From Policy Guidelines to Problem Solving

A Critical Assessment of the National Conservation Strategies of Botswana and Zambia

Kjetil Børhaug

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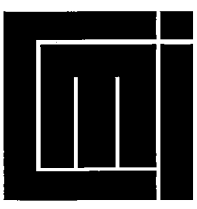

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Summary:

This study focuses on the National Conservation Strategies of Botswana and Zambia. The strategies contain detailed elaborations about environmental problems, goals, means and implementation. The implementation of the NCSs depend on a number of conditions and the main part of this analysis discusses whether these efforts are likely to produce the intended changes. The conclusions reached are that the efforts will most likely have effects on governmental performance, but that the effects will probably be unexpected and that some intended effects will not materialise.

Sammendrag:

Denne studien fokuserer på de nasjonale miljøvernstrategiene i Botswana og Zambia. Strategiene inneholder detaljerte utredninger om problemer, mål, midler og iverksettingstiltak for miljøvernet. Gjennomføringen av strategiene avhenger av en rekke betingelser, og hoveddelen av analysen diskuterer hvorvidt disse tiltakene vil føre til de ønskete endringer. Studien konkluderer med at tiltakene vil ha klare virkninger på offentlig iverksettingskapasitet, men at virkningene vil være uventete og at noen av dem vil utebli.

Indexing terms:	**Stikkord:**
Environmental protection	Miljøvern
Government policy	Offentlig politikk
Botswana	Botswana
Zambia	Zambia

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Abbreviations

ALDEP	-	Arable Lands Development Program, Botswana.
ARAP	-	Accelerated Rainfed Arable Program, Botswana.
EIA	-	Environmental Impact Assessment.
GOB	-	Government of Botswana
GOZ	-	Government of Republic of Zambia
IUCN	-	International Union for Conservation of Nature and Natural Resources
LIRDEP	-	Luangwa Valley Integrated Resource Development Project, Zambia.
MFDP	-	Ministry of Finance and Development Planning, Botswana.
MLGL	-	Ministry of Local Government and Lands, Botswana.
NCDP	-	National Commission of Development Planning, Zambia.
NCS	-	National Conservation Strategy.
NDP	-	National Development Plan, Botswana.
NEAP	-	National Environmental Action Plan.
NEC	-	National Environmental Council, Zambia.
NGO	-	Non Governmental Organization.
TGLP	-	Tribal Grazing Land Policy, Botswana.
SSA	-	Sub-Saharan Africa.
UNDP	-	United Nations Development Program.
UNEP	-	United Nations Environment Program.
WWF	-	World Wildlife Fund.

Preface

What can be done to address the environmental problems in Africa? Protecting the natural environment of African societies is an important goal because people's lives depend upon its achievement. The environmental problems are accelerating, and they are among the causes of poverty in African societies. But how can they be addressed? How can structures and processes which will focus continuously on these matters be established? Are national comprehensive plans an answer?

I first heard of the National Conservation Strategy of Botswana in 1989, when I was in Botswana doing field work for my master thesis. I soon learned that also other countries had formulated or were about to formulate such national strategies. The strategies looked impressive. They dealt with a whole range of problems, they formulated sub-goals and means. They designated responsibilities. Implementing all this would quite obviously be a huge challenge, and it seemed reasonable to expect that it would pose problems. My aim in this study is to point out more precisely what problems we should be prepared to encounter. The hope is that it will be a useful contribution to those who work with these issues from day to day. The contribution I hope to make, is to give names and labels to likely problems. But I will also argue, as I do in the concluding chapter, that such strategies may be worthwhile even if they produce results that are different from those envisioned in the NCS documents. The study is based on literature studies and on short visits to Lusaka, Gaborone and to IUCN head quarters in Geneva in 1992.

Alf Morten Jerve has commented the contents and language of this study. The study was made possible by a generous grant from the Royal Norwegian Ministry of Foreign Affairs. I would also like to thank the Chr. Michelsen Institute for a pleasant working place during most of the period I have worked on this study.

1. Introduction

The environmental problems in Sub-Saharan Africa (SSA) are now recognised as a major challenge by most governments in the area. Among the reasons for this development are increasing donor pressure, a worsening of the environmental degradation and a growing amount of research documenting the seriousness of the problems and their consequences.

The trend in most countries seems to be to address the environmental issues by means of national, comprehensive policies. One group of countries has formulated National Environmental Action Plans in cooperation with the World Bank. Another group has developed National Conservation Strategies assisted by the International Union for Conservation of Nature and Natural Resources (IUCN) (Toulmin 1991: 27). Botswana and Zambia are two countries found in the latter group, and our study object is the National Conservation Strategies of these two countries.

The National Conservation Strategies (NCS) are impressive. They address a whole range of important problems and they have high ambitions. If these plans or at least parts of them can be put into practice, that would be an important and very encouraging achievement. The question is naturally if they really can be implemented. The study of implementation processes has developed rapidly the last 20 years. Students of African development have also increasingly come to realize the importance of the processes of putting plans and programs into practice. It is now common knowledge that implementation often fails in Africa.

Numerous conditions for successful implementation have been identified in the literature (van Meter and van Horn 1975). One group of conditions focuses on the qualities of the policy itself. Another group focuses on characteristics of the implementing organisations. A third group focuses on the relationship between implementors and target groups.[1] We will in particular examine the two latter types of conditions. These conditions are recognised by the policy makers in both countries, and efforts are planned to meet them. Our main concern is what

[1] Included in these groups of conditions are that goals have to be clear, consistent and clearly communicated, the implementing agencies must have sufficient capacity and the right type of capacity, the active support and endorsement of the policy must be developed among the implementors, the policy itself must be based on relevant means-ends knowledge, policy makers must have some means to control the implementing agency and finally, the implementing agencies must handle powerful actors in the environment who wish to alter the policy.

prospects these efforts have to meet the conditions and thus facilitate implementation.

These objectives require the following steps in our discussion:

1. What requirements do the policies impose on the governmental apparatuses in the two countries? We will focus on a few, which are also identified as crucial by the policy makers. First is the requirement that a whole range of agencies in the governmental machinery has to take up new tasks of a conservationist[2] nature, i.e. that they change their present activities in a conservationist direction. The second requirement is that various agencies coordinate and integrate their respective activities in cross-sectoral programs. Third is the requirement that this policy and its implementation are adjusted to local variations regarding what problems to address and how, and that it mobilizes the knowledge and the resources of local populations. Finally, donors have to be activated and contribute funds and expertise.

2. To what extent are the governmental agencies capable of meeting these requirements? As will be shown below, there are reasons for concern.

3. What measures are suggested to increase this capability? The designers of the environmental policies in both countries have identified several shortcomings, and have proposed a number of measures to enhance the capability of government institutions to act according to the policies.

4. Will these measures enable government organisations to play the kind of role that the policies require? This is the main question of this study.

Environmental policy is a broad category and can be defined in a number of ways. In this study we take as a point of departure that the National Conservation Strategies of Botswana and Zambia are perceived as centre pieces of their environmental policy, and we will limit our discussions to the NCSs.

It is still too early to evaluate these strategies, as well as the actual effects of the measures proposed to facilitate their implementation. The NCSs have just been launched. Thus, this study is no evaluation of performance, but an attempt to point out where problems are likely to occur in the process of implementation.

The data material for the present analysis comprises of interviews with civil servants, NGO representatives, IUCN officials and NORAD personnel working in

[2] The terms conservation and environmental policy and protection are used as synonyms, conservation being the term most often applied in the policy documents.

both Zambia and Botswana. Furthermore, the plan documents of the National Conservation Strategies have been examined.[3]

In the following chapters, we will first outline in brief what problems the policies address, how the policies have developed, what general objectives they contain and what requirements for governmental action the policies prescribe. From this background, we move on to discuss the prospects of the various measures to facilitate implementation of the NCSs.

Our main objective is to identify possible problems of an organisational nature in the cases of the two NCSs. However, these conditions are of importance for environmental policy making and implementation in most African countries. We observe that in most countries, the environmental problems are met with national comprehensive plans. If the conditions for such planning cannot be met in the case of our two NCSs, than there is reason to be sceptical about the prospects of similar plans as well.

[3] These documents include the formally approved plans, some of the preparatory memoranda, drafts of proposals for organisation, and some conference proceedings and progress reports.

PART I

BACKGROUND: ENVIRONMENTAL PROBLEMS, GOALS AND POLICY MEANS

2. The development of the National Conservation Strategies in Botswana and Zambia

The environmental degradation in Zambia and Botswana is not an entirely new phenomenon. Overgrazing was recognised as a serious problem in Botswana already in the 1930's. In Zambia, environmental protection early became an issue for the colonial administration, and regulation on land use, notably forests, was introduced by the colonial authorities (GOZ 1985: 27).

However, like most newly independent states, Botswana and Zambia saw environmental protection as a low priority task. It was perceived that this objective was far less important than the one of socio-economic development, and environmental policy was understood as a complicating factor in development processes (Baker 1989; Colby 1990). Furthermore, regulation on the use of natural resources was discredited as illegitimate colonial repression.[4] Consequently, environmental issues were largely ignored. In recent years, however, they have come high up on the political agenda.

Before the National Conservation Strategies were initiated, both countries had already adopted fragments of an environmental policy, trying to solve acute problems within various sectors. The NCSs in contrast, represent an ambition to formulate a national, integrated strategy, encompassing all sectors and activities. In other words, the NCSs imply a change in scope as well as in integration of the environmental policy in both countries.

The processes leading to the formulation of the National Conservation Strategies in Botswana and Zambia are quite parallel. Both processes were launched in the early eighties. In 1983, the Government of Botswana invited the International Union for Conservation of Nature and Natural Resources (IUCN) to assist in the development of the strategy. The IUCN provided expatriate expertise and consultancies. IUCN's assistance was largely funded by NORAD, SIDA, UNDP, UNEP, the Netherlands, EEC and USAID (GOB 1986: 11-13; 1990a: 2).

The Zambian National Conservation Strategy came as a result of contacts and discussions between the very top political leadership of the country and IUCN.

[4] See for instance Matiko (1990), for the case of Tanzania. Interview Mr. Maimbolwa, Lusaka, april 1992.

After a feasibility study, the work on the National Conservation Strategy was launched in early 1984 and completed by the end of the same year. As in Botswana, a permanent IUCN mission assisted the project, and the Swedish and Dutch donor agencies provided funds (GOZ 1985: 18).

In both countries, the key policy makers were a relatively limited group of government officials, assisted by IUCN advisors. In Botswana, a group of officials in the Department of Town and Regional Planning, Ministry of Local Government and Lands coordinated, guided and kept up the momentum in the policy making process (GOB 1990a: 2). Task forces and technical committees with representatives from the various agencies were mobilized and put to work in a coordinated manner, providing background papers and knowledge. In Zambia, a small secretariat in the Ministry of Lands and Natural Resources led a larger, multi-sectoral Task Force, which organised and coordinated the work. More background information was provided by a 30 member Technical Group, representing various agencies and interests groups (GOZ 1985: 8).

In Zambia, the NCS was approved by the Cabinet and the UNIP Central Committee in 1985. However, soon after the political approval, the NCS encountered problems. A serious economic, social and political crisis paralysed the Government and it was not until 4 — 5 years later that the process got back on the track. In Botswana the process took more time. There was controversy over the livestock policies signalled in the NCS, and the NCS was not approved by the Cabinet and the National Assembly until 1990.

3. Main issues addressed by the National Conservation Strategies of Botswana and Zambia

The National Conservation Strategies address a whole range of issues. The question of whether these issues are the most important ones and whether they are correctly understood is beyond the scope of this report. In general, the policies seem to include the problems most frequently mentioned in the literature. Thus, we will only briefly outline the problems addressed in the policy documents.[5]

Water scarcity

Botswana suffers from scarcity of water, and more efficient management is urgently needed. The many different needs for water put a very heavy pressure on water resources, whose carrying capacity is not sufficiently well known (GOB 1990a: 20-21). Zambia has larger water resources, but also in Zambia, increasing demands for water combined with poor management systems and infrastructure, make water shortage a prospect within less than 10 years. An additional problem is the serious pollution of water supplies in areas with intensive mining and industry (GOZ 1985: 55).

Deforestation

In both countries, trees and bushes are an important source of energy, and construction, fencing and crafts also depend on wood resources. Around towns and larger settlements bush and forests are being depleted at an accelerating pace (GOB 1990a: 23; GOZ 1985: 23-27), which in turn leads to erosion, reduces water catchment capacity and increases off-take of remaining forestry resources.

Numerous causes of deforestation are identified. A particular problem in large parts of Zambia is slash-and-burn agriculture (*chitemene*) (GOZ 1985: 24-25;

[5] Environmental policy guidelines in both countries identify control of the population increase as an important issue (GOB 1990a: 27; GOZ 1985: 53-54). Both countries have very high growth rates, that have to be reduced. However, even if this is presented as a major problem, not much is said about operational goals and practical means. This contrasts with the other problems identified. This issue will therefore be left out in the remaining analysis.

NORAGRIC 1989).[6] Overgrazing is mentioned as a cause, as it prevents forests to regenerate (GOZ 1985: 26). The problem is not only the magnitude of the forest off-take. It is also the lack of coordination among various users.

Overgrazing

This is seen as the most urgent problem in Botswana (GOB 1990a: 23), but also in Zambia is this a serious problem in areas where people keep livestock (GOZ 1985: 33). The consequences of overgrazing include increasing losses of animals, diminishing returns on livestock production, soil erosion and deforestation.

The causes of overgrazing are numerous. Management systems have increasingly proved incapable of preventing over-exploitation of common grazing lands. Governments' development policies, in particular in Botswana, have allowed and encouraged expansion of the national herd without sufficient regard to ecological conditions (GOB 1990a: 22-23). Arable expansion into grazing areas has intensified the problems.

Pressure on wildlife and natural vegetation

Protection of natural fauna and flora requires considerable areas of land, and in both Botswana and Zambia, these needs for land conflict with land requirements for livestock and agriculture. Zambia experiences severe pressure on wildlife resources as well as on reserved land, endangering valuable species and eco-systems (GOZ 1985: 42). Pressure on wildlife resources is a problem in Botswana as well. To stop the depletion of veld products is given particularly high priority (GOB 1990a: 24-25). While wildlife is threatened by human activities, wildlife also creates problems for human activities, for instance, arable farming through crop damage.

In Botswana, the cattle industry causes problems by expanding the grazing areas, and by erecting cordon fences that interfere with wildlife migration routes. There are multiple claims on wildlife and natural vegetation in both countries. Local people need hunting and gathering grounds, the tourism industry needs the resources and there is strong claim for the preservation of resources for aesthetic reasons (GOZ 1985: 42). The problem of poaching is also significant.

[6] *Chitemene* is a traditional form of cultivation, which was sustainable as long as land was allowed sufficient fallow periods. Due to increasing population pressures this is no longer the case in many areas.

Industrial and urban pollution

There is a growing problem of pollution from settlements. Disposal of waste is arbitrary and sanitary infrastructure is not adequately developed in Zambia (GOZ 1985: 38). Botswana's settlements often suffer from the same problems (GOB 1990a: 25). Pollution from mines and industry is also recognised as a significant problem, although such sites are not numerous, particularly in Botswana. But the problem is aggravated by the fact that settlements are often located near industrial sites and mines (GOZ 1985: 52; GOB 1990a: 25-26).

These problems are caused by neglect and poor governmental control and legislation. Not least local governments have failed to develop satisfactory sanitary infrastructure. Furthermore, industries, particularly in Zambia, are outdated and worn down, due to sinking profits and shortage of foreign currency for import of spare parts and improved technology.

Agriculture

Arable farming is not included in Botswana's list of priority issues although it is perceived as a problematic area, e.g. concerning soil erosion (GOB 1990a: 2). Zambia makes agriculture a more prominent issue in its environmental policy. Poor cultivation techniques, overgrazing, deforestation, inadequate fallow periods and poor crop rotation systems all contribute to erosion and diminishing agricultural output (GOZ 1985: 30-32). Other pertinent problems are dangerous use of chemicals and inconsistency between production types and ecological potential, due to price and other incentives promoting cultivation of a particular crop, while the land may better suited for other crops.

Poverty and underdevelopment

A recurrent theme is that the development process is dependent on the solution of environmental problems. On the other hand, the environmental problems result among others from poverty and underdevelopment. It is emphasized that if exploitation of resources can be made optimal and sustainable, this will be a major contribution to the development process and to the struggle against poverty. Which will further improve the resource management systems.

4. Objectives of the National Conservation Strategies

The NCSs comprise of a whole range of objectives and not all of them can be reviewed here. We can identify three overall objectives that are more or less the same in the two countries.

1. All resources should be in use. In the documents one can hardly trace any concerns for protecting nature for its own sake. It is perceived that each country is dependent on its own resources, and the emphasis is on maximum utilisation for the benefit of development. The policy documents stress that an environmental policy should aim at identifying untapped potentials and it is argued that this is one of the ways in which environmental policies may assist the development process.

It follows that more information should be gathered about what resources exist. The NCSs do also identify some inadequately tapped resources. For instance, fisheries in Botswana are said to have an untapped potential and forest resources as well as agricultural land are said to be under-utilized in Zambia (GOZ 1985: 17,23; GOB 1990a: 14).

2. All use of resources should be sustainable. The concept of sustainability is often criticized for not being a very clear analytical concept (Jerve 1990). Here it is applied as a political principle, meaning that renewable resources should be used in ways allowing it to regenerate and to be harvested indefinitely.

The policies identify a number of resource exploitation practices that are definitely unsustainable, and in need of changes. Exploitation of water, arable land, forests, pastures, fish and wildlife are all pointed out as areas where substantial changes are needed in both countries (GOZ 1985: 65; GOB 1990a: 7,38).

The changes that are required to fulfil the goal of sustainability include first of all, changes in technology. Exploitation can only be made sustainable if improved technologies in production, processing and consumption are adopted. Secondly, and of equal importance, are changes in the resource management systems, including land use planning, management of common resources and land tenure. Along with these changes there will be a need for infrastructure development.

3. The use of resources must be optimal (GOB 1990a: 2; GOZ 1985: 15). This means that the use of a resource should be as efficient and profitable as possible.

Efficiency and profit can be greatly enhanced by reducing losses and waste of harvested resources. It is a goal to improve storage technology and marketing infrastructure, e.g. for fisheries and agricultural products (GOZ 1985: 36,49).

Optimal off-take of a resource requires that there is a well functioning management system, which can regulate accurately how much can be harvested at various points in time. The development of improved management systems for groups of users as well as individual users is considered important.

Furthermore, resources used should be further processed and value-added. Zambia points out this challenge within fisheries and forestry (GOZ 1985: 23,29,49). In and near urban centres, the agricultural and fuel wood production potential should be better utilized and managed in sustainable ways, as there is a growing market for these products.

Strongly emphasized in both countries is the potential of multiple use of resources. This include agro-forestry, combining controlled off-take of wildlife with local communities' needs for hunting and multiple use of water (GOZ 1985: 65).

5. Policy means and governmental action

How do the NCSs envision that these goals can be reached? Even if substantial emphasis is placed on education and information that may motivate people to take a responsibility for conservation themselves, the heaviest responsibility is placed on the governmental apparatus. As already indicated, the NCSs point out a large number of fields where the Governments have to intervene with assistance, guidance, technology, credit, training, regulation and planning. The policies do not spell out in detail what should be done within various sectors and sub-sectors. However, we can outline a framework for implementation of the strategies. The general approach is that the existing governmental structure should elaborate specific programs and projects. Among the principal guidelines for this implementation are:

1. The sectoral agencies have a primary responsibility to solve the environmental problems within their fields, and to adjust present activities to the NCS guidelines.

2. Due to the cross-sectoral character of environmental problems, governmental agencies are expected to cooperate closely and to design integrated programs and projects.

3. Because the problems and potentials vary greatly throughout the country, local adjustment of policies is absolutely necessary. Furthermore, implementation should seek to mobilize the knowledge and resources of the local people. Finally, implementation has to be adjusted to people's perceptions, wishes, interests and needs in order to build legitimacy and acceptance.

4. The strategies aim at quite massive action, in many sectors and locations. This means that donor support is absolutely necessary. Neither Botswana nor Zambia dispose the required financial and professional resources, and need assistance.

These guidelines for implementation will be elaborated in the following section. Our main concern is whether the expectations and demands expressed by the NCS can be met.

5.1 Expectations to the performance of sectoral agencies

The NCSs place heavy requirements on the governmental agencies who are responsible for sectoral and national policies affecting the use of resources. Agencies that deal with livestock, agriculture, fisheries, forests, water resources, and wildlife are in particular singled out as key actors in both countries.

The present activities of these agencies are seen as not sufficiently consistent with the new environmental policies, and changes are required. This means firstly, that already existing environmental responsibilities have to be addressed more forcefully. In particular the Zambian policy emphasizes this concerning sectors like forestry, agriculture, wildlife and fisheries (GOZ 1985: 26-28,32,42,48-49). Also Botswana recognises the problem of poor enforcement of existing environmental rules and regulations due to shortage of funds and skilled manpower (GOB 1990a: 15,21-23,32).

Secondly, the various agencies are expected to develop new, specific environmental goals and premises for their sector, and adjust their ordinary projects to these. The policy makers in Botswana explicitly point out various agricultural projects that have to be adjusted (GOB 1990a: 48). It is underlined that Environmental Impact Assessments have to be included in the planning of all projects of environmental relevance (GOB 1990a: 70-72). Also the Zambian policy states that environmental principles have to be integrated in all sectors. For instance agricultural extension programs, town planning and tourism development projects all need adjustment to environmental goals (GOZ 1985: 32-34,40-46,64).

Thirdly, policies that are unsustainable should be phased out. The Botswana policy states that destumping for arable development has to be stopped, but it seems mainly to be left to the sectoral departments and ministries to identify which activities are unsustainable.

Fourthly, it is required that these agencies take up new tasks. For instance, the Zambian policy signalizes new activities such as promotion of fuelwood plantations and community planting for fuelwood purposes, and systematic attention to urban agriculture in town planning (GOZ 1985: 26-28,40-41). These are new tasks for the Forestry Department and the urban planning authorities. In the case of Botswana, it is proposed that the Water Department should engage in provision of management systems for water resources and the Department of Wildlife and National Parks should take up development of wildlife based industries (GOB 1990a: 21,36).

5.2 Inter-organisational change

In order to realize the ambitions of the policies, important changes are needed also in the relationship among the various governmental agencies. This requirement to implementation has several aspects.

In both Zambia and Botswana, governmental policy is framed by a national planning system, administered by the MFDP (Ministry of Finance and Development Planning) in Botswana, and by NCDP (National Commission of Development Planning) in Zambia. MFDP is a quite effective and powerful system

(Gasper 1989). NCDP is also powerful, but it is by many observers seen as an old-fashioned planning mechanism that creates more problems than it solves. At present, the NCDP's role is under consideration, as part of major reorganisations. The future role of NCDP is still unsettled, but an overall framework of national planning will remain. It is important that these national planning structures facilitate and promote the new environmental policy. It is realized in both countries that environmental premises have to be integrated in this national planning system. Both to allow environmental project ideas from the agencies, and to actively promote the initiation of such (GOZ 1985: 69; GOB 1990a: 33,69). The Botswana NCS is said to depend on the MFDP, and is envisioned to be integrated in the National Development Plan (GOB 1990a: 33,69). The Zambian policy likewise stresses the need to engage the NCDP (GOZ 1985: 69).

Another requirement is that various governmental agencies avoid launching projects which together will over-exploit any resource. This is a matter of coordination. Both policies emphasize strongly that inter-sectoral coordination is poor, and in need of improvement (GOZ 1985: 18,58 and GOB 1990a: 25,59).

Optimal resource management implies planned multi-purpose use, like agro-forestry. It is required that various agencies should develop such activities in cooperation. The Zambian policy aims at integration of agricultural and forestry programs and extension. Wildlife issues should be addressed in ways integrated with agriculture, tourism and forestry projects. The development of tourism and infrastructure has to be integrated with the infrastructure needs of other sectors, and the various users of water resources have to integrate their activities (GOZ 1985: 29, 44-49). The Botswana NCS clearly emphasizes that the policy has to be based on interventions that actively and directly promote integrated, multi-purpose use of resources. It is even suggested that development planning may be based on a concept of ecological zones (GOB 1990a: 33,44-47).

5.3 Field implementation

The challenges for institutions at the sub-national level are formidable. The field staff of sectoral ministries, the district administrations as well as the local governments are all expected to cooperate in integrated resource management.

All the activities proposed in the NCSs imply substantial workloads for the field units. Not least because many activities will be quite demanding, requiring experimentation, data collection and local adjustment in addition to administration and advice.

The needs for integration at the national level, pointed out by the NCSs are valid also at the local level. The NCSs expect that the field services of various agencies, local governments, and district administrations integrate their activities. In

Botswana, for instance, envisions that units implementing forestry projects, livestock development and conservation projects cooperate with the District Administration. Furthermore, District Land Use Plans should link the problems of the wildlife and pollution (GOB 1990a: 55-60). This is seen as a prerequisite for integrated resource management systems that also benefit the local people (GOB 1990a: 35,41,52). The Zambian policy also emphasizes strongly the need for integration of field staff. The departments of Agriculture, Fisheries, Forestry and Natural Resources should all be integrated. Furthermore, District Councils should participate in forestry projects in cooperation with the local staff of the Forestry Department (GOZ 1985: 29,32,75-76).

It is recognised in the NCSs that it is important to adjust implementation to local circumstances and to ensure that the people contribute actively in environmental projects (GOZ 1985: 76; GOB 1990a: 47). This means that implementors have to work closely with the local people. First, the latter are the holders of detailed knowledge about local ecological, social and economic conditions. These vary greatly, and many projects will not succeed without careful attention to these issues. Second, many projects will depend on resources from the local people, i.e. labour, land and resources spent on future maintenance of infrastructure. Such relationships, it is argued, will only occur if people themselves see any benefit from it. Thus, projects depend on being adjusted to local needs (GOZ 1985: 45,65). The NCSs list numerous reasons for participation; it facilitates self-help, it eases pressure on governmental resources for implementation, it reveals local needs, it makes people engaged so that maintenance can be left to them, and finally, it utilizes local skills and knowledge (GOZ 1985: 76).

5.4 Donor involvement

Both countries hope that donors will play a major role, contributing to specific projects, to research and to building of indigenous competence (GOZ 1985: 57). This is a crucial matter particularly in Zambia as the Government finances and the administrative system are in a very poor state. Parts of the Zambian public administration hardly function at all. Funding for both recurrent costs and investments is extremely inadequate. But also Botswana rely significantly on donor engagement in the environmental field (GOB 1990a: 36,62).

The problem, however, is not only to mobilize donors, but also to channel their contribution into the NCSs' framework of goals, implementing principles and organisational framework. In other words, to prevent that donors apply the bypass strategies that have been resorted