Myths and Narratives in Environmental Planning. The Case of Burkina Faso

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Abstract

An exploration of the National Environmental Action Plan (NEAP) in Burkina Faso illustrates the difficulties of sectoral planning for improved natural resource management. Tracing the history of development planning and the background to the preparation of environmental action plans in numerous African countries, leads to an assessment of the results and impact of the NEAP in Burkina Faso. It is argued that the NEAP has played only a marginal role in tackling the environmental problems of the country. The lack of participation in preparation, institutional confusion and insufficient analysis of the main causes of environmental degradation as well as the failure to identify costs and benefits of specific resource management improvements are amongst the shortcomings of the plan. But in particular it is argued that the root causes of ecological degradation portrayed in the NEAP promote and sustain a number of myths and narratives surrounding the environmental development discourse.

1. Introduction

In the aftermath of the work of the Brundtland Commission (WCED, 1987) and the United Nations "Rio" Conference on Environment and Development which culminated in the adoption of the "Agenda 21" strategy (UNCED, 1992) there has been a tremendous upsurge in environmental planning. Both in industrialised countries and in developing countries of the third world the environment has been given an ever increasing priority in national policy making. This has included the preparation of action plans for future environmental management.

Many developing countries have received donor support in an effort to encourage the formulation of national environmental strategies designed to provide a basis for sustainable development by improving the well-being of both people and ecosystems. In some countries where the climatic and agroecological conditions as well as standards of living (socioeconomic conditions) present significant development challenges - such as those in the Sahelian zone of West Africa - the search for sustainable development strategies is particularly important, since improved management of fragile natural resources is fundamental to economic growth. Such economies, including Burkina Faso, are highly vulnerable to the misuse and destruction of natural resources and thus decisively dependent on appropriate resource management strategies. In Burkina Faso, the search for improvements in ecological conditions is part of an effort to maintain agricultural output which has become an important policy objective, as expressed through economic development plans and other strategic planning frameworks¹.

Work to prepare and design national environmental plans and strategies in developing countries has often been backed and encouraged by international organisations and aid donors. In the 1980s, action plans to combat desertification were prepared

¹ These policy frameworks include, inter alia, the policy statement and background studies for the "PASA" agricultural sector adjustment programme (Burkina Faso, 1992a and 1992b) and the sustainable development policy document issued by the government in 1995 which outlines a strategy for "un développement durable" to the year 2005 (Burkina Faso, 1995).

with assistance from the United Nations Sudano-Sahelian Office (UNSO)/United Nations Development Programme (UNDP) and the Permanent Inter-State Committee for Drought Control in the Sahel (CILSS), while national conservation strategies were supported by IUCN (the World Conservation Union) and tropical forestry action plans (TFAPs) have been drafted with the backing from the FAO, UNDP and initially the World Bank². A recent trend is the preparation of national environmental action plans (NEAPs), in which the World Bank has played a key role. At the same time, since the signing of the International Desertification Convention in 1994 - one result of the "Rio" gathering in 1992 - efforts to prepare another series of national action plans to tackle desertification have also been initiated (Toulmin, 1993, 1995 and 1996).

Very little is known about the effects and impact of such environmental plans and strategies as few studies have been carried out to assess the results³. To confront this analytical deficit, the NEAP prepared in Burkina Faso will be subjected to a critical assessment in this article, based on an examination of relevant documents supplemented by information derived through interviews with a number of key persons in the ministries, organisations and donor agencies involved. As an introduction to the discussion of the NEAP and environmental policy making in Burkina Faso the paper begins with some observations on one important underlying issues: the changing role of economic planning for development. This is followed by a

² The roles of these agencies are important in West African environmental planning. The mandate of UNSO has recently changed from a project implementing agency to an organisation responsible in part for the International Desertification Convention. The "Comité Permanent Inter-Etats de Lutte contre la Sécheresse au Sahel", generally known by its French acronym "CILSS" is an intergovernmental organisation linked to the OECD through the "Club du Sahel" which is a consortium of donor agencies operating in the Sahel region. Rather than producing more development plans, in the early 1990s the Club du Sahel and CILSS (together with the African Development Bank) prepared a "long-term perspective study" of trends in West Africa (Snrech, 1994) focusing on population, employment and migration, agriculture and food supply, education and other socio-economic indicators and attempting to assess key determinants of change.

³ However, see, inter alia, the comments on national conservation strategies by Wood (1994), and the recent analysis of the impact of the NEAP in Madagascar by Brinkerhoff (1996) and by Larson (1994).

presentation of the ideal-typical model of the NEAP approach, where the aims of the NEAP process are outlined through a critical examination of some reports and studies which have stated the overall objectives and ambitions of this form of environmental planning. Finally, the plan document will be assessed in relation to the root causes of ecological degradation portrayed, indicating that myths and narratives often associated environmental problems are also maintained in this kind of policy formulation, with an obvious risk that remedial actions proposed may be shortsighted, even counterproductive.

2. Planning for Development

Development planning in third world countries is both a relatively recent phenomenon and one which is so complex that a generalised opinion has failed to emerge. As Robertson (1984, p. 1-2) points out: "Although development planning could now be regarded as mankind's most ambitious collective enterprise, our understanding of it remains debilitatingly vague. This may be because the phenomenon is simultaneously so new, so complex and so widespread that we have not yet been able to form a coherent, generalised understanding of it."

Nonetheless, as Turner and Hulme (1997) have recently pointed out, "during the era in which most Asian and African nations came to independence, belief in the efficiency of development planning knew no bonds." Plans were drawn up to ensure "that poor, agricultural countries would become rich, industrialised nations within a few decades" (ibid., p. 133). By independence in the 1960s, few countries were not engaged in some form of development planning, and the plan itself had become a powerful symbol of modernity.

Such macro-economic development planning reached its peak in the mid-1960s when "developmental states" were regarded as the main agents of development. This was very much inspired by the central planning concept applied in the USSR and in the "Eastern Bloc socialist" countries. Many African leaders aspired to the "socialist" model in which development planning played a key role. The way in which planning was carried out in the former Soviet Union and Eastern European countries was thought

to be desirable, feasible and transferable. The plan was seen as an essentially logical and perfectly realistic ambition; a rational (in an economistic sense) choice which could produce policy and management tools for setting objectives and priorities which could in turn direct decisions (and people) towards the fulfillment of plan targets.

Another source of inspiration was derived from the planning exercises carried out in the USA and Western Europe during and after the Second World War (Conyers and Hills, 1984). In this case planning linked to the disbursement of Marshall aid for reconstruction demonstrated that it was possible to guide economic development and that governments could influence the direction of growth. This was particularly important in countries with mixed economies⁴. With the subsequent spread of Keynesian economic development philosophy which presupposed a major role for the state as a regulator and as an intervening agent in the economy, planning became an increasingly important tool (Toye, 1993, p. 56-62).

Although most developing countries in Africa inherited the post-war, independence "obsession" with development planning (Leys, 1972, p. 57), the results were somewhat meagre. In many cases African governments attempted to perform as "strong states" but they soon became victims of numerous constraints; some related to the way in which the international division of labour was evolving, many more associated with internal problems, such as ethnic strife, corruption and general economic mismanagement. The net result was that the state often lost legitimacy and credibility.

Many observers have been critical of current and past development planning efforts and the way in which they have or have not - been implemented and worked out in practice. In the early 1980s, Killick (1981, p. 61) noted "a rather

⁴ Planning has always been particularly important in France, given the widespread state ownership of industrial capital. The "export" or transfer of strong planning concepts to former French colonies is also evident: for example, in Côte d'Ivoire where French planners used the country's natural resources (palm oil, rubber, cotton and coffee) as a basis for the introduction of sophisticated technical and organisational structures of production. On this process in Côte d'Ivoire, see, inter alia, Marcussen and Torp, 1982.

widespread disillusionment among economists, perhaps among governments, with the utility of development planning". Other reviews of development plans in Africa showed that "there have been more failures than successes in the implementation of development plans" (ibid.).

There are a number of reasons for these failures. Conyers and Hills (1984, p. 46) pointed to the methodological approach used, in which:

"there tended to be far too much emphasis on simply writing plans or vetting projects. In many countries planning was, and still is, regarded as little more than producing some kind of document on either a five-year or an annual basis. This blueprint for the future, often incorporating totally unrealistic objectives, frequently became an end in itself rather than a means for achieving development".

Apart from deficiencies in the plans themselves, other reasons for failure include inadequate capacities in governments and administrations, particularly in relation to coordination between planning ministries and line ministries, shortages of trained and experienced personnel, lack of precise and appropriate information and data, lack of motivation and incentives among administrative and professional staff, interference from politicians⁵, inability to address conflictual issues, a general lack of resources to implement the plans, and inability to counter influences from exogenous sources, such as deteriorating terms of trade, climatic variations, and so on. In response to these and other overwhelmingly negative assessments of "the state of development planning in Africa", researchers began to refer to the "crisis in planning" (Faber & Seers, 1972)⁶.

⁵ Political interference in planning is, according to Leys (1972, p. 62) connected to the fact that "the underlying concept of planning contradicts the basic concepts of politics".

⁶ Of course, development planning has also been ascribed a number of positive effects, particularly when trying to predict what might have happened if plans had not been formulated and (partly) implemented. Among the positive aspects often mentioned is the raising of awareness

Conyers and Hills (1984, p. 47) also summarised the major problems associated with traditional approaches to development planning. They noted that there was too much emphasis on the plan and not enough on implementation, that plans overemphasised the medium term and there was often excessive rigidity as well as differences in perspective and inadequate communication between politicians, planners and administrators. There are also conflicts of interest between planners and those who are being planned for.

Gradually, the approach to planning has changed as the belief in planning as a universal tool which can solve most problems has faded, while the need for planning in developing countries is still recognised, not least in the light of the continued existence of monumental underdevelopment problems, particularly in Africa. Plans are increasingly broader and more comprehensive, reaching beyond purely economic factors to include other sectorial issues, such as environmental impact assessment. Non-economic factors are often included and planning is increasingly seen as a continuous long-term process with simultaneous capacity building. Furthermore, in many cases participatory techniques in planning have been introduced which seek to involve target beneficiaries, eg. those groups who ultimately benefit from the planning effort⁷. The World Bank assisted NEAPs should be seen as an example of such comprehensive planning effort, using participatory approaches and trying to learn from experience.

While these recommendations for improving the approach to development planning are perfectly valid, they do not question the fundamental nature of planning, its very basis as one of the tools of modernisation. Similarly they do not question the "ideal" world in which most planning efforts are conceived and expected to be implemented, nor do they question the inherent

among bureaucrats and politicians of the need to prioritise and to assess the associated benefits and costs.

⁷ The proliferation of different participatory rural appraisal techniques in connection with rural development schemes based on donor funded project intervention is a good example of this trend.

complexities. According to this view, rational planning is both necessary and possible, as in the West, if only the tools and approaches are refined and perfected.

Increasingly, this approach to planning is coming under fire also in the West. Planning, in both the West and the South, is not an uncomplicated and straightforward operation. It expresses rationality and is an effort to supply structured rationality. But according to Mintzberg (1994, p. 17), this rationality is based on an illusion because it is not possible to plan for the future, to prepare for the inevitable, to preempt the undesirable nor to control the uncontrollable:

"Planning is not really defended for what it does but for what it symbolizes. Planning, identified with reason, is conceived to be the way in which intelligence is applied to social problems. The efforts of planners are presumably better than other people's because they result in policy proposals that are systematic, efficient, coordinated, consistent, and rational. It is words like these that convey the superiority of planning" (Mintzberg, 1994, p. 18-19).

Planning is to him primarily a symbolic structure which signals the virtues of modernity and rational choice, but which has limited practical value⁸. What Minztberg fails to see, however, is that even as a symbolic construct with, perhaps only limited intended practical value, planning has its consequences and impact. Plans express not only ideally reason and rationality but also power. The explicit or implicit political agendas introduced through plans have obvious bearings on socio-political conflicts, such as, for example, access rights to land or natural resources.

From another angle, the dominant theoretical development paradigm of what is called "planned intervention" has come under attack in a number of empirical studies of planned intervention, using primarily African examples (Long and van der Ploeg, 1989; Elwert and Bierschenk, 1988; Crehan and von

 $^{^8}$ Referring to the numerous failues of planning, Mintzberg even suggests "that the failures of planning are not peripheral or accidental but integral to its very nature" (1994, p. 221).

Oppen, 1988; de Sardan, 1988). As with development projects generally, plans and planned intervention are expressions of a firmly rooted belief that reality can be empirically disaggregated, data collected, analysed and again synthesised in a manner which facilitates policy formulation, which again leads to implementation and fairly predictable estimates of outcomes. This approach to development intervention is based on a "rather mechanical model of the relationship between policy, implementation and outcomes" (Long and van der Ploeg, 1989, p. 227), is linear in its approach and has a harmonious view of the societal contexts in which interventions are expected to work. At the same time, these "planned interventions" are discontinous elements which make the necessary "break" with the past (where the development problems are "rooted") and, therefore, create the conditions for the change needed and the brighter future to come.

Empirical studies have shown that planned intervention is not a neutral instrument which interacts with harmonious settings in a largely anticipated way. On the contrary, planned intervention is not predictable, as interventions are seen by "target beneficiaries" as arenas of struggle over resources or positions. Thus each group or person use the planned intervention to facilitate their individual "project".

But the belief in the basic rationality and usefulness of "planned intervention" has not faded. On the contrary, plans and strategies have proliferated, often formulated in response to donor requirements and conditionalities for further aid. In particular sectorial plans have been prepared to address, for example, health, educational or environmental issues. In the case of the environmentally related plans and strategies, these are often formulated with a recognising that market forces cannot accomplish everything and that there is still a need for the state to play an important regulatory role (Reed, 1996, p. 340-342 and World Bank, 1997).

3. The NEAP Approach to Environmental Planning. Have Lessons been Learned?

Previous national planning exercises have variously failed for a number of reasons. This goes for macro-economic development planning so popular in the 1960s and 1970s, as well as for the first national environmental strategic frameworks formulated, such as the Tropical Forestry Action Plan⁹.

The preparation of NEAPs started off with the intention of creating a more demand-driven environmental planning process in a limited number of countries in Africa. Subsequently a World Bank Governing Council decision stipulated that such plans should become an obligatory part of the structural adjustment reform process in the sense that no adjustment lending could be expected to be released from the Bank group unless a NEAP was prepared. As a result NEAPs have rapidly grown in number in Africa, and the question is whether these plans have succeeded in learning from the past, avoiding some of the pitfalls of the Tropical Forestry Action Plans (TFAPs) and other planning exercises, in getting beyond the donor and supply driven plans, with their blueprint approaches to planning and so on.

The NEAP approach to environmental planning has been widely publicised and institutional arrangements have been made to involve other donors, in order to establish a forum where experience from NEAPs and lessons learned could be exchanged but also to give an impression of NEAPs being the responsibility of more than just the World Bank itself¹⁰.

⁹ In assessing the TFAPs, the World Resources Institute in Washington did a major effort in synthesizing lessons learned. In consequence of its negative evaluations, however, particularly the role played by FAO in administering the TFAPs, the WRI withdrew its support to the TFAPs after a couple of years.

¹⁰ After a meeting in Dublin in 1990 in which a broad spectrum of donors were invited to share "the NEAP experience" (particularly the one in Madagascar) with the World Bank a "Club of Dublin" was established. The Club was also intended as a network in which the African experts involved in NEAPs could "share NEAP experiences among national teams, disseminate lessons to new national teams initiating the process, develop human resources, and monitor and evaluate NEAPs" (Falloux, Talbot and Larson, 1991, p. 2). The importance of the Club soon faded, however, and

Actually, despite the fact that NEAPs often form part of adjustment programmes (through the conditionalities attached to such loans), the Bank makes a point of constantly emphasizing that the plans are established at the request of governments and that many donors and NGOs are involved, while the Bank is only "hosting" the initiative 11.

With the introduction of this approach to environmental planning, a systematic attempt has been made to try to learn from previous planning exercises. The environmental and sectoral planning exercises included in this "lessons learned" approach range across country environmental studies, profiles and issues papers; National Conservation Strategies (NCS); sectoral action plans, including National Plans of Actions to Combat Desertification (NPLCDs), the TFAPs, and the Energy Sector Management Assistance Programme (ESMAP). Recognising that in particular the efforts of the TFAP and ESMAP have been insufficient, four major lessons learned are outlined:

- environmental planning must be demand and countrydriven rather than donor and supply or product-driven;
- the effectiveness of sectoral planning exercises is greatly enhanced if they form part of a more comprehensive environmental planning framework, the interpretation of which is that TFAPs and ESMAPs have suffered from this, while NEAPs offer this "more comprehensive framework";

instead a number of regional meetings were held. While attempting to get African experts to play a more influential role in the experience learning process, but in reality guided and supervised by Bank staff, the Bank at the same time hired a number of the most highly qualified environmental experts from the NEAP countries, or NEAP countries in spe, and brought them to Washington where, as Bank staff, they were supposed to give a clearer African profile (and perhaps "ownership") to the NEAP process.

¹¹ Nevertheless, given the fierce criticism of World Bank involvement in funding a series of large and environmentally questionnable projects in Brazil, India and elsewhere, a good deal of effort was put into "greening the Bank" from the end of the 1980s (George & Sabelli, 1994, p. 162ff). The World Bank interest (and intellectual investment) in NEAPs should perhaps be seen in this perspective too.

- helping a country to define its priorities is necessary but not sufficient. "A time-bound action plan has to translate such strategy into immediate actions"; and
- previous experience has shown that popular participation and building of national capacities are crucial to successful planning, and that particularly these aspects have to be incorporated into NEAPs, while the coordination of the various planning exercises in each country has to be strengthened "to enhance synergy and avoid wasteful competition" (Falloux, Talbot and Larson, 1991, p. 8).

Thus the plans are drafted in an attempt to avoid the pitfalls of previous planning exercises, while refining and perfecting the instruments of planning. The essence of a NEAP is explained as follows:

"A National Environmental Action Plan is a process. It is intended to provide a framework for integrating environmental concerns into a country's economic and social development, and to imbed that framework in the fabric of the government and peoples so that it is their process; they have "ownership" of it and it is an authentically national effort. Consequently, the development of a NEAP requires that it be a demand driven effort requested by the country itself and it requires the mobilization and meaningful participation of all levels of society, governmental and non-governmental" (Falloux and Talbot, 1993, p. 19).

Comparing the NEAP to previous planning efforts, the same authors also summarise what makes the NEAP different in the following ways: it is based on a demand-driven process approach; it is an in-country process; it involves broad participation by all segments in society (in particular NGOs are expected to play an influential role); it involves a long-term process, not a one-time report; it is holistic, action oriented and it is focusing on underlying causes of environmental degradation. In addition, the Bank stresses institutional factors, which are both constraining and enabling in furthering appropriate (environmental) planning, and which need to be adequately addressed to make the NEAP work. The land tenure issue is

particularly important in this context, and Falloux and Talbot (1993, p. 100) unreservedly repeat traditional Bank policy notions about the virtues of private land ownership¹².

The Bank's concern about institutional issues, expressed as a need for creating a "dynamic and evolving institutional framework", has a number of consequences for the approach to planning, which may or may not fit in with the other objectives of participation and ownership of the planning process. The need for institutional reform is translated into requirements to establish environmental policy and legislation, which is often lacking in African countries, as well as to establish the institutional framework for dealing with the environment. The latter seeks to address the problems associated with environmental issues cutting across traditional divisions between sectors, and the fact that most often African governments "lack institutional structures for dealing with environment. The NEAP process is instrumental in creating institutional reforms which are intended to correct this fundamental problem" (Falloux, Talbot and Larson, 1991, p. 10).

That most governments lack institutional structures for dealing with the environment seems a bit strange, as most governments have ministries dealing explicitly with the environment. But the Bank suggests the following approach to environmental planning:

"To run the NEAP process, governments must establish a three-tier organization: (i) a steering committee at the policy level; (ii) a NEAP Secretariat at the working level to ensure the multi-sectoral participation and coordination; and (iii) task forces for the selected environmental issues" (ibid., p. 2).

^{12 &}quot;Without security of land ownership, those who occupy the land are more inclined to mine the land's resources rather than manage them on a sustainable basis". This assessment of the virtues of private land ownership has increasingly come under attack, also from within the Bank itself - see for example the study by Migot-Adholla et al. (1991) - but has not prevented the Bank advocating in a rather blueprint fashion cadastral surveys to be made, paving the way for privatisation. For a discussion of land tenure issues in the West African Sahel, see, inter alia, the paper by Thébaud (1995b).

This outline does not seems to be very flexible or adaptable to local circumstances. Rather it is an indication of a blueprint approach, as the phrasing indicates, where the "must" seems to be exactly that: a condition for continued funding of the NEAP. It also follows well in line with other traditional Bank approaches, where existing institutional structures (which need strengthening) are bypassed when they do not meet with Bank expectations regarding efficiency, accountability and transparency. This results in parallel structures being erected by the Bank.

The information available on the Bank experience from this and other approaches to the NEAP process is rather sparse¹³. A couple of reports have, however, been produced by the World Resources Institute (which was also involved in reviewing the TFAP). Among the problems identified after only a handful of NEAPs were initiated in Africa are difficulties related to achieving effective, grassroots participation. In both the cases of Uganda and Ghana these difficulties are related, in part at least, to the NEAP being based on an government agreement, where the institutional structure forms part of a top-down hierarchy which does not easily translate itself into participation by grassroots in the design, formulation and implementation process. Another problem is that NEAPs - when linked with decentralised institutions - tend to favour, what is termed "external" forces (Talbott, 1990, p. 10), such as church groups, development NGOs or other formal structures, at the expense of "traditional, indigenous institutions which have for centuries organized and directed local much activity development" 14.

13 In connection with what he calls Country Environmental Studies (CES) which include the NEAPs, Arensberg (1992, p. 155) points out that "We have relatively good information that describes what has been done in the past, but there have been no thorough, field-based comparative evaluations indicating how effective CESs actually have been".

¹⁴ The report recommends that "A critical issue for NEAPs is to define the role of the traditional political and social institutions (Chiefs, Council of Elders, etc.) in a development initiative that is essentially liable to be driven by external forces (international donors, national governments, and regional authorities)".

Often NEAPs present a harmonious view of development issues and state action, as if conflicts were not inherent parts of any development process¹⁵. In particular NEAPs have neglected issues such as conflicting interests relating to land and resource use, and often needs have been assessed through very short field visits by external consultants, rather than as a more committed and continuous effort¹⁶.

Much more recently Brinkerhoff (1996) has pointed out major problems of coordination in the NEAP formulated for Madagascar as early as 1987, one of the first in Africa of its kind. In the Plan, the coordination issue was a key factor and following the requirements set out in the NEAP, the Malagasy government established a National Office of the Environment by decree which was intended to be the implementation and coordination network of national institutions. However, in the course of time, other institutions were created which were also given coordination mandates.

Part of the problem was that the NEAP document itself and enabling legislation did not provide definitions of cooordination nor any guidance on how to establish consensus, coordination and concerted action. Another part of the problem - a rather common one in Africa - was that administrative and technical capacities were limited, and that the institutional capacity building foreseen was "consistently overestimated" both in

¹⁵ A similar criticism was raised against the TFAPs which did not incorporate and analyse the trade-offs and divergent interests involved in exploiting forestry resources, see Winterbottom, 1990.

The fact that national team members for the first time travelled to regions affected by a NEAP is seen as a positive experience by Talbott (1990, p. 12), which it sadly, is: "In Guinea, Uganda, and Madagascar, the WRI Center joined national members of the NEAP teams and NGOs to conduct similar field work. In Guinea, for example, several NEAP national team members travelled for the first time to the four main biophysical regions of the country, gaining invaluable first hand knowledge of local conditions and perceived priorities." By contrast, in drafting the NEAP in Benin, a series of regional and national "problem identification" workshops were held, and efforts were made to reduce the "external" input to a minimum (Republique du Bénin, 1993).

terms of the magnitude of the problem and the time needed to build these capacities 17.

By the mid-1990s, around 30 countries in Africa had initiated or were in the process of initiating a NEAP (Dorm-Adzobu, 1995). The first plans were drafted in 1987 for Madagascar, Mauritius and Botswana. The "second generation" of NEAPs were formulated shortly after, including those in Ghana and Lesotho (Falloux, Talbot & Larson, 1991) as well as in Burkina Faso where the first version of the action plan was prepared in 1991 (Burkina Faso, 1993b & 1994). Although the time span since 1991 is relatively short, Burkina Faso offers a good case for reviewing the general experience with the NEAP process. Burkina Faso belongs to the generation of "NEAP-countries" which have been among the first to try this type of environmental planning, while having had the opportunity to correct some of the "infant sickness" elements which were associated with the Madagascar case for example.

4. The NEAP in Burkina Faso

Prior to the adoption of the first version of the NEAP in 1991 a number of planning initiatives and measures to tackle environmental problems had been introduced in Burkina Faso. Extensive legislation known as the "Réorganisation Agraire et Foncière" (RAF), dealing with land ownership, access and tenure rights - which was introduced by the revolutionary government in 1984 - was arguably the first step towards a new conception of environmental regulation. Village organisations were given the authority (on paper at least) to plan land allocation and approve measures to enhance the productive capacity of the

^{17 &}quot;The capacity demands of managing NEAPs are high. Implementation networks are complex structures to manage, and call for management, political, and interpersonal skills that can be difficult to find in any country. Madagascar's NEAP performance targets for each of the plan components are quite ambitious in light of the capacities required. The need for capacity-building was recognized from the start, and the NEAP's design includes institutional development. The speed, however, with which capacity could be built and then translated into performance was consistently overestimated. Thus, the perspective of various donor oversight missions during the first years of NEAP implementation was that things were "behind schedule" (Brinkerhoff, 1996, p. 1506).

land. However, in vesting land rights in the state, the RAF was found to be something of an obstacle to reform when the time came for the government to negotiate a structural adjustment loan with the World Bank. Thus, in 1991 as a conditionality prior to the loan agreement, the RAF was revised, and private ownership of land was authorised (Speirs, 1996, p. 113). Subsequently, discussions about appropriate forms of land tenure regulation and the content as well as the application of new legislation have blossomed in Burkina Faso¹⁸.

In a further effort to tackle environmental degradation in the wake of the severe drought in the early 1980s, the government also adopted a "Plan National de Lutte Contre la Désertification" (PNLCD) in 1986. This was largely, but not exclusively, an initiative of the forestry services. As elsewhere in the Sahel, deforestation and the problems of supplying woodfuel were rapidly becoming major concerns and the longer term impact of the loss of vegetation on livelihoods in the region was increasingly in the limelight. At the same time, following from certain articles in the RAF which laid the basis for the establishment of community land management organisations, a national natural resource management programme was launched. This was known as the "Programme National de Gestion des Terroirs" (PNGT) and focused on decentralised management of natural resources 19.

Preparations for the NEAP started in 1989 with a number of studies carried out by Burkinabè researchers, followed in the same year by a seminar which issued several recommendations for the action plan. This process was repeated in 1990 through more studies and followed up in 1991 with another national seminar. Finally, the NEAP was drafted in 1991 and after a

¹⁸ See, inter alia, the fascinating study of the inconsistencies of environmental legislation in Burkina Faso (1993d) prepared in connection with the round table on the NEAP in 1994 (see below) as well as the paper by Lund (1996).

¹⁹ The World Bank together with other donors including the UNDP subsequently funded a "PNGT" project. This "community based" rural development strategy ("gestion des terroirs") has rapidly become the generalised approach used by numerous donors and NGOs to deal with land degradation and resource management in the Sahel (CILSS, 1989).

process of "relecture" (re-reading) in 1993, where the document was once more assessed, a second version of the plan was published in 1994. The resulting NEAP (or "Plan d'Action National pour l'Environnement") comprised an analysis of the state of natural resources in the country (a "diagnostic") and the presentation of three framework programmes ("programmes cadres") and two support programmes ("programmes d'appui") which constituted the main thrust of the activities proposed.

The original version was prepared by a team under the guidance of the World Bank and with several Bank staff and consultants on board, while the head of the CNLCD secretariat (the secretariat established in connection with the PNLCD) assisted in the editing, probably to show some form of continuity and willingness to learn. The team consulted with all possible ministries and government departments, most donors present in Burkina Faso, international organisations, research institutions, the private sector (primarily Burkinabè consulting firms) and a couple of NGOs. Although the preparation process seems to have been rather thorough, few Burkinabè were closely involved and it was heavily directed by the World Bank. But ensuring participation and participatory processes, encouraging the involvement of NGOs, and ensuring in-country processes and demand-driven approaches do not seem to have been fundamental pillars in the work, at least not in the sense and with the seriousness prescribed in Bank documentation (Falloux, Talbot & Larson, 1991 and Falloux & Talbot, 1993).

As a document adopted by the government of Burkina Faso, the NEAP is presented as a planning tool for environmental management in accordance with the requirements of the UNCED and Agenda 21. In this sense, the government certainly has developed some form of "ownership". But ownership in the sense that the government unequivocally had requested the NEAP to replace an apparently deficient PNLCD is less obvious, and the lack of participatory processes seems not to have made it easier to convince the government that this was their plan. The World Bank Governing Board decision to require the preparation of NEAPs as a precondition for adjustment loans has also weighed against efforts to foster "local ownership" of the environmental action plan.

In the programmatic sense used by the World Bank in seeking "demand-driven, in-country" planning efforts based on

participatory approaches, the NEAP in Burkina Faso does not live up to expectations. The "ownership" which has gradually evolved seems more related to the "cargo cult" syndrome and the opportunistic expectations that with a new plan more external funding for projects may be generated.

As mentioned, NGOs were only marginally involved and almost no representatives from the private sector took part in consultations prior to or during the NEAP formulation (Burkina Faso, 1994, annexes). The NGOs thus did not in any way influence the process, nor have they been given anything near a prominent role in the implementation, except that NGOs generally are expected to play a key role in strengthening the institutions of civil society in the wake of state retraction following from adjustment policies. Also in broadening the PNGT approach NGOs are expected to be key partners for village based community structures.

But the NEAP-process has not succeeded in moving any further forward in relation to previous planning failures, and appears to suffer from the same shortcomings with respect to impact and sustainability.

5. The Root Causes of Ecological Degradation Portrayed in the NEAP

Some of the weaknesses of the NEAP have been pointed at above, such as the plan being overly comprehensive, as being everything and nothing, weak on economic analysis and not prioritising among the various remedial actions proposed. In addition, the NEAP has with regard to using a participatory approach or having NGOs playing a major role in the design and formulation process not lived up to the ideal requirements as formulated by the Bank.

Neither in terms of substantial content and analysis, does the NEAP seem to advance understanding of specific environmental problems in Burkina Faso beyond the approach and "diagnosis" which formed the basis of the PNLCD in the 1980s. Nor does the NEAP offer an analysis of root causes of ecological

degradation which reach beyond what has been termed "traditional development narratives" (Roe, 1991 and 1995).

As stressed by Allan Hoben (1997), "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". In this way, a particular development discourse "becomes not merely a set of beliefs or a theory, but a blueprint for action". And Hoben continues: "Because they (the development narratives) 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".

In other words, development narratives develop a logic of their own, where established truths are constantly repeated and where the mutual confirmation of beliefs as to what causes ecological degradation is repeated by the various actors, be it representatives of the aid community, government officials or even researchers. These constant repetitions and confirmations establish thereby the basis for these conventional wisdoms becoming cemented parts of the aid jargon, which are so difficult to modify or change. The more people repeat the same perceptions as to root causes of ecological degradation, irrespective of what research results or actual experience may have shown, the more cemented and irrevocable the narratives become.

In the following, some of the root causes of ecological degradation portrayed in the NEAP for Burkina Faso will be discussed, several of which being part of the myths and narratives surrounding the environmental development discourse, which are present not only in environmental planning such as the present case, but more generally within the area of "planned intervention".

The equilibrium notion

Very often, in planned intervention, references are made to an earlier, more harmonious and balanced state of the environment,

which could be labelled the paradise lost narrative. According to this notion, the environmental narrative tells us, in Hoben's phrasing, "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".

In the case of the NEAP, this paradise lost notion is reflected in the basic objective of the plan, namely to reestablish the equilibirum between man and nature, which is believed to have existed in the past. In the NEAP it is formulated, as follows (translation ours):

"...the ultimate objective of a rational natural resource management plan is to search for an socio-economic equilibrium and, finally, an equilibrium between man and nature".

In other words, it is taken for granted that an environmental equilibrium existed in the past, where man and nature, pastoralists and farmers, lived in harmony, without conflicts or serious competition between them. Representatives of the various production systems lived happily together without threatening any "carrying capacity", or any other expression of equilibrium thinking.

What this narrative obviously is neglecting is, what has been amply demonstrated in current and past research, that an equilibrium probably has never existed. On the contrary, the representatives of the various production systems, but in particular pastoralists, have continuously been adapting their herding practices to situations of constant change and disequilibirum. The transhumant grazing patterns, the constant adaptations in migration patterns to availability of water and grazing, has created a very flexible and adaptable production system, which has established at its very basis a notion of disequilibrium as the normal condition of survival and existence. The same goes probably for other forms of livelihood in the Sahel.

The crisis narrative

Closely following from the above is the narrative, which tries to depict a situation of severe crisis, which can only be remedied through the realisation of the objectives sketched out in a proposal, be it a NEAP or a development project. Unless the NEAP is supported heavily by the donor community, the environmental crisis, in the form of land degradation or even desertification, may take on a form which will be irreparable or irreversible.

In a number of project documents this often take on the form of postulating that due to the processes of ecological degradation, the number of hectares (most often in the thousands) which have been lost, either due to overgrazing, extending the cultivated area, cutting in the vegetation for fuelwood needs, or bush fires, etc.etc., are so drastic that all vegetation or farm land will be lost to degradation processes or the advancing dunes before the turn of the century. - These calamities are often offered as established truths, and the thousands of hectares postulated lost over the past few decades are proposed as the outcome of scientific and valid monitoring and data collection processes. Which, however, they are not. They are often wishful thinking, or at their best, guesstimates, but neither particularly reliable nor valid.

Examples of such wild guesstimates are offered in plenty supply in the NEAP, as, for instance, when trying to measure up the economic costs of losing land to degradation processes:

"...it seems fair to estimate the costs of the degraded renewable natural resources to be in the range of 20 to 25% of the GNP for Burkina Faso".

Other examples include numerous accounts of water availability in the plan, indicating increasing shortages ("the total surface water resources available to-day are far less than the demand"), the frequent mentioning of "the accellerated environmental degradation", or grossly summarised deficit situations with regard to not only water, but also woody vegetation, grazing areas, etc. ("Since 1980, there has been an overexploitation of the forestry resources resulting in a considerable reduction in forest cover").

Related to these crises narratives, some wishful thinking is on the other hand represented, when the optimistic forecasts of using the correct and appropriate technologies are suggested:

"At the producer level, the benefits which can be expected, are particularly high, provided that the available and appropriate technologies are made accessible to the farmers and adapted to their requirements. In such cases, these techniques can foster increases in outputs ranging from 30 to 130%, and produce a return on investment close to 100%..."

The population - environment nexus

In a country where the population growth rate is around 3 percent per year, the demographic "pressure" is often thought to be the main enemy of the environment, through an increased demand for both land and wood. In the NEAP, this is expressed as follows:

"The demographic growth and the rate of occupation of the available spatial resources, particularly in certain regions, is among the most important factors...(...). The demographic pressure is, beyond doubt, the single most important factor responsible for the overexploitation of the national natural habitat... (...). The immediate consequence of the rapid population growth is translated into the abandonment of traditional cultivation practices, which in particular pay respect to the environment (long fallow periods, shifting cultivation, pastoralism)".

While these factors are of course part of the picture of environmental degradation in the Sahel, they do not tell the whole story, and are often repeated ad infinitum in development plans and other documents in order to justify project funding. Recent research into the ecology and economics of dryland farming systems in "complex, diverse and risk prone" areas suggests that the dynamics of degradation are a good deal more complicated than is implied in the NEAP document.

The population, agriculture and environment "nexus", reinventing the "Boserup hypothesis" of technological innovation

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as a consequence of population growth, has also been tackled in several provocative and stimulating studies including those by Mortimore (1995) in northern Nigeria and by Tiffen, Mortimore and Gichuku (1994) in Kenya. Hoben (1995) has shown how a neo-Malthusian "environmental policy narrative" in Ethiopia served both the Ethiopian government and the donors in efforts to attract huge sums of aid for food-for-work land reclamation schemes which have had only limited effect. As another example, Williams (1995) has illustrated how a "development discourse" based on a causal chain of more people, less land, lower agricultural productivity, less food and more degradation, is being put forward in numerous World Bank publications in order to justify population control policies to curb growth rates in Africa.

Overgrazing, cutting in the vegetation, bush fires and extending the area cultivated

Apart from the demographic factor, there is not much doubt in the NEAP as to what have caused the environmental problems in Burkina Faso.

The extension of the cultivated area has, together with the uncontrolled cutting in the vegetation by household members and the overgrazing following from an increase in livestock numbers, led to ecological degradation. These factors are, in addition to bush fires, unreservedly blamed for the environmental problems in the country:

"The constant expansion of land under cultivation, including expanding onto forest and bush land, is, beyond doubt, at the very basis of the reduction in vegetation cover. Other factors contribute to the degradation processes. Among these, in particular the uncontrolled cutting in the vegetation to cover fuelwood needs, the overgrazing and the bush fires". "...the increasing livestock numbers are responsible for the overgrazing".

As can be seen, the causal chain proposed is rather straigthforward and nearly to be taken as self evident. Such broadly sketched "diagnoses" of the root causes of degradation canhardly be of much help for the government and others who

look to the environmental action plan for strategic advice. What is even more problematic is that the analysis is not only superficial, but also disregards the results of much recent research.

Much of this research has been published relatively recently, in 1994 and later, but has been in the making since the early 1990s and has definitely not been unknown to the Bank, as seminars discussing and qualifying "conventional wisdom" have been arranged throughout, with World Bank participation and, in cases, Bank financing. This goes, for example, for discussions of what may be called the "desertification narrative", which by Nelson received a major qualification already in 1988, while the rude concept of desertification still lingers on in Bank publications, such as the NEAP for Burkina Faso. Here "desertification" is seen as a major cause of ecological degradation, while the only indicator in the NEAP document is a map (Burkina Faso, 1994, p. 27) showing preliminary estimates of soil degradation through wind and water erosion (where the measuring units are not specified).

Another area is the complexity of grazing patterns and pastoral production systems in the Sahel which has been extensively explored by Sandford (1983) and more recently by Scoones (1994) and Thébaud (1995a). Such research has, inter alia, demonstrated that pastoralists' "herd and land-management strategies are not, in fact, precipitating overgrazing and linear degradation, but instead are making the most of productive opportunities in highly variable and patchy dryland environments" (Leach and Mearns, 1996, p. 29).

Also the excessive fuelwood cutting as a cause of vegetation loss has been questioned by research results, such as by Leach and Mearns (1988) and more recently by Benjaminsen (1996). In conventional thinking (and as portrayed in the NEAP) again environmental degradation is seen as a linear process, where cutting the vegetation causes deforestation which again leads to a situation where present and future demand for fuelwood will exceed supply. But, as shown by research, the dynamics of degradation are a good deal more complicated than meets the eye at first sight. For instance, most woodfuel comes not from cutting live trees, but either from surplus wood left over from clearing of land (Leach and Mearns, 1996, p. 2-3) or from

collecting dead wood and branches (Benjaminsen, 1996). In addition, sources of fuelwood are much more varied, including smaller trees, bushes and shrubs - rather than simply tall standing trees, etc., etc. Including these more varied and broader perspectives, "there is not just one, very big problem of energy supply, but many smaller problems of command over trees and their products to meet a wide range of basic needs, including food" (Leach and Mearns, 1996, p. 3)²⁰.

The need for awareness creation

The NEAP for Burkina Faso has a number of strategic options, particularly in building capacities with Burkinabè institutions and creating new ones. In addition, the NEAP consists of a wide variety of programmes, but in particular projects, some new, but the majority being already existing projects funded by a variety of donors, now, however, supposed to be included under the NEAP umbrella, as part and parcel of the NEAP strategy for redressing environmental problems.

In addition, a major strategic component is to "sensibilise", eg. to create environmental awareness with the users of the land, in order to motivate and create a greater understanding for the necessity of taking good care of the environment:

"First of all, the proper management of the village land presupposes a strong effort in creating awareness, educating and motivating the users of the land. The fulfillment of this fundamental necessity requires the mobilisation of all local energies, through a process of "redynamisation" and a stronger effort in land management".

Again, this may be both needed and appropriate. But taking it for granted that this should be one of the major preoccupations of a NEAP, may be overdoing the job - and may be redirecting

²⁰ Leach and Mearns (1996, p. 3) continue: "The way in which the problem and solution are framed in the case of the woodfuel crisis offers a classic example of how 'received wisdom' about environmental change obscures a plurality of other possible views, and often leads to misguided or even fundamentally flawed development policy in Africa".

the attention to the wrong issues. For a good deal of research (Richards, 1985; Chambers, 1993) has, for instance, shown that the local users of the land are well aware of the environmental implications of what they do, but do not feel in a position to change this fact, given external and internal socio-economic constraints. Peasants and pastoralists may not be ignorant and in great need of mobilisation or "sensibilisation", but rather already experienced and with great environmental sensitivity, although, perhaps, lacking the means and the material preconditions for correcting on their situation.

Again the plan is portraying the environmental problematique in a superficial and non-complicated way, as if it was self-evident that the masses were to be mobilised, possibly with the assistance of some external experts, either from abroad or from the national administration, who so self-evidently are in a position to transmit the right and correct messages to those in need.

6. The Impact of the NEAP in Burkina Faso

It can easily be argued that the production of recurrent plans which often resemble each other in content, structure and approach is a duplication of effort and a waste of scarce resources. This may be the result of donor-driven pressures as well as of government inability - or lack of will - to coordinate and to decline the offer of a new plan when the dust from the previous document has barely settled. But the institutional confusion which arises from this duplication of effort is seriously detrimental to capacity building for environmental management which is greatly needed in a country like Burkina Faso.

Not infrequently, donors compete to create or strengthen institutional structures (organisations, departments of ministries, agencies, etc.) which suit their purposes. The World Bank often appears to prefer the creation of new structures rather than reinforcing existing ones, and in terms of environmental planning, has a blueprint for a three tier structure which is thought to be most suitable (see above and

Falloux, Talbot & Larson, 1991, p. 2). Thus in Burkina Faso, the NEAP entailed the establishment of a government coordination committee ("le Comité Ministeriel de Suivi") chaired by the Ministry of Finance and Planning. In addition, an interministerial technical coordination committee ("le Comité Interministerial de Coordination Technique") was set up comprising 14 members from 12 different ministries. The idea of this committee is to determine coordinated approaches environmental problems cutting across sectoral interests. Finally, a permanent secretariat with a number of technical staff was established in order to guide the day-to-day implementation of activities under four NEAP programmes (outlined above). The UNDP, not the World Bank, has been selected as the coordination forum for donors supporting environmental activities in Burkina Faso, while regional coordination of NEAP activities is carried out through regional planning authorities.

While this institutional set up may seem perfectly logical on paper at least, in practice it is less convincing. The permanent secretariat has been re-organised and overhauled a couple of times since 1991. With the impending new workload to plan the implementation of the Desertification Convention, there are moves to revise staffing and other working relationships of the secretariat. At the same time, there are considerable problems related to a secretariat and "Conseil" which attempts to coordinate the activities of other ministries which may be higher up the hierarchy. Adding to these problems are a lack of a clearly defined mandate and insufficient technical skills.

Another problem relates to shifting portfolios amongst the ministries dealing with environmental issues. This problem is not unique to African countries. Obviously the Ministry of the Environment has overall responsibility for environmental policies and coordination. In Burkina Faso, the "Direction des Etudes et Planification" (the research and planning department) of the Ministry of Environment and Water is supposed to collect data and information related to the environment, to monitor environmental projects and to conduct environmental assessments of projects prior to funding. These are all tasks which also come within the mandate of the permanent secretariat.

Further institutional conflicts may arise between the Ministry of Finance and Planning and the Ministerial Committee responsible for the NEAP (Burkina Faso, 1993, p. 30). Again donors exert significant influence, particularly when the role and mandate of the different bodies are not clear in relation to project funding proposals for example. Thus, although many of these institutional difficulties may be apparent in both rich and poor countries, the NEAP process does not appear to have made things simpler and may have exacerbated some of the problems²¹.

At a round table meeting of donors and the government in early 1994 a status report was presented and the implementation of the NEAP assessed (Burkina Faso, 1993b, 1993c, 1993d). The main objective of this meeting was to gain support from the donors for a five year investment programme and to review the proposed coordination mechanisms. At the request of the Burkinabè government, the UNDP agreed to act as the coordinating organisation for the donor community in relation to the NEAP²².

The round table "sur le PANE" in 1994 (as reported during another round table with donors held in Geneva in 1995) did not generate any significant additional funding for the activities proposed in the NEAP. Both bilateral donors and multilateral agencies simply incorporated some projects in the spheres of environmental protection and natural resources management into

²¹ See for instance Brinkerhoff (1996) for a similar institutional confusion resulting from the formulation and implementation of the NEAP for Madagascar.

²² The World Bank had been looking to be the lead agent in the follow up to the NEAP, but was "beaten" by UNDP. From an examination of similar coordination conflicts in other countries, it is obvious that the World Bank does not want to be coordinated by any other agency, least of all the UNDP, despite the fact that the UNDP Resident Representative is usually designated UN Coordinator. Thus, while the UN organises round table meetings of donors, the World Bank holds parallel sessions in order to coordinate donor efforts in backing structural adjustment programmes. The institutional confusion which results from these conflicts between the UNDP and the World Bank, may, in the case of Burkina Faso, have led the World Bank to rapidly abandon any ambitious efforts to manage environmental strategies through the NEAP since it had lost control of the process.

the overall "programmes" outlined in the NEAP (Burkina Faso, 1995a). However, the round table meeting also revealed another main weakness of the NEAP; namely that despite statements and efforts to the contrary, the plan was likely to end up as a shopping list of projects for which the government was seeking donor funding.

Although attempting to build on the (relative) successes of decentralised land management, the main problem with the NEAP is that it is far too ambitious, too broad and covers a wide range of environmental issues on which it is difficult to intervene effectively. Thus the NEAP appears unrealistic. It is everything and nothing, as was pointed out by several observers during interviews in Ouagadougou at the end of 1996. The plan entirely lacks strategic choices and fails to outline environmental development scenarios with associated cost and benefit analyses. In terms of environmental policy making in Burkina Faso, it is as if the NEAP did not exist!

7. Concluding Remarks. Are Environmental Plans Addressing the Right Issues?

An assessment of the NEAP in Burkina Faso suggests that it has played a fairly marginal role in focusing on environmental problems and that it has not been a very useful instrument in furthering policy making in relation to these problems. Moreover, in comparison with the World Bank's ideal NEAP, in which lessons from the failures of previous planning efforts are supposed to have been learned and incorporated in design, the "PANE" in Burkina Faso seems to have a number of shortcomings. Some of the rhetoric about the potential impact of environmental planning seems to be little more than wishful thinking.

In addition to this, the NEAP for Burkina Faso has in its analysis of the root causes of environmental degradation been portraying oversimplified statements which, it was argued, contributed more to cementing conventional wisdom, myths and narratives, than to solving the environmental problems of the

country. In fact, the superficial and oversimplified analysis presented in the NEAP risks introducing measures and solutions which could even prove counterproductive.

But apart from that, are environmental action plans the right answer to a complex development problematique?

Many researchers, including a few planners, would be doubtful in that respect. Plans and planning processes are in their view part of the "planned intervention" approach seeing development as a mechanical and linear process, which is believed to be entirely predictable and controllable. The way in which environmental planning is conducted in Third World countries is often based on a rationality belief, which, however, does not correspond to reality.

While the World Bank may have devoted some efforts in "perfecting the tools", these efforts have been directed to a limited number of issues, while other key contextual issues have been largely neglected. Together with many liberal thinkers, the Bank has, for instance, disregarded or not satisfactorily analysed conflicts, tending towards a homogenous view on how to plan for the environment, presupposing that consensus can easily be reached, and disregarding that a plan - or a plan process - is an example of an outside intervention which, with its resources, enters arenas (or establish new ones), where individuals or groups of people (often mediated by institutions) position themselves with their own agendas, in order to reap the benefits in power or monetary terms.

The problem with environmental plans, the way they have been adopted, is that they are an echo from the modernisation age, an expression of modernity, with a blind belief in prediction, objectivity and manageability, seeing the objects of planning as - exactly objects, and the context in which planning is supposed to work as a well-understood and well-functioning machine²³.

²³ This is also expressed by Turner and Hulme (1997, p. 149), as follows: "The approaches used for planning must recognize that knowledge is often limited, information only partially available, uncertainty and risk considerable, analytical capacity is a scarce resource and that planning is inherently a political process".

References

Arensberg, W., 1992: Country Environmental Studies: A Framework for Action, *Environmental Impact Assessment Review*, Vol. 12, No. 1/2.

Barbier, Edward, 1991: Natural resource degradation - policy, economics and management. In: James Winpenny (ed.): Development research - the environmental challenge. Overseas Development Institute (ODI), London.

Benjaminsen, Tor A., 1996: Bois-énergie, déboisement et sécheresse au Sahel: le cas du Gourma malien, *Secheresse*, Vol. 7, no. 3.

Brinkerhoff, Derick W., 1996: Coordination Issues in Policy Implementation Networks: An Illustration from Madagascar's Environmental Action Plan, World Development, Vol. 24, No. 9.

Burkina Faso, 1992a: Lettre de politique de développement agicole (LPDA) - Programme d'ajustement structurel du secteur agricole. Ministère de l'Agriculture et des Resources Animales, Ouagadougou.

Burkina Faso, 1992b: Programme d'ajustement structurel du secteur agricole (PASA) - Rapport général de synthèse, avec annexes. Ministère de l'Agriculture et des Ressources Animales, Ouagadougou.

Burkina Faso, 1993a: Les grandes orientations en matière de gestion des terroirs au Burkina Faso. Programme National de Gestion des Terroirs (PNGT), Ministère de l'Agriculture et des Resources Animales, Ouagadougou.

Burkina Faso, 1993b: Note introductive sur le Plan d'Action National pour l'Environnement (PANE). Document de base pour la consultation sectorielle sur l'environnement. Ministère des Finances et du Plan, Ouagadougou.

Burkina Faso, 1993c: Stratégie du Plan d'Action National pour l'Environnement (PANE). Document de base pour la consultation sectorielle sur l'environnement, Ministère des Finances et du Plan, Ouagadougou.

Burkina Faso, 1993d: Analyse des textes législatifs et réglementaires sur l'environnement. Document de base pour la consultationsectorielle sur l'environnement, Ministère des Finances et du Plan, Ouagadougou.

Burkina Faso, 1994: Plan d'Action National pour l'environnement (PANE), 2è édition, Sécretariat Permanent du PANE, Ministère de l'Environnement et du Tourisme, Ouagadougou.

Burkina Faso, 1995a: Revue des programmes sectoriels dans l'agriculture, l'environnement, les transports, le secteur privé et le renforcement des capacités institutionelles de gestion de l'économie. Document pour le conférence de table ronde (Genève), Ministère des Finances et du Plan, Ouagadougou.

Burkina Faso, 1995b: Lettre d'intention de politique de développement humaine durable, 1995 - 2005. Document pour la conference de table ronde, Genève, Ouagadougou.

Burkina Faso, 1996: Role de la recherche scientifique dans la protection de l'environnement (document du forum de la recherche scientifique, avril 1996), Centre National de la Recherche Scientifique et Technologique (CNRST), Ouagadougou.

Carew-Reid, Jeremy, R. Prescott-Allen, S. Bass and B. Dalal-Clayton, 1994: Strategies for National Sustainable Development. A Handbook for their Planning and Implementation, Earthscan, London.

Colchester, Marcus and Larry Lohmann, 1990: *The Tropical Forestry Action Plan: What Progress?*, World Rainforest Movement and The Ecologist, Penang.

Colchester, Marcus and Larry Lohmann (eds.), 1993: *The Struggle for Land and the Fate of the Forests*, World Rainforest Movement and the Ecologist, Penang.

Conyers, Diana and Peter Hills, 1984: An Introduction to Development Planning in the Third World, John Wiley and Sons, Chichester.

Cort, Cheryl, 1991: Voices from the Margin: Non-Governmental Organization Participation in the Tropical Forestry Action Plan, World Resources Institute, Washington.

Crehan, Kate and Achim von Oppen, 1988: Understandings of 'Development': An Arena of Struggle, *Sociologia Ruralis*, vol. XXVIII, 2/3.

Dalal-Clayton, Barry, et al., 1994: National Sustainable Development Strategies: Experience and Dilemmas, IIED, London.

Dorm-Adzobu, Clement, 1995: New Roots: Institutionalizing Environmental Management in Africa, World Resources Institute, Washington.

Elwert, Georg and Thomas Bierschenk, 1988: Development Aid as an Intervention in Dynamic Systems. *Sociologia Ruralis*, Vol. XXVIII, 2/3.

Faber, Mike and Dudley Seers, (eds.), 1972: The Crisis in Planning, Vol. I and II, Sussex University Press, London.

Falloux, Francois, Lee Talbot and Jeri Larson, 1991: Progress and Next Steps for National Environmental Actions Plans in Africa, Environment Division, Technical Department, The World Bank, Washington.

Falloux, Francois and Lee M. Talbot, 1993: Crisis and opportunity. Environment and development in Africa, Earthscan, London.

FAO, 1985: *The Tropical Forestry Action Plan*. Food and Agriculture Organisation, Rome.

Greve, Albert Michael, Julian Lampietti and Francois Falloux, 1995: National Environmental Action Plans in Sub-Saharan Africa. Environmentally Sustainable Development Division. Africa Technical Department. The World Bank, Washington.

Hoben, Allan, 1995: Paradigms and Politics: The Cultural Construction of Environmental Policy in Ethiopia. *World Development*, Vol. 23, No. 6.

Hoben, Allan, 1997: The Role of Development Discourse in the Construction of Environmental Policy in Africa. Paper presented to the Research Seminar on "Concepts and Metaphors: Ideologies, Narratives and Myths in Development Discourse", International Development Studies, Roskilde University.

Johnson, Brian, 1991: Responding to Tropical Deforestation. An Eruption of Crises - An Array of Solutions, WWF, Washington.

Killick, Tony, 1981: Policy Economics, Heinemann, London.

Killick, Tony, 1995a: Economic inflexibility in Africa - evidence and causes. In: Tony Killick (ed.): The flexible economy - causes and consequences of adaptability in national economics. ODI & Routledge, London.

Killick, Tony (ed.), 1995b: The flexible economy - causes and consequences of adaptability in national economics. ODI and Routledge, London.

Larson, Bruce A., 1994: Changing the Economics of Environmental Degradation in Madagascar: Lessons from the National Environmental Action Plan Process, World Development, Vol. 22, No. 5.

Leach, Melissa and Robin Mearns (eds.), 1996: The Lie of the Land. Challenging Received Wisdom on the African Environment. The International African Institute, James Currey and Heinemann, London.

Lewis, Jeffrey, 1995: Community-Based Land Management in West Africa. A Review of the Experience, The World Bank, Ouagadougou.

Leys, Colin, 1972: A New Conception to Planning?, in: Faber and Seers, 1972.

Leys, Colin, 1996: The rise and fall of development theory. EAEP/Indiana University Press/James Currey, Nairobi, Bloomington and London.

Long, Norman and Jan Douwe van der Ploeg, 1989: Demythologizing Planned Intervention: An Actor Perspective, *Sociologia Ruralis*, Vol. XXIX, 3/4.

Lund, Christian, 1996: Land tenure disputes and state, community and local law in Burkina Faso. In: Kabré and Speirs (eds.), 1996: Environmental Management in the Sahel - research approaches and methods, *SEREIN Occasional Paper No. 4*, Institute of Geography, University of Copenhagen, Copenhagen.

Lynch, Owen J., 1990: Whither the People? Demographic, Tenurial and Agricultural Aspects of the Tropical Forestry Action Plan, World Resources Institute, Washington.

Marcussen, Henrik S. and Jens Erik Torp, 1982: Internationalization of Capital: Prospects for the Third World, Zed Books, London.

Marcussen, Henrik S. (ed.), 1994: Improved Natural Resource Management. The Role of the State versus That of the Local Community. *Occasional Paper No.* 12, International Development Studies, Roskilde University, Roskilde.

Migot-Adholla, S., P. Hazell, B. Blarel & F. Place, 1991: Indigenous land rights systems in sub-Saharan Africa - a constraint on policy? *World Bank Economic Review*, 5 - 1.

Mintzberg, Harry, 1994: The Rise and Fall of Strategic Planning, MacMillan, New York.

Mortimore, Michael, 1995: Caring for the Soil. Agricultural Expansion, Population Growth, and Natural Resource Degradation in the Sahel, in: Reenberg and Marcussen (eds.): The Sahel. Ethnobotany. Agricultural and Pastoral Strategies. Development Aid Strategies, SEREIN, Copenhagen.

OECD, 1995: Planning for Sustainable Development. Country Experiences, OECD, Paris.

Reenberg, A. and H.S. Marcussen (eds.), 1995: The Sahel. Ethnobotany. Agricultural and Pastoral Strategies. Development Aid Strategies, SEREIN, Copenhagen.

Reenberg, A., H.S. Marcussen and I. Nielsen (eds.), 1996: The Sahel. International Environmental Conventions. Health and Environment. Afforestation and Environment, SEREIN, Copenhagen.

Robertson, A.F., 1984: People and the state. An anthropology of planned development, Cambridge University Press, Cambridge.

Roe, Emery M., 1991: Development Narratives, Or Making the Best of Blueprint Development. *World Development*, Vol. 19, No. 4.

Roe, Emery M., 1995: Except-Africa: Postscript to a Special Section on Development Narratives. *World Development*, Vol. 23, No. 6.

Sandford, Steven, 1983: Management of Pastoral Development in the Third World. Wiley, Chichester.

de Sardan, Jean-Pierre Olivier, 1988: Peasant Logics and Development Project Logics, *Sociologia Ruralis*, vol. XXVIII, 2/3.

Scoones, Ian (ed.), 1994: Living with Uncertainty. New directions in pastoral development in Africa, Intermediate Technology Publications, London.

Seers, Dudley, 1972: The Prevalence of Pseudo-Planning, in: Faber and Seers, 1972.

Speirs, Mike, 1996: Structural adjustment in Burkina Faso, 1983 - 94. in: Poul Engberg-Pedersen et al. (eds.): *Limits to adjustment in Africa - the effects of economic liberalisation*, 1986 - 94. James Currey, London.

Talbott, Kirk, 1990: Public Participation in African Environmental Action Plans, Center for International Development and Environment, World Resources Institute, Washington.

Talbott, Kirk and Michael Furst, 1991: Ensuring Accountability: Monitoring National Environmental Action Plans in Africa, Center for International Development and Environment, World Resources Institute, Washington.

Thébaud, Brigitte, 1995a: Pastoralisme et Degradation du Milieu Natural au Sahel. Mythe ou Réalité?, in: Reenberg and Marcussen (eds.): *The Sahel*, SEREIN, Copenhagen.

Thébaud, Brigitte, 1995b: Land tenure, environmental degradation and desertification in Africa - some thoughts based on the Sahelian example. *Drylands Network Issues Paper*, 57, IIED, London.

Tiffen, Mary, Michael Mortimore and Francis Gichuki, 1994: More People, Less Erosion. Environmental Recovery in Kenya, Wiley, Chichester.

Toulmin, Camilla, 1993: Combatting Desertification: Setting the Agenda for a Global Convention. IIED *Issues Paper*, No. 42, London.

Toulmin, Camilla, 1995: The Convention to Combat Desertification: Guidelines for NGO Activity. IIED *Issues Paper*, No. 56, London.

Toulmin, Camilla, 1996: Tackling Dryland Degradation: Will a Convention Help?, in: Reenberg, Marcussen and Nielsen, 1996: The Sahel. International Environmental Conventions..., Copenhagen.

Toye, John, 1993: Dilemmas of Development. Blackwell, Oxford.

UNCED, 1992: Agenda 21. United Nations General Assembly agreement. United Nations, New York.

WCED (World Commission for Environment and Development), 1987: Our Common Future, Oxford University Press, Oxford.

Williams, Gavin, 1995: Modernizing Malthus. The World Bank, population control and the African environment, in: Crush, Jonathan (ed.), 1995: *Power of development*, Routledge, London.

Winterbottom, Robert, 1990: Taking Stock: The Tropical Forestry Action Plan After Five Years, World Resources Institute, Washington.

Winterbottom, Robert, 1991: Environment Action Plans for the greening of Africa, *People*, Vol. 18, No. 1.

Wood, Adrian, 1994: National Sustainable Development Strategies in Africa, in: Marcussen (ed.), 1994.

World Bank, 1997: World Development Report. The World Bank, Washington.