation, which they generally attributed to Africans' lack of farming and herding skills and foresight. Not surprisingly, their recommendations for state planning and regulation of land, tree and range use were more readily accepted by colonial regimes and more stringently enforced in those parts of eastern and southern Africa where native and European white settler or commercial interests conflicted with those of the Africans. While much colonial-era research on environmental management was biased by pre-conceived notions, it should be noted that by the beginning of the Second World War a mounting but scattered body of evidence challenging simplistic assumptions about African management practices had begun to accumulate (Richards 1985). Unfortunately, much of this work was forgotten during the turbulent war years and transition to independence.

III. The greening of development discourse

After independence, conservation was assigned low priority by African governments because it was unpopular with rural people — indeed some leaders had campaigned against it — and because economic development was seen as the most pressing need. Nor were major donors concerned with the environment. Throughout the 1960s the bulk of foreign assistance to sub-Saharan Africa was intended to improve infrastructure, build human capital and raise industrial and agricultural production. In retrospect, some of the agricultural and forestry activities funded in this period were detrimental to the environment.

In the 1970s donor policy placed additional emphasis on improving the lives of the rural poor. There were still comparatively few projects that were expressly "environmental" though pastoral livestock projects and fuelwood

projects were intended to have environmental as well as other benefits. Nevertheless, three major developments laid the foundation for an increase in donor concern with environmental issues in Africa. The first was the Sahelian drought which received much coverage in the media and affected popular perceptions of Africa in the West. The second event was the energy crisis, highlighted by the oil shocks of the 1970s. The third was the growth of the environmental movement in Europe and North America. The way the drought and the energy crisis influenced development discourse is discussed below. The influence of the environmental movement was, in the end, more diffuse and more pervasive.

In both AID and the World Bank early concern with environmental issues represented a defensive response to law suits and mounting external criticism. AID instituted an environmental impact assessment requirement on all projects after the Sierra Club brought suit to prevent the agency from using pesticides overseas that were banned in the United States. The World Bank greatly expanded its environmental staff and requirements for environmental impact analysis after it received public criticism for a number of large projects and was sued by the Environmental Defense Fund.

The environmental cause was not generally taken up by donor agency management or personnel with enthusiasm. Indeed, in the late 1970s many AID officials in Washington thought requirements for environmental impact assessment rather "flaky" — one more bothersome requirement for project design, foisted on the Agency. In the mainstream of the World Bank opinion environmental issues were viewed as just another passing fad, fundamentally irrelevant to the Bank's work.

In the 1980s, in response to widespread economic crises in Africa and a shift to the right in the industrial nations, new donor policies focused on structural adjustment and private sector development. Preoccupation with these issues did little to raise aid officials' environmental consciousness. Indeed, structural adjustment policies tended to result in greater pressure for the extraction of resources such as tropical forests and to undercut the capacity of governments to support environmental management programs. At the same time, however, external support for a greater emphasis on environmental issues continued to build among the donors' critics and constituencies. Increasingly, the pressure was to do something positive to improve the environment or stop its degradation, rather than

merely to make sure that projects did no harm. I recall a high level, rather perplexed AID official asking my advice on how the Agency might use the money earmarked for the environment by the Congress. Soon AID, the World Bank and other development agencies were hiring environmentalists, setting up new offices and funding new programs for environmental work.

By the 1990s there had been a notable greening of development discourse and numerous environmental initiatives, large and small. In AID mainstreaming the environment was accomplished largely at the expense of agricultural programs. This may seem paradoxical in view of the fact that the vast majority of renewable natural resources are managed by African farmers and herders. At a major AID conference on its natural resource management programs held in Gambia in January 1994, I found myself surrounded by true believers. One of them remarked, "The aggies had their chance and muffed it. Now it is our turn."

At the Bank, too, environmental issues were taken seriously. Failure to address them could slow or block project approval. In addition, the Bank threw its support behind an effort to have all the nations in sub-Saharan Africa prepare National Environmental Action Plans (NEAPs). In addition to giving extensive technical support to countries preparing NEAPs, the Bank compelled IDA governments to complete them by June 1993 as a condition of IDA loan replenishment.

The impetus to address environmental problems in Africa has been almost entirely exogenous. African governments have once again been policy takers. Overhung by debt and more dependant than ever on foreign assistance, they have had little choice but to take on and institutionalize the donors' new enthusiasm for environmental management and sustainable agriculture. New ministries and agencies devoted to environmental management have blossomed across the continent. New governmental positions have been created in this new growth sector, even as others are being abolished by policy reforms designed to reduce public expenditures and the size of government. Environmental projects, large and small, flourish, many including long- and short-term training. Officials in government and non-government organizations alike are becoming proficient at thinking in the new development discourse.

IV. The rise and decline of desertification

The story of desertification exemplifies the power and endurance of an environmental narrative that caught the imagination of donors' domestic constituencies and suited the needs of donor agencies. It also shows how a narrative, and its assumptions, once embedded in policy and organizational interests, can resist mounting scientific counter-evidence and, ultimately, transform most of its content while retaining the utility of its evocative name. Finally, it illustrates the way the same narrative can be used by different stakeholders, in this instance donors and national governments, to pursue very different objectives. The schematic account that follows is based on the work of Jeremy Swift (1996) and my own experience while serving as the Senior Anthropologist for Policy in AID.

The desertification narrative, without the label, took shape in West Africa in the 1920s and 1930s in response to officials' concern with the apparent drying out of extensive areas in the French and, later, British West African colonies. The narrative was first clearly articulated in the writings of E.P. Stebbing, a forester from the Indian Forest Service who traveled from the coast forest zone across the savanna and onto the Sahara desert in 1934.

By 1938 he had systematized his ideas in writings that contained all of the key assertions and assumptions that still are found in writings on desertification today:

In West Africa the process [the advancing Sahara] owes its commencement to the system of farming the bush or degraded type of forest which covers much of the countryside, this system being a form of shifting cultivation. With an increasing population the same areas are reformed at shorter intervals, with a consequent more rapid deterioration of the soil constituents, until a stage is reached when the soil is not longer sufficiently productive for agriculture.

It may then be made over for stock-raising. The grazing and browsing, accompanied by the universal practice of annually firing the countryside, reduces the quality, height and density and therefore the resisting power to sand penetration of the now much-degraded forest or bush,

and the soil becomes covered with a sandy top, gradually increasing in depth. Once this stage has developed the rapidity in the degradation of the bush increases until it no longer affords sustenance to cattle; then the sheep disappear; and under the final exploitation by goat herds to feed their flocks the savannah succumbs and the desert has encroached and extended its boundaries. (Stebbing 1938: 12-13 cited in Swift 1996: 74-75.)

To counter the encroachment of the desert, which he estimated to have been moving at the rate of one kilometer per year for the previous three centuries (Stebbing 1937a: 24, cited in Swift 1996: 5), Stebbing recommended international cooperation in the creation of a continuous forest belt and the strengthening of central and local government power to regulate farming and ban unregulated burning.

Even before Stebbing had published the article quoted above, an Anglo-French Commission of scientists, established at Stebbing's insistence, conducted research after an unusually wet season, and set out a counter-narrative. They refuted most of Stebbing's assertions and concluded that there was no evidence of climate change, but rather of periodic variation in rainfall, with vegetation suffering in dry years and regenerating most rapidly in wet years. Summing up the report, Dudley Stamp, an eminent Africanist geographer, concluded that what was being observed was the world-wide problem of local soil erosion, rather than a desert on the march.

Over the following decade, however, Stebbing's version of the narrative seem to have gained adherents in the French colonial forest service, perhaps because it legitimized their claims to greater authority over natural resources and people. In 1949 A. Aubreville, a French forester, first introduced the term desertification. Despite his participation with the Commission, he now insisted that African farming and herding practices were almost entirely responsible for the destruction of the forest and savannah zones. Nevertheless, the two narratives, along with their entailed assumptions, assertions and recommendations, co-existed uneasily during the 1950s and 1960s, which saw above average rainfall.

The Sahelian drought which began in the late sixties and reached its climax in 1973 precipitated a revival of interest in desertification. Without being cynical, one can say that the drought could not have come at a better time for AID. The

agency was still recovering from a threat to its funding, if not its existence, caused by backlash against the Vietnam war, and trying to cope with a new Congressional mandate that directed it to work with low-income rural people without an increase in its budget. The drought, which was vividly reported on television and in the press, created an opening for the Agency to lobby the Congress for additional funds. And this it did.

AID officials concerned with the Sahel were well aware of the debate over the nature and causes of changes in the Sahara/Sahel boundary. Indeed, they commissioned a year-long review of the evidence by the prestigious Massachusetts Institute for Technology. Nevertheless they aggressively adopted the desertification narrative and made it the centerpiece of their drive for Congressional funding for a major new program for the Sahelian region. In 1972, well before the results of the MIT program were available, AID's Office of Science and Technology stated unequivocally without citing sources that:

..... measurable encroachment in the northern areas of [the Sahelian] countries has occurred and is continuing. While specific areal data are lacking, a rough estimate of magnitude of encroachment south of the Sahara is that about 150,000 square miles of arable land (*i.e.*, suitable for agriculture or intensive grazing) has been forfeited to the desert in the past 50 years... [S]everal studies of the Sahara have concluded that there has been a net advance in some places, along a 2,200 miles southern front, of as much as 30 miles a year. (AID,1972: 2-4, cited in Swift 96: 77-78).

A new Sahelian office was created in AID in response to the drought and the funding opportunity it presented. Under the skillful and charismatic leadership of its first director, David Shear, a former history professor, the office obtained authorization for an unprecedented five billion dollar, twenty-year Sahelian assistance program. Although AID was not successful in obtaining the long-term funding assurances it sought, the Sahel program was remarkable, in bureaucratic terms, for both the size of its budget and the flexibility with which it was allowed to operate. Soon its budget came to rival that of the entire rest of AID's sub-Saharan programs.

Allan Hoben

As it grew rapidly, the new office generated both excitement and resentment within the Agency. It attracted a number of AID's most able and ambitious young professionals. It engaged a significant proportion of the rather small pool of American academics with experience in Francophone West Africa. And it let out research and support contracts to major academic institutions with relevant strengths of many kinds. In this way it built a support network outside the Agency that gave it access to the latest scientific and social science expertise, co-opted those who might be its most effective critics if things did not go as well as hoped, and co-incidentally strengthened its support in the Congress. The office also contracted the services of experts in public relations to assist it with its Congressional presentations. Not surprisingly, its success and autonomy created jealousy in other parts of the Agency. I can recall hearing it referred to as a "satrapy."

In some ways AID's Sahel program was innovative, one might say visionary. Just as he had taken account of pitfalls in the Agency's ambivalent relationship with the Congress, David Shear was keenly aware of the limited capacity of Francophone west African governments and institutions. He also saw the need for adopting a regional, rather than country-specific approach to planning and development, as the former French colonies were in some ways better linked to France than to one another. The program supported a number of institutions intended to create greater research, documentation and analysis capacity in institutions that served all the countries in the Sahelian region. It also supported a wide variety of research, studies and planning exercises.

Ironically, both the MIT desk study and much of the research engendered by the Program tended to discredit the desertification narrative. The Sahara, it seemed, had been oscillating rather than advancing since the end of the Pleistocene. Farming and herding practices were not as destructive as imagined, and it proved very hard to identify technical packages and practices which would improve on existing land, water and tree use under present economic circumstances.

In the end, the major thrust of AID's assistance was directed to rather traditional bilateral projects with individual countries, rather than to regional programs, as the Sahel Office had hoped. This was because the Department of State, and its

embassies, as usual, regarded aid as one of their few tangible foreign policy tools for negotiating with national governments.⁴

In terms of expenditures, the bilateral projects had little to do with environmental issues, but rather emphasized crop production and strengthening existing government extension services through training, infrastructure and institutional support. The production projects were particularly unfortunate, as they were implemented through the traditional French West African colonial top-down approach to agriculture and rural development, which relied heavily on quotas and forced production. Production projects, voluntary or otherwise, were not normally favored by AID's agricultural experts at the time. Their exceptional use was justified by the magnitude of the food security problem.

Over time AID employees working in the Sahel became increasingly discouraged by the gap between official program rhetoric and what was happening on the ground. By the mid-1980s it had become clear that the enormous and poorly coordinated post-drought investment by AID and other donors had far exceeded the absorptive capacity of the Sahelian states. Their project-related recurrent costs were mounting steeply and threatened to run out of control if promises to support donor projects after the end of donor support were kept. In some countries, funds promised dwarfed all other expenditures. It was also evident that institution building and training efforts were increasing the size of government bureaucracies and payrolls, making fiscal stringency and civil service reform, for which the need was already becoming evident, still more difficult.

In retrospect, the programs that had been launched in the name of coping with drought and desertification had little to do with the environment. Information from Sahel Program research called into question the desertification narrative's assertions about the inexorable advance of the Sahara, the nature of environmental change, and the role of human agency in causing the change. Nevertheless, a conjunction of institutional pressures were keeping the narrative alive and well and on center stage in the first world public's awareness of environmental problems in Africa.

If the desertification narrative was useful for a time in AID's Africa Bureau, it became the centerpiece for the United Nations Environmental Program (UNEP), a new UN agency trying to define its distinctive role and a rationale for funding new

programs. As it gained prominence in donors' development discourse, the narrative also justified the efforts of African governments to legitimate their claims to control over natural resources and the farmers and herders who used them.

Two studies carried out in the mid-1970s provided key elements in UNEP's desertification discourse.⁵ The first, commissioned by the Sudanese government, UNESCO and UNEP, was a three-week survey combining aerial reconnaissance with a ground survey carried out by Hugh Lamprey. Using a number of indicators and comparative data from a 1958 survey, the study concluded that the southern edge of the Sahara had moved south 90-100 kilometers in 17 years. This tentative finding was transformed into fact and fixed in desertification discourse as proof that the Sahara was moving south 6 km a year along its entire southern edge. With the advantage of hindsight, it is interesting to note that far more intensive multi-year research carried out subsequently in the same region failed to verify any of Lamprey's observations (Helldén 1991, p. 379).

The other influential study was a book by Fouad N. Ibrahim based on his research in northern Darfur, Sudan. His work supported the conviction that the Sahara was advancing — 650,000 square km in the past fifty years — and that "man is the real cause of this desertification." (Ibrahim, 1984: 17, cited in Swift 1996: 79). The desertification narrative had been grounded in scientific data, located along the southern edge of the Sahara, and fixed, along with its images and rhetoric, in the discourse that was to dominate other views and evidence in UNEP for more than a decade.

International concern with desertification culminated in The United Nations Conference on Desertification (UNCOD) held in Nairobi in 1977. At the conference, for which four extensive state-of-the-art reviews of scientific knowledge had been commissioned, many scientists involved expressed uncertainty about the causes and the extent of desertification.⁶ The final UNCOD report ignored these doubts and concluded that the problem of desertification was "more widely shared, and require[s] greater and longer term action than expected." (UNCOD, 1977a:1) More than one third of the earth's surface was natural desert and semi-desert, another ten percent was man-made desert, and another 19 percent was threatened by the increased intensity of inappropriate land use.

To combat the advance of desertification, UNCOD produced a Plan of Action to Combat Desertification which was to be implemented by the year 2000. In addition to 28 detailed recommendations, the plan proposed large-scale transnational projects which, among other things, would construct a Sahelian green belt from 50 to 100 km wide from the Atlantic to the Red Sea and a somewhat narrower northern green belt of similar length. UNEP was given the mandate to monitor progress on implementing the plan (Swift 1996, pp. 80-81). UNSO was to be the key implementing agency, but aside from inter-agency squabbling over jurisdiction little came of the effort, and the major projects were never funded.

On the basis of a 29-page questionnaire sent to 91 countries, a new set of figures supporting the desertification narrative were issued by UNEP in 1984 (UNEP, 1984). The report made no mention of the doubts and strong reservations of a panel of outside advisers asked to provide an overview of the data. The new figures, which further concretized the narrative and the urgency of the threat it described, passed into the Brundtland Commission report and from there into many other reports, with or without attribution. Though it was never accepted by many dryland scientists, the official UNEP position became part of the orthodox donor discourse on desertification.

UNEP was never able to obtain funding for the major projects envisaged by UNCOD. Nevertheless, the crisis scenario the agency promulgated, and the narrative that supported it, was used by some African governments to justify and intensify the dirigist approach to rural development which was already being challenged. In the name of combatting desertification they sought to legitimize their attempts to strengthen central governments' bureaucratic control over natural resources and over those who lived in the drylands. Pastoral nomads, in particular, were singled out, as their uncontrolled movements and actions were viewed as threats to state sovereignty and security.

Adherence to the dominant desertification narrative and its confusion of *drought* (two or more years of well-below-average rainfall), *desiccation* (a more general process of drying out over a period of a decade or more, leading to changes that may be reversed over the long run), and *dryland degradation* (persistent decrease in the productivity of vegetation and soils, caused largely by inappropriate land use) has masked very real natural resource management problems and distracted donor and

government attention from addressing them. During the following decade, the weight of evidence and scientific opinion eroded support for the desertification narrative and began to shift donors to the alternative, less drastic discourse that focused on specific, localized cases of man-made soil degradation.

By the time of the Earth Summit in Rio in 1992, much of the content of the desertification narrative had changed. Some of the old figures were still used, but climate variation was viewed as equally important to human action, and solutions to land degradation were formulated in the more current discourse of poverty alleviation, environmental education, better incentives for farmers and herders and community-based natural resource management.⁷ Today, the best available evidence suggests strongly that human activities have no impact at all on climate variation in the Sahel, all of the variation being accounted for by phenomenon similar to El Nino in the North Atlantic. Yet it would be difficult to say that desertification had been entirely de-mythologized or de-politicized. Its emotive images and crisis scenario remained. And it was reinserted in the great north-south development debate as the industrial nations insisted on the primacy of global warming and the developing nations held out for the salience of desertification, which seemed more relevant to their situation and their prospects of obtaining development assistance. The international Convention to Combat Desertification signed in 1994 must be seen in this light. Summing up his analysis of what has changed and what has not, Jeremy Swift; himself a participant in the debates surrounding the rise and decline of the desertification narrative, remarks:

There are few scientists or international administrators now who would defend the received narrative of desertification, although it lingers on in many government departments in dryland areas and some development agencies, and is often raised as a critical issue in project formulation in dry areas. A simple idea, adorned with powerful slogans, proves remarkably hard to change, even when shown to be patently inaccurate. (Swift 1996: 85)

V. Summary and conclusions

In this essay I have outlined the key elements of a framework for analyzing development discourse and its relationship to development practice. It is a framework that attempts at once to examine the role of unconscious and semi-conscious structures of thought in shaping the discourse; to analyze the many ways that development discourse is used by individuals, and institutions to justify their actions in the pursuit of wealth, power and prestige; and to understand the way the discourse as used in action influences the impact of development assistance.

To show how the framework can be used, I first suggested that an earlier image of "Africa as Eden" was transformed during the colonial period into one of Africa in crisis or "Paradise Lost." Then, by examining the rise and decline of desertification policy narrative, with its roots in the Paradise Lost narrative, I have illustrated the way particular policy narratives become institutionalized, influence the allocation of financial resources, are challenged and defended, and ultimately can be displaced. Finally, I suggested that African environmental policies are not only based on incorrect assumptions but are counterproductive as well. By influencing both investments and regulations, they often cause hardships for the ordinary men and women whose livelihoods depend on using natural resources, create negative incentives for sustainable natural resource management, and encourage rent seeking and short-term resource exploitation by elites.

I believe the most important contribution of this rather tentative and incomplete analysis is to demonstrate that it is very useful to re-examine development policies and processes as discourse in action. Including the "culture of the developers" in the analysis of what they do helps us understand what otherwise appears to be puzzling and irrational behavior that, in some instances, harms people, degrades the environment and wastes development resources. It helps us to understand the extraordinary shifts and fads that have characterized donors' development policies in sub-Saharan Africa since independence. And it cautions us not to accept simplistic political, conspiracy or dependency theory explanations for these problems.

It may be argued that the policies analyzed here are exceptional. I do not think this is the case. There is a growing literature on environmental policy in Africa that suggests that the role played by the desertification narrative and its

embedded assumptions is by no means atypical (*cf.* Hoben 1995; Leach & Mearns 1996; etc.). Nor by any means are the problems associated with the uncritical use of development discourse limited to environmental policy.⁸

It may also be objected that all public policy inevitably rests on simplifying discourse and narratives. Indeed, this is precisely what Albert Hirschman pointed out in his seminal 1968 study, *Development Projects Observed*. He argues that effective development policies and programs (*i.e.*, ones that succeed in mobilizing funds, institutions and technology) rest on a set of more or less naive, unproven, simplifying and optimistic assumptions about the problem to be addressed and the approach to be taken. Without such a cultural script for action it is difficult for donors and aid recipients to mobilize and coordinate concerted action in the face of the many uncertainties that characterize processes of economic, political and institutional change everywhere, but especially in the less developed nations. More recently Emory Roe has reinforced this point and suggested that it is futile to expect detailed research to do more than shift policy makers to an alternative, equally narrative-based policy (Roe 1991).

While I would agree that all policy rests on development discourse, often set in narrative form, I believe that, for two fundamental reasons, this increases rather than decreases the importance of understanding the processes through which discourse enters policy and influences what is done. First, under some circumstances ignorance and power relations can lead to the adoption of discourse that is detrimental to some or even most stakeholders, including the policy makers themselves. In Africa the circumstances that have contributed to the adoption of damaging policies include: outsiders' poor understanding of distinctive African ecosystems, climate variation, and farming practices; asymmetric international power relations during both the colonial and post-colonial period; and the marginality of Africa in the world economy and industrial nations' foreign policy.

A second reason to recognize and understand the power of development narratives and discourse is that doing so may make it possible to improve development policies. This could be done by establishing high-level policy fora in which policy makers, social and natural scientists and stakeholders can identify the assumptions in alternative narratives and discourse and agree on

how these assumptions may be examined by mutually accepted scientific research (see Brockington and Homewood 1996).

Developing these pragmatic suggestions at greater length, as well as exploring the implications of this approach for anthropological theory and practice, are beyond the scope of this essay. They are, however, fertile topics for future work.

Notes

1. For further discussion of the simplifying role of concepts in development planning, see Wood 1985; Leach and Mearns 1996, p. 7; and Long & Van der Ploeg 1989.

2. It should be made clear that I am not taking a post-modernist position that all policy narratives are equally valid as there is no way of establishing the truth value of any of them. On the contrary, I believe that the value of alternative policy narratives can and should be tested.

3. For examples of the way science can be influenced by received wisdom see Fairhead and Leach 1996 and Stocking 1996.

4. There is always tension between AID and the State Department over the objectives and disposition of foreign assistance. In the early 1970s this was heightened by the fact that AID was just coming back into most Sahelian countries after having been withdrawn during the Vietnam war, in accordance with a high level policy study prepared for President Johnson by Ambassador Korry.

5. The material in the remainder of this section is based on an excellent account of desertification narratives by Swift 1996.

6. The report reflected a new consensus that desertification, to the extent it was occurring, preceded from gradually expanding patches rather than along a broad front. This view was accepted by UNEP and other agencies, but the image of the advancing Sahara continued to be evoked in development discourse.

7. See UN, 1992, Agenda 21, chapter 12.

8. Similar problems have been described for Pastoral Livestock Projects (Hoben 1979, Behnke and Scoones 1993); agricultural research (Richards 1985); and fuel-wood (Leach and Mearns 1988; Dewees 1989).

References

AID, 1972. *Desert Encroachment on Arable Lands: Significance, Causes, and Control*. Office of Science and Technology, USAID, Washington, DC, pp. 2-4.

Blaikie, Piers, 1985. *The Political Economy of Soil Erosion in Developing Countries*. London: Longman.

Brockington, Daniel, and Katherine Homewood, 1996. "Wildlife, Pastoralists and Science: debates concerning Mkomazi Game Reserve, Tanzania," in M. Leach and R. Mearns (eds), *The Lie of the Land: Challenging Received Wisdom on the African Environment*, The International African Institute, in association with James Currey, Oxford, and Heinemann, Portsmouth, NH.

Deweese, Peter, 1989. "The Woodfuel Crisis Reconsidered: observations on the dynamics of abundance and scarcity." *World Development* 17:(8):1159-72.

Hardin, G., 1968. "The tragedy of the commons," *Science* 162:1243-8.

Fairhead, James, and Melissa Leach, 1996. *Misreading the African Landscape: Society and Ecology in a Forest-savanna Mosaic*, Cambridge University Press, Cambridge and New York.

Helldén, U., 1991. "Desertification: time for an assessment?" *Ambio* 20:(8):372-83.

Hirschman, Albert O., 1968. *Development Projects Observed*, Brookings Institution, Washington, DC.

Hoben, Allan, 1979. Lessons from a Critical Examination of Livestock Projects in Africa. Working paper of the Studies Division, Office of Evaluation, USAID, Washington, DC.

_____, 1989. "USAID: Organizational and institutional issues and effectiveness," in R.J. Berg and D.F. Gordon (eds), *Cooperation for International Development: the United States and the Third World in the 1990s*, Lynne Rienner, Boulder, CO, pp. 253-78.

_____, 1995. "Paradigms and politics: the cultural construction of environmental policy in Africa." *World Development* 23:(6):1007-22.

Ibrahim, Fouad N., 1984. "Ecological imbalance in the Republic of the Sudan – with reference to desertification in Darfur," *Bayreuther Geowissenschaftliche Arbeiten* 6. Druckhaus Bayreuth Verlagsgesellschaft, Bayreuth.

Leach, G., and Robin Mearns, 1988. *Beyond the Woodfuel Crisis: People, Land and Trees in Africa*. Earthscan Publications, London.

Leach, Melissa and Robin Mearns, 1996. "Environmental change and policy: challenging received wisdom in Africa," in M. Leach and R. Mearns (eds), *The Lie of the Land: Challenging Received Wisdom on the African Environment*, The International African Institute, in association with James Currey, Oxford, and Heinemann, Portsmouth, NH.

_____, 1996. *The Lie of the Land: Challenging Received Wisdom on the African Environment*, The International African Institute, in association with James Currey, Oxford, and Heinemann, Portsmouth, NH.

Long, Norman, and J. Van der Ploeg, 1989. "Demythologizing planned intervention: an actor perspective," *Sociologia Ruralis* 29:(3/4):227-49.

Richards, Paul 1985. *Indigenous Agricultural Revolution: Ecology and Food Production in West Africa*. London: Hutchison.

Rihoy, E., 1995. *The Commons without the Tragedy: Strategies for Community Based Natural Resources Management in Southern Africa*. Proceedings of the Regional Natural Resources Management Programme Annual Conference, SADC Wildlife Technical Coordination Unit, Lilongwe, Malawi.

Roe, Emory, 1991. "'Development narratives' or making the best of blueprint development." *World Development* 19:(4):287-300.

Stebbing, E.P., 1938. "The man-made desert in Africa: erosion and drought." *Journal of the Royal African Society*, Supplement, January, pp. 3-35.

Stocking, Michael, 1996. "Soil erosion: breaking new ground," in M. Leach and R. Mearns (eds), *The Lie of the Land: Challenging Received Wisdom on the African Environment*, The International African Institute, in association with James Currey, Oxford, and Heinemann, Portsmouth, NH.

Swift Jeremy, 1996. "Desertification: narratives, winners and losers," in M. Leach and R. Mearns (eds), *The Lie of the Land: Challenging Received Wisdom on the African Environment*, The International African Institute, in association with James Currey, Oxford, and Heinemann, Portsmouth, NH.

Tendler, Judith, 1975. *Inside Foreign AID*, Johns Hopkins University Press, Baltimore

UN, 1992. *Agenda 21: the United Nations Plan of Action from Rio*. United Nations, New York.

UNEP, 1984. *General Assessment of Progress in the Implementation of the Plan of Action to Combat Desertification 1978-1984: Report of the Executive Director*. Governing Council, Twelfth Session, UNEP/GC.12/9. UN Environment Programme, Nairobi.

Wood, G. (ed.), 1985. *Labelling in Development Policy*. Sage: London.