

4

TBNRM
Lessons,
Conclusions
and Future
Needs

TBNRM Lessons, Conclusions and Future Needs

This chapter presents summary lessons and conclusions from the project analysis. It then outlines gaps in current understanding of TBNRM, and lists future priority needs to enhance natural resource management effectiveness in a transboundary context. The content of the chapter has been drawn from regional reviews, case studies, the pan-African workshop, comments from collaborators and other sources.

How to Use This Chapter

People considering a new transboundary initiative should find the lessons and conclusions in Section 4.1 particularly useful.

People already involved in TBNRM may want to skim the headings of the lessons and conclusions in Section 4.1 and pick those most useful to them. Section 4.2 outlining gaps and future needs should be relevant; people already involved should be able to advance some of these ideas and address needs.

4.1 Lessons and Conclusions from the Analysis

4.1.1 General and Ecological Aspects

TBNRM Can Be an Effective Approach—Under the Right Conditions

TBNRM can be an effective approach for natural resource management and biodiversity conservation, where shared threats can be tackled jointly and/or mutual benefits can be gained collaboratively. Key to success is the existence of a *win-win situation* for major stakeholders in each country involved, when potential *benefits outweigh costs*. TBNRM can work in a variety of situations, including conservation of threatened species or resources; sound use of limited resources such as water, rangeland, wildlife and forests; and ecosystem management. The objective is to provide a mechanism to achieve conservation and natural resource management results that cannot be achieved as easily by the countries in isolation.

This is illustrated by collaborative work undertaken in the Virunga region. Recent monitoring data shows an increase in the mountain gorilla population over the past decade, despite the conflicts and war in that region and the related movement of thousands of displaced civilians seeking refuge in the mountains. The conservation achievement is a direct result of the dedication of field staff at the in-country level, and the undertaking of collaborative activities under a regional framework for joint management addressing shared threats and opportunities. Although there are likely to be future ecological benefits from many of the transboundary conservation case studies reviewed in this project, most of them are relatively new ventures and it is too early to assess their ecological success fully.

Transboundary practices can be found in many places in sub-Saharan Africa, mostly through informal mechanisms at community or other local levels. Formal arrangements are much more recent, particularly in conservation. They have been developed to the greatest extent in Southern Africa, probably because of the frequent combination of intense threats to natural resources and very good economic opportunities. TBNRM also can promote important social, political and institutional benefits. Potential benefits of TBNRM are listed in Section 1.3.

TBNRM Is Not a Universal Panacea

TBNRM is not, however, a universal panacea for joint management of natural resources by different countries on borders. In some cases it is more effective for transboundary

partner countries to manage their shared resources independently because there is little to gain from collaboration, or because the costs involved in TBNRM are too high in relation to the potential benefits (see below). *The existence of a shared resource or ecosystem is not enough justification per se to go transboundary.* It is very important to have a sound rationale for TBNRM before embarking on it; it needs to be demand-driven. There are many constraints to TBNRM, and sometimes they are insurmountable, or the cost of overcoming them and creating enabling conditions is too high. Constraints and enabling conditions are listed in Section 2.7.

TBNRM Is Dependent on Good Internal NRM; It Is Not Meant to Replace It

TBNRM should not replace NRM within each country involved; it should be an extension of it. Many NRM activities must continue to be implemented internally, as this is more appropriate and efficient. A limited number of other activities will require transboundary collaboration because they can be implemented more efficiently this way. It is important that TBNRM not be done at the expense of internal NRM activities—that extra resources be found to cover it. Otherwise it may do more harm than good.

In the same vein, *TBNRM will not succeed if internal NRM does not work.* When internal conditions for good NRM are absent, the situation will not be improved by going transboundary. Many of the requirements for TBNRM collaboration (e.g., good governance, organizational capacity, bottom-up approach, clarity of vision, flexibility, sustainable funding, building trust and teamwork, and strategic partnerships) are similar to those for internal NRM. In places where internal NRM is weak, it may be more important in the short term to improve that rather than going transboundary.

There Is No Blueprint for TBNRM

TBNRM has an extremely wide range of applications—across a continuum from transboundary CBNRM and transboundary protected areas to integration into regional economic development. There is a tremendous *range of scales and degree of complexity*, and variation in social, economic and political factors. Thus there is *no set paradigm or formula* for TBNRM; it needs to be planned, implemented, evaluated and frequently adapted around the specific circumstances of each situation.

TBNRM Is Gaining in Popularity, but It Is Largely Unproven Especially at Formal Levels

Over the past decade TBNRM has become an increasingly popular approach to natural resource management in many regions of sub-Saharan Africa, heralded as the next big approach after CBNRM in some places. It is becoming a major focus of NRM efforts and is attracting large donor investments. However, knowledge and understanding of the

conditions for success are as yet limited, and TBNRM has not yet been broadly tested and proven. Transboundary practice adds another layer of complexity to NRM, which is already a complex subject.

There is, however, a significant amount of experience with TBNRM collaboration at local, informal levels, and there have been some striking successes (e.g., conservation of the mountain gorilla in the Virungas, despite a long war in the region). Much less is known of TBNRM effectiveness at formal levels, where Memorandums of Understanding in the conservation sector have only recently started to be negotiated among countries (although agreements for resources such as water have been in existence longer). It is clear that this approach takes considerable time and larger amounts of funding before showing any results in terms of improved resource management or better conservation on the ground. With TBNRM there is also higher risk of being disconnected from the local level, and failing to bring local benefits (see Section 4.1.5). Formal agreements should recognize and harmonize with appropriate existing traditional or informal agreements to help to avoid this problem.

Indiscriminate application of TBNRM, including situations where it is less likely to work, will result in failures. This will discredit TBNRM as an approach. It is very important to proceed with care (see Section 4.1.2 below).

4.1.2 Process

TBNRM Feasibility Should Be Assessed before Starting

Since there are *many costs*—related to funding and human resources as well as less quantifiable factors—to TBNRM in time, it is crucial to undertake an adequate assessment of TBNRM feasibility before embarking on it. Which objectives can be better met by working transboundary, and which ones internally? Do the ecological and other benefits outweigh the costs of working transboundary? Will the major stakeholders benefit? Methods for conducting the assessment were outlined in Chapter 3. As yet there is unfortunately no well-developed, rigorous quantitative cost-benefit analysis methodology for TBNRM assessment and evaluation. *If the qualitative assessment outlined in Chapter 3 suggests that costs exceed benefits, TBNRM should not be initiated and shared natural resources should continue to be managed independently by the countries concerned.*

TBNRM Should Work at the Lowest Level Possible

Experience to date in Africa suggests that it is best to work at the lowest transboundary level(s) possible. Many successful initiatives have worked from the bottom up, starting at

the local level and involving higher levels as and when needed to achieve objectives and create enabling conditions. A bottom-up approach has the greatest chance of ensuring participation, buy-in and ownership of the process at the local level where the resources are managed. Building on existing practices and common cultures, it can create a solid base of *trust* at the local level for future collaboration, where people are motivated to find practical and realistic solutions. Involvement of higher levels can change over time: for example, ministry headquarters may become involved temporarily in order to create an enabling condition such as a new policy, or to develop an international agreement. *Different functions are performed at different levels. Ultimately, effective TBNRM is the combination of strategies involving different levels that has the optimum net gain in benefits versus costs stakeholders are willing to pay.*

There Is No Need to Wait for All the Enabling Conditions before Starting

Alongside the point made about assessment above, it should be pointed out that it would take a long time to create all the missing enabling conditions (see Section 2.7), if indeed this is ever feasible. It is important to *be pragmatic* and start off on an approach where there are feasible opportunities, even if they are limited. Some enabling conditions are likely to be created along the way. Be proactive and try to anticipate and tackle constraints before they become limiting factors. Explore new avenues to get around those constraints that are not easily resolvable.

TBNRM Must Be Built on Trust and Partnerships

Trust takes *time and patience* to establish and cannot be rushed—this includes trust both across borders and within countries. Teamwork at the local level is particularly important. There is a need for sound partnerships with *clearly defined roles and responsibilities*. *Good, practical coordination* is important, focused on achieving results rather than coordination for its own sake.

TBNRM Should Be a Flexible, Evolving Process

The TBNRM process needs to *evolve on the basis of real need*. At its heart, a complex series of partnerships is developing and exploring opportunities and limitations of working together. Many trade-offs have to be assessed to see what works and what does not. It is important to *monitor and evaluate* the effectiveness of this collaboration frequently, and *adapt* as appropriate. Learning should be done jointly across borders, which requires transparent sharing of information. This includes comparing TBNRM results with those that might have been gained through internal NRM alone, to assess whether TBNRM participation is worthwhile.

At the same time external social, economic and political conditions are frequently changing, all of which affect the shared natural resources. Approaches to TBNRM need refining in light of changing background conditions as well. Adapting to change necessitates working flexibly but staying within an overall strategic framework for collaboration, keeping a joint vision firmly in sight.

Since understanding of TBNRM is still incomplete, it is important to learn about its degree of effectiveness not only within an initiative, but also to *exchange experiences* across different initiatives.

Good Communication Is Essential for Successful TBNRM

Communication is essential across the border, within countries, within and across levels, and across institutional and technical sectors. This includes sharing of information in a transparent and timely way.

4.1.3 Social Aspects

Going Transboundary Increases the Complexity of Stakeholders

The number and range of stakeholders tend to be greatest in large-scale, multiple tenure/land-use TBNRM initiatives involving many different levels. The *diversity of interests* can be very high, covering sociocultural, economic, political and institutional issues including sovereignty. There are many constraints but also opportunities that can inhibit or reinforce the effectiveness of these initiatives in trade-offs and win-win situations. Ensuring adequate *stakeholder participation* is costly in terms of time and human and financial resources.

Going Transboundary Can Unite Local Communities across Borders

Increasing the scope of existing CBNRM across borders can facilitate formal contact and cooperation among communities that have been estranged by international borders. It can renew cultural ties and traditions that have been severed or restricted by borders, strengthen marginalized groups, and increase social stability in border areas.

Note that further issues concerning local communities are documented in section 4.1.5 below as part of the discussion on political and policy aspects.

4.1.4 Economic and Financial Aspects

TBNRM Must Increase the Efficiency of NRM in Order to Be Worthwhile

Synergism is essential for successful TBNRM: *the whole must be greater than the sum of the parts*, otherwise individual countries are better off managing their resources independently. TBNRM needs to be a *value-added* product, and should strive for the maximum output with minimum input. Transaction costs must be kept as low as possible, otherwise the endeavor will not be worthwhile. In addition, all key stakeholders need to gain net benefits. In the right situations TBNRM can increase the efficiency of managing and monitoring natural resources through avoiding or reducing duplication of effort, creating economies of scale, and enhancing economic opportunities such as increased tourism potential. But there are also many situations where TBNRM is not feasible—hence the need for the initial assessment (Section 4.1.2).

TBNRM Requires Additional Investments of Money and Time

Funding for TBNRM should be incremental, over and above NRM funding (Section 4.1.1). Where there are strong economic development opportunities, some or all of this funding may be generated from economic activities. In many cases today donors are providing funding, either to single countries or on a regional basis. Donor funding can cover the start-up costs of TBNRM, until longer-term benefits kick in and fuel the process sustainably. However, it is often difficult to make that transition. The length of donor project cycles is often too short, especially in light of the extra complexity of TBNRM over internal NRM, and the need to get adequate participation for success. A *flexible, broad funding base* rather than reliance on a single donor can help. This can include different mechanisms such as trust funds and economic activities. In the long term, TBNRM initiatives should aim for *financial self-sufficiency* in order to be sustainable.

TBNRM Can Be a Valuable Tool in the Face of Global and Regional Market Forces

Transboundary collaboration can create cartels to manage and market shared resources in the face of external market pressures. This not only can benefit individual countries economically, but also help to manage resources sustainably. One example could be the collaboration by West African countries to develop collaborative approaches to protect their shared marine fishery resources against external pressures from, for instance, the European Union.

4.1.5 Political and Policy Aspects

Political Will and Long-Term Commitment Are Essential

Political will is essential for successful TBNRM. Regardless of the established level of formal transboundary collaboration, it is necessary to have political will at the local level. Some transboundary activity can take place without formal commitment from top levels in a country (e.g., community-based TBNRM, or limited, informal protected area collaboration), provided there is no interference to it from above. However, in more complex and formal TBNRM initiatives, political will at top levels is also necessary. Long-term commitment from both countries is essential as well. Since successful NRM is by nature a long-term process, and since partnerships take time to evolve and mature, TBNRM is also a long-term process.

Sovereignty and Security Issues Can Constrain TBNRM

There is often concern that countries will lose sovereignty by going transboundary, through loss of control over some of their land and/or resources to a neighbor. In reality, by being prepared to give away a little control to the TBNRM process, a country may gain significantly from it, through improved management of shared resources. There also may be concern over security. This can include fear of borders becoming more porous, with, for example, movement of illegal immigrants or contraband among countries with differing economies; influx of arms; and spread of disease and pests. Security and sovereignty concerns may limit the degree to which a country is prepared to collaborate.

Good International Political Relations Help TBNRM

Good diplomatic relations between neighboring countries can greatly aid TBNRM, and are very important for larger-scale initiatives. At the level of local, small-scale initiatives this is not always essential, but its absence can be a limiting factor to effectiveness and further development of the initiative (as is the case, for example, in the Virungas).

Does TBNRM Promote Peace?

TBNRM can resolve local-level cross-border conflict by finding common ground and shared objectives. It can help to increase security and control over resources in border areas so that their rightful owners/users benefit more from them. Its potential role in larger-scale peace processes is less clear. Certainly in the Virungas, TBNRM has helped to

protect the gorillas during conflict, and to identify and realize transboundary economic opportunities (through gorilla tourism), which are an important foundation for postwar development and local livelihoods in all three countries. In theory TBNRM collaboration can lay a foundation for deeper cooperation and development of trust among countries with poor diplomatic relations. Initial collaboration over natural resources may pose little risk for governments if there is not much at stake politically. This study did not focus specifically on this issue and was not able to assess how effective this approach could be at a national as opposed to local level.

Devolution, Good Governance and Participation Are Essential Elements of Successful TBNRM

The principle that those who own, manage and live with natural resources should benefit from them and be involved in related decision making is widely accepted in CBNRM and broader environmental governance circles. Much has been talked about *devolution and subsidiarity*. However, TBNRM at a formal scale tends to increase the involvement of upper government levels (e.g., the line ministry in each country, and sometimes multiple government ministries). These levels may exert influence and control that is not in the best interests of local communities or private landowners. At worst, TBNRM can present an opportunity for corrupt national-level powers to gain personally from TBNRM benefits. Donors, the private sector and NGOs can also drive the TBNRM agenda in a way that conflicts with local interests.

Good governance within a country is therefore essential for successful TBNRM, including two-way *transparency and accountability* between higher and lower levels in control of land and resources. Those at the lowest levels should have ownership of the TBNRM process, including involvement in design and implementation, and should benefit from it. Where and when needed, higher levels should be involved. This reinforces the recommendation in Section 4.1.2 to work at the lowest levels possible in TBNRM. There are advantages to keeping initiatives small and at an appropriate scale, so that key stakeholders can remain in control and retain ownership of the process. Stakeholders should benefit in proportion to the costs they incur in the process, so that the process is *equitable*.

The Existence and Implementation of Compatible Policies and Legislation Enhances TBNRM Success

Harmonization of relevant policies and legislation across boundaries can be an important enabling condition for TBNRM. This can take a long time, though, and hold up the TBNRM process. Enforcement of control over access to and use of resources (whether by government or traditional structures) is also important. TBNRM is unlikely to succeed if national laws controlling resource use cannot be enforced.

TBNRM Arrangements Are Characterized by a Broad Continuum of Agreements

Agreements are necessary in situations where either party would be unable to achieve a necessary or desirable goal without participation of the other. It is the *purpose* of agreements that determines the level and type of agreement *appropriate to a particular circumstance*. Transboundary interactions can take many forms, ranging from very informal or traditional relationships among local resource users, to Memorandums of Understanding or international treaties governing resource management programs among countries. Agreements may start informally and be developed over a number of years into more formal arrangements.

In large-scale TBNRM initiatives, an umbrella agreement or protocol may be negotiated to empower stakeholders at different levels to negotiate sub-agreements.

International Conventions Are Currently Playing only a Limited TBNRM Role; Regional Economic Agreements May Be More Influential

From the regional reviews and case studies, conventions such as the Convention on Biological Diversity and CITES do not seem to be playing a highly significant role in promoting or facilitating TBNRM in sub-Saharan Africa to date. Given their international coverage and technical mandates, these conventions could probably be much more effective in TBNRM. The Ramsar Convention and the Convention on the Conservation of Migratory Species of Wild Animals are more involved, particularly at specific sites. Some of the regional economic agreements (e.g., SADC) seem to be playing a larger role in facilitating transboundary collaboration, either directly or indirectly—and opportunities exist to expand this role.

4.1.6 Institutional Aspects

TBNRM Is Constrained by Governments' Narrow NRM Approach through Isolated Treatment of Single Resources/Land Uses

This issue is observed at the national level in African countries, and is often a constraint to sound and integrated ecosystem management internally as well as across international boundaries. While communities have complex traditional systems for managing multiple natural resources and land uses, governments through their bureaucratic colonial inheritance compartmentalize resources. Different departments deal with forestry, wildlife, water, agriculture, etc., and land is often designated for single land uses. Communication and collaboration among government departments is often limited. Yet *sustainable development*—that is, integrating economic development with sound natural resource use and

ecosystem management—*requires an integrated approach, working across existing land-use boundaries*. TBNRM on a large scale requires coordinated, multisectoral government inputs. If these are not forthcoming there is a risk that TBNRM will revert to single-sector management structures that are too weak to exert any influence except in their own jurisdiction. The key challenge is to *build coalitions* among management authorities with overlapping jurisdictions, in order to attain a *common vision*.

Weak National Structures Cannot Create Strong TBNRM

Adequate national organizational capacity is necessary for TBNRM to ensure reciprocity in terms of “carrying the weight.” If capacity is weak on both sides of the border TBNRM is not likely to succeed. To a limited extent, a stronger partner can help to build capacity in a weaker transboundary partner. However, extremely uneven capacity is a constraint for TBNRM. The stronger partner can become very frustrated at the failure of the weaker partner to participate fully. The weaker partner feels threatened and dominated by the stronger partner. Mutual trust and cooperation are hard to foster in these circumstances. Outside facilitators can fulfill an important role in building capacity in weak partners.

Capacity Strengthening Is an Important Need for TBNRM in Africa

Many of the regional reviews and case studies cited above referred to the need for capacity strengthening. Needs vary depending on scale, resource, complexity, stakeholders and so on, and consideration should be given to organizational development, technical NRM skills and business and finance skills including fundraising. Capacity strengthening is required of many different stakeholders including community-based organizations and different levels of government.

TBNRM Should Work through Existing Organizations—Rather than Attempting to Build New Ones

Just as TBNRM should build on existing internal NRM rather than inventing totally new initiatives, it should also work through existing organizations where possible. In the long run this is more likely to be successful, rather than creating new organizations that may not have buy-in or acceptability by other stakeholders, or sustainability.

The Success of Early Stages of TBNRM Initiatives Is Often Greatly Dependent on a Few Individuals

TBNRM initiatives are particularly vulnerable in the early stages, before trust and partnerships are well established. Very often a few key people are responsible for *facilitating and leading* the developing initiatives to more formal arrangements. As TBNRM initiatives

mature, the role(s) of these key players often change, as capacity is built and national partners assume more leadership. Agreements can increase the sustainability of outcomes by making the process less dependent on the immediate actions of individuals.

4.2 Gaps and Future Needs

Given the relative youth of many TBNRM initiatives, the natural resource and conservation sectors are still on a high learning curve when it comes to transboundary practices. At the same time, the rapid gain in popularity of the TBNRM approach is attracting large investments across sub-Saharan Africa. It is therefore very important that as experiences build up, they are evaluated and lessons from both successes and failures are distilled and communicated broadly—in order to ensure that these investments are applied in the most effective ways. The TBNRM approach needs to evolve over time and develop its status as one of several resource management approaches—and practitioners need to develop a good understanding of its benefits and limitations.

In terms of gaps and future needs, there are many internal, country-specific aspects that are relevant to TBNRM. There are also aspects that are specifically international in nature. Some of the internal aspects are generic to all forms of good natural resource management, including political will, sound environmental governance and adequate capacity in participating organizations. These are enabling conditions for TBNRM (and their absence causes constraints), but since they are of a non-specific nature they are not covered in detail here. The paragraphs below outline some of the more specific internal and international aspects that need to be further developed in order to ensure successful TBNRM processes in Africa.

4.2.1 A Continuous Learning Process

Overall Analysis

As new experiences are gained the existing understanding of TBNRM needs to be augmented; the analytical work must be continued. Griffin *et al.* (1999), Sandwith *et al.* (2001), Singh (1999), Zbicz (1999), BSP's pan-African TBNRM project (this publication), and others have undertaken analyses of TBNRM experiences to date and created a foundation of knowledge about the TBNRM process, and its opportunities, enabling conditions and constraints. Lessons should be drawn from all natural resources sectors including water and freshwater and marine resources. Organizations that are well placed to take the lead in continuing analyses include regional analytical organizations such as the African Centre for Technology Studies (ACTS), IUCN (with involvement of commissions

such as WCPA, SSC/SUSG), and international NGOs that have adopted a broad landscape approach to conservation.

Specific Analyses and Development of Tools

- **Economic Valuation of TBNRM:** There is an urgent need to *develop cost/benefit analysis techniques* for TBNRM. Very little systematic economic valuation has been done so far for specific TBNRM ventures to determine the costs and benefits of managing resources collaboratively across borders versus managing them independently in each country. Good economic valuation tools exist, although there are still difficulties in valuing some of the indirect and non-material uses of natural resources and biodiversity, as well as some of the externalities. There is an urgent need to use the tools that do exist to develop systems for economic valuation to *find the optimum balance* of TBNRM interventions and internal management interventions for each country involved. This includes reviewing the option of completely internal management on both sides of the border—i.e., not pursuing the transboundary route.
- **TBNRM and Political Relations:** There is a need to increase our understanding of how political relations among countries affect TBNRM at different levels and scales, and determine what types of transboundary collaboration are possible and desirable under different political relations. A clear understanding will help practitioners to determine the most appropriate approach to TBNRM in a particular situation. A special case is that of peace-building—determining how much of a role TBNRM can play in building a foundation of trust and collaboration among neighboring countries.
- **TBNRM and Environmental Conventions:** Several international conventions have the potential to facilitate TBNRM. The potential role that environmental forums—such as CBD, CITES, CCD, the Ramsar Convention and the Convention on the Conservation of Migratory Species of Wild Animals—can play in TBNRM should be investigated more fully, since at the moment the role of several international conventions seems to be limited. Avenues of promising findings should be followed up on.
- **TBNRM Assessment Tools:** These help with the process of deciding whether to go transboundary or not, and if so, to determine which objectives require further testing and refinement.
- **TBNRM and Compartmentalized Government:** TBNRM needs holistic, multi-level and inter-sectoral approaches. A review across a number of countries should be undertaken to see whether and how the existing limitations are being tackled and what kind of solutions are being considered.

Communicating Results and Lessons

TBNRM results and lessons should be disseminated widely in Africa and indeed globally. This will help to ensure the most effective management of natural resources in transboundary areas. To promote an *exchange of experiences and learning*, mechanisms for

information sharing and networking need to be created or enhanced. Possibilities worth exploring include:

- **Networks:** Networks of natural resource policy makers and managers should be established. In order to succeed, networks should have clear objectives and roles—they should fill a specific need;
- **Information centers:** These can be set up to collect regional and international publications and other information on TBNRM, as Peace Parks Foundation does in Southern Africa;
- **Exchange visits to TBNRM sites:** Visiting other TBNRM sites and exchanging experiences on TBNRM can be extremely valuable to policy makers and managers;
- **Training courses:** Colleges and universities should incorporate TBNRM aspects into natural resource curricula, so that students can have a head start on TBNRM principles when they work; and
- **Conferences:** These can be used as platforms to exchange and discuss new information and increased understanding.

Database(s) of TBNRM Expertise in Africa

As expertise in TBNRM develops in African sites, experts can play important capacity-building and technical-assistance roles for other TBNRM initiatives. This includes expertise in legal aspects, planning, facilitation, organizational aspects and technical NRM issues, as proposed in Griffin (1999). A database should include the names of experts, their skill areas and experience, languages they speak and their availability. A fund might be made available to cover travel and consultancy fees to make this expertise available, thus supporting TBNRM development on a broad front in Africa.

4.2.2 Approaches to Focus On

Given the many TBNRM initiatives underway and the broader developments surrounding and affecting natural resource management and biodiversity conservation, a number of topics have been identified that could enhance the implementation of TBNRM.

Promoting TBNRM's Role in Economic Development

TBNRM needs adequate political support in order to integrate it into broader economic regional planning and development, supporting livelihoods through sound natural resource management. *Investment opportunities and partnership with the private sector* should be promoted in this vein. The range of economic activities should be *as broad-based as feasible* to avoid devastating impacts of possible single market collapses (e.g., tourism). However, TBNRM objectives should not be sidelined by the larger regional

planning objectives. Managers need to recognize when to *negotiate and trade-off wisely* where there are perceived net benefits, but should work to avert unacceptable adverse consequences to the natural resource base.

Collaborating across Sectors and Disciplines

TBNRM practitioners should increase their understanding of and collaboration with other sectors and disciplines within their countries and across their borders, as appropriate. This may include areas such as planning, immigration, transport, agriculture, energy and foreign affairs. New strategic partnerships need to be developed across institutional sectors: civil society, government and the private sector. Closer to home, greater collaboration among the various natural resource sectors is needed for sound integrated ecosystem management and multiple land use, in order to maximize possible benefits from TBNRM. This need is particularly prevalent in government, where compartmentalism of single natural resources limits the implementation of TBNRM.

Mainstreaming TBNRM in Regional and International Forums

Where appropriate, TBNRM needs to be mainstreamed to a greater extent in regional and international economic forums (e.g., EAC, SADC, WTO). Existing regional protocols should be put to greater use to facilitate and catalyze TBNRM processes; natural resource managers in government, civil society and the private sector need to increase their understanding of and participation in these regional forums.

Financing TBNRM

Adequate financing of TBNRM initiatives is a challenge, particularly for large ones. Donor funding cycles are often too short for developing financial sustainability. Donors should be realistic about the time TBNRM takes to develop, especially when operating at high levels with formal agreements, and commit to supporting for *longer time frames* if interim evaluations indicate successful progress. Donors should place emphasis on supporting the process and building capacity rather than looking for quick and direct results. TBNRM implementers need to plan for reliable long-term funding, including involvement where feasible of the private sector and other, more *independent and sustainable funding mechanisms* besides donor-funded project cycles.

Building Capacity for TBNRM

Capacity building is needed for key organizations and institutions up to a minimum critical level. While the capacity development should cover a broad range of skills concerning natural resource management and biodiversity conservation, in the TBNRM context special attention should be given to negotiating and conflict resolution skills.

4.3 Closing Remarks

The rationale for TBNRM is strong, and there is growing interest in the subject in sub-Saharan Africa. Opportunities for TBNRM development are being explored and recognized rapidly by many practitioners and decision makers. At the same time, the constraints are numerous and varied. In some cases the costs are too high in relation to the benefits and it is more effective and efficient for countries to manage their shared resources independently.

Many transboundary initiatives are likely to remain at a small and less formalized level rather than becoming larger and more formal. Given the huge range of complex individual circumstances in transboundary areas, there is no one ideal formula for TBNRM development. Capacity building, flexibility, experimentation, adaptive management and the learning and sharing of experiences will be important ingredients in TBNRM development in sub-Saharan Africa in the foreseeable future.

