

Community Based Natural Resource Management Questionnaire

CBNRM Site:
Completed By:
Affiliation:
Date:

Note: The terms 'community' and 'stakeholders' frequently appear below. The range and diversity of CBNRM experiences in Africa is so wide that these terms defy strict and narrow definition. However, for the purpose of this questionnaire, we suggest the following descriptions.

Community: Refers to associations of individuals or groups with close, localized, relationships (neighborhoods, villages, small number of villages).

Stakeholders: Refers to individuals, groups or institutions with a directly related and significant interest in a CBNRM activity. They can include private sector operators, local or central government units, active donors or NGOs.

S0 Social Factors **The following questions address the extent to which social factors played a positive or negative role in the initiation of this CBNRM activity.**

S1 **Clear Leadership** **To what degree was there a consensus on leadership within the community?**

Effective communities tend to have clearly defined leadership. This does not mean that there is necessarily only one leader, but that leaders are clearly identified and broadly accepted as such. A working hypothesis for CBNRM is that the clarity of leadership with respect to access to and use of resources is key. A community may have a clear leader, with strong authority in the area of religion, but this person may not necessarily be the best community leader for resource management. Clear leadership is thought to influence the community's capacity to negotiate with other stakeholders, and to manage NR activities.

S2 **Community Cohesiveness** **To what extent was the community socially cohesive?**

Cohesiveness is assumed to be a critical determinants of success for a CBNRM activity. CBNRM requires that the community members act jointly to identify or consider a CBNRM opportunity, decide to take action, organize themselves and mobilize their efforts to manage the resources and the enterprise, and agree on the sharing and distribution of benefits. This requires both leadership and a certain amount of cohesiveness. For example, if some social or age/gender-specific groups are left out or slighted, chances of significant or long-term success will be slim. Cohesiveness is not synonymous with homogeneity; some communities are ethnically or socially homogeneous but not very cohesive, while others are cohesive in spite of greater social diversity. A community does not have to be very egalitarian to be cohesive, but wide disparities in access to basic resources (e.g. land, water) and in social status are good signs that a community would have difficulty managing a CBNRM activity and sharing its benefits broadly. A good indicator of cohesiveness is whether access to basic education, training and extension services are accessible to members of the community's various ethnic, social, and gender/age specific classes.

S3 **Community Organizations** **To what extent did the community have effective, formal organizations?**

In many cases, central or local governments are unwilling to devolve to a community the authority to manage natural resources and enter into agreements with various parties unless they have some formal, legal status (cooperative, producers' association or economic interest group, conservancy organization, etc.). Formal organization may not, in itself, enhance the community's capacity to manage resources, but it may facilitate relations with other stakeholders. In addition, communities with formal organizations may have more enterprise management skills and experience.

- S4 **Breadth of participation** **To what extent were some community members prohibited from participating in activities associated with resource management?**
Another way of asking the question might be: is the intended CBNRM design inclusive of various types of resources and of various resource user groups, including women, youth, elders, within the community?
- S5 **Extent of ability to negotiate** **To what extent was the community able to negotiate joint resource use and benefits with other communities and stakeholders?**
This is seen as an important joint determinant of successful CBNRM, although a community's capacity to negotiate applies to various types of interlocutors at several different levels, and may vary between levels.
- S6 **Labor Mobilization** **To what extent could labor be mobilized at the time it was needed for CBNRM activities?**
The type of resource being managed strongly determines the type of community labor to be mobilized, but designs sometimes overlook ancillary activities that may involve other types of labor. For instance, women and/or children may be gathering wild forest products while adult males may be mostly occupied by a woodlot or fuelwood activity. Other things being equal, one may also assume that a higher proportion of community labor being mobilized would be consistent with broad rather than narrow distribution of benefits within the community.
- S7 **Leadership responsiveness** **To what degree was community leadership responsive to the needs of its members?**
The hypothesis here is that if CBNRM is to benefit most of the community members rather than a small subset of them, the leadership has to be responsive to several constituencies within the community. Responsiveness should broaden the leadership base of support, and facilitate involving various community groups in main and ancillary schemes of CBNRM. The question is, therefore, whether the leadership is responsive at all, and equally responsive to the needs of various community groups (by social strata, gender- or age).
- S8 **Quality of Labor Pool** **To what extent was this community able to manage a CBNRM activity?**
The community must be able to manage the labor, technical and managerial requirements of a CBNRM activity. Requirements depend on the nature of the resource, and on the degree of sophistication of resource management methods. However, one would expect that communities which have received training and manage other types of enterprises are more likely to manage a CBNRM activity.
- S9 **Training** **To what extent had relevant community members benefited from training appropriate to CBNRM?**
Other things being equal, one would expect that **appropriate** training is a major factor of likelihood of successful CBNRM. This is especially so if the training has been relevant in terms of the type of resource(s) to be managed by the community, and if it has been available and extended to those community members likely to play a role in CBNRM (i.e. including certain groups often under-represented in training activities, such as women, youths).

PO Political Factors The following questions address the extent to which political factors played a positive or negative role in the initiation of this CBNRM activity.

P1 **Decentralization** To what degree did a process of decentralization devolve authority from the central to lower levels of government?

Through the process of decentralization, local governments must have the authority from the central government to establish linkages with local stakeholders, especially if some of the resource management mandate is shifted to, or shared with, local communities.

P2 **Authority of communities** To what degree did the government grant to this and to other communities the authority to manage natural resources?

The right of communities to manage natural resources, and their responsibilities in doing so, have to be worked out with local and central governments. Although the authority granted to communities is supposed to lie within the bounds of national laws and regulations, these are often inadequate when issues and disputes arise. For instance, effective CBNRM requires that communities responsible for the management of a well defined set of resources have the capacity to exclude or control resource use by other groups. This authority to exclude others is essential, and has to be sanctioned by a clear agreement, even though this agreement may be somewhat informal or *ad hoc*. Communities must also be able to enforce resource management by their own members, and exclusion of non members, or stakeholders who are not part of the resource management plan or agreement.

P3 **Legal framework** To what extent did CBNRM fall within the legal framework and within acceptable bounds of national policy or tolerance?

With few exceptions, the legal framework for access to and use of natural resources does not explicitly grant NRM rights or authority to community organizations. This is changing, but slowly. The 'legal framework' in many countries also includes a number of complex and often contradictory legal and legislative instruments governing access to and use of land, forest, wildlife, aquatic and other natural resources. In Africa, legal and legislative frameworks are still very much based on colonial and State-centered visions, so that many CBNRM activities result from an explicit or tacit agreement to 'bend the rules' slightly or to live with practical inconsistencies between what is legal from the viewpoint of the State, and what is legitimate from the traditional perspective of rural communities. Even when there is a willingness to be flexible, there are two further issues; One is the remaining element of arbitrariness on the part of government officials in allowing or preventing CBNRM activities to take place. The other, related issue is that of consistency: why allow it for community A and not for community B, since both fall outside of the strict definition of what is legal?. At some point, however, the pressure from communities and from donors to widen the CBNRM experience at the national level induces gradual, incremental changes in the legal and legislative frameworks.

P4 **Linkage to national policy** To what extent could this CBNRM effort be linked to various stages of the national policy process?

One of the main conclusions from the review of the literature is that CBNRM experiences do not take place in a vacuum: successful CBNRM activities must be both 'horizontally' and 'vertically' integrated. Horizontal integration refers to relationships established between a community and other communities, local traditional or government authorities, local private sector operators, etc. Vertical integration refers to the linkages between local initiatives, and various elements of the legal, political and policy apparatus at higher levels. These may include provincial and national governments, national environmental action plans and policies, and macroeconomic policies.

The CBNRM literature also suggests that good vertical linkages between communities and higher national levels must operate in both directions. For example, macroeconomic events and national environmental policies, as well as political processes such as

decentralization, represent a 'downward' linkage to community based NRM. Conversely, the social, political, economic and environmental results of aggregated CBNRM experiences at the national level reflect an 'upward' linkage to national processes, often inducing incremental changes in policies and their implementation. The strong vertical linkages necessary for successful CBNRM have also influenced donor and country environmental strategies. For instance, it is not uncommon to see an environmental program focusing mostly on CBNRM to include environmental policy reform, legislative processes, environmental education campaigns, and support to local government units as well. 'Linkages' usually come in the form of institutional relations between communities and higher levels of the governmental and non-governmental authorities.

P5 Risk of Conflict

To what extent was conflict relevant to CBNRM initiation?

Most widespread conflicts stem from fights over control of natural resources: high value, extracted resources such as diamonds, certain ores, oil or natural gas. On a smaller scale, social groups may oppose each other for control over renewable resources: land, pastureland, certain forested areas or water points. Conflicts between *élites* introduce large-scale insecurity and make it difficult or impossible to manage natural resources efficiently. Conflicts among social groups over renewable resources, on the other hand, are a sign that customary systems of communication, negotiation and sharing of resources are breaking down. Under both conditions, the resource use is likely to be increasingly inefficient. However, conflict conditions may also make it much more difficult for CBNRM to succeed at all levels (community, local and central government).

P6 Security of Tenure

To what degree did perceived security of tenure over resources influence CBNRM?

The literature suggests that this is an essential condition. Unless people perceive that they have secure tenure rights over the **entire set** of related resources that they need to manage for their livelihood, they will not invest in their long-term use or sustainability. On the contrary, the 'rational' strategy seems to be to mine the resources as much and as fast as possible before one loses access to them to some other user.

P7 Competition over resources

To what extent did this community compete with other interests in the planned implementation of CBNRM?

Shifting to a CBNRM type of resource management usually implies that the respective roles of, and benefits derived by, various stakeholders are going to change. CBNRM may be more likely to succeed if channels of communication and mechanisms for negotiation and joint resource management are available. However, there are cases where one of the stakeholders perceives the resource as so strategic to its vested interests that incentives to modify the pattern of resource use and to negotiate over the new distributions of benefits are minimal or lacking. For instance, a central government may not want to relinquish (even relative) control over a resource that is a major source of export earnings. Similarly, private sector or institutional interests may be unwilling to give up control over a resource which is a major input into a complex chain of economic activities.

P8 Vertical communication

To what extent did the community's actions inform national authorities on the management of local resources and vice versa?

Another major theme in the CBNRM literature is the need for communities to be integrated (vertically and horizontally) with other legitimate stakeholders. As mentioned elsewhere, horizontal integration is about relations at the local level with other communities, traditional authorities, and private sector operators who might be involved in joint ventures. Vertical integration refers to the linkages between CBNRM activities at the local level, and institutional partners at various levels (provincial, central). Such partners include government institutions, NGOs or donor agencies. When communities undertaking CBNRM are well integrated vertically, communications flow in both directions: downwards and upwards. For instance, good vertical integration allows for downward communication between governments and communities on environmental policies, legislation,

and technical information. It also allows for upward communication from communities to higher levels on environmental conditions at the local level, to inform policy and decision-making. These are the same channels communities rely on to promote further policy and legislative change, leading not only to greater dissemination of the CBNRM approach, but also to more widespread decentralization of authority (and thus, political power) at lower levels.

E0 Economic Factors **The following questions address the degree to which economic factors played a positive or negative role in the implementation of this CBNRM activity.**

E1 **Distribution of Benefits (internal)** **To what extent could the benefits of CBNRM be distributed acceptably among the various community members?**

Successful CBNRM usually requires a sizable investment in time, effort and financial resources on the part of certain members of the community. The community members who are to do the 'heavy lifting' may not do so unless they can expect that a good share of the benefits will accrue to them, as well as to other members of the community. Conversely, there may not be broad support for a CBNRM activity if there is a perception that most or all of the benefits will be entirely captured by a small élite. This is closely related to the question of how the community, as such, decides how to distribute benefits from CBNRM between 'active' and 'non active' members of the community.

E2 **Sharing Benefits** **To what extent did the community share CBNRM benefits with other stakeholders?**

The distributional issue also concerns non-community or 'outside' stakeholders. These are the groups which have a 'legitimate' claim on some of the benefits from the use of resources. This may be either because they participate in enterprise management (e.g. private sector operators) or because, as a local government agency, they provide relevant technical services. In some cases, the central government considers that taxing benefits derived from the use of national resources is legitimate. The literature clearly suggests that mechanisms must be established for negotiating the sharing of CBNRM benefits within the community and with outside stakeholders.

E3 **Management Capacity** **To what extent could the community manage the benefits from the activity?**

Most communities have weak management skills. To derive more benefits from better NRM, they may need to: acquire/sharpen their own management capacity, and establish relations with outside operators who can be active partners in resource-based enterprise management. Sometimes it is because these operators have more expertise or better access to processing facilities, or to markets. Communities also need to determine how much of the activity they should manage on their own, and at what point it is most efficient to turn things over to other partners. Other things being equal, communities with previous experience in managing such activities as grain mills, water pumps, cooperative, etc. are likely to do better than communities which have not had that experience.

E4 **Infrastructure** **To what degree did infrastructure enhance the capture of the value of the resources?**

Depending on the case, the availability of infrastructure can enhance or reduce benefits from more efficient resource management and use. For example, roads can facilitate access to the resource and to input or product markets. Infrastructure can also take the form of equipment for processing, storage, refrigeration/freezing, or include means of communication, such as access to mail, telephone or fax services, and access to new technologies. There are, however, cases where infrastructure can have a negative impact. Public works do not always allow communities to seek the most efficient pattern of resource use. For

example, some communities may find themselves "boxed" in by the patterns of irrigation schemes or livestock water points imposed by outside actors.

E5 **Level of Innovation** **To what extent did the community display a capacity to innovate?**

The capacity of a community to innovate depend partly on the quality of its labor pool (which may be related to training or information received) and on the capacity of this labor pool to mobilize itself or to be mobilized by the leadership. A community with good capacity to innovate is likely to be better at managing a CBNRM activity than a community that is not so inclined.

E6 **Perceived B/C ratio of CBNRM** **To what extent did community members perceive that CBNRM would bring more to them than it would cost?**

One of the strongest recurring themes in the literature on CBNRM is that the perceived value of the resource to be managed must be large enough for the community to go through the considerable efforts of community organization, mobilization, planning, management, and implementation for the activity, plus dialogue and negotiations with a potentially large set of legitimate stakeholders. The perceived value of the resource to the community also has to do with the extent to which the community has access to a market (if the resource is a tradable), to market information, or even to processing facilities. However, the perception of the benefit/cost of doing so is not necessarily straightforward. For instance, communities are often unaware of the potential value of their local resources, once adequately processed, and given good access to markets. Techniques for qualitative improvement are often ignored or discounted because of difficult access to key inputs. The relative benefits and costs also depends on how the community assesses or values the effort by, and benefits to, certain social groups. Some communities tend to have high discount rates (i.e. they would much rather have small benefits now than larger ones in a distant future), while others do not. Finally, the composite assessment of a community's benefits/costs of CBNRM is often at odds with that of other stakeholders or potential partners, making negotiations difficult.

E7 **Financial Resources** **To what extent did access to financial resources constitute a factor in CBNRM initiation?**

According to this hypothesis, communities need to have access to a minimum of financial resources to undertake a CBNRM activity. Access can be relatively direct, as when the community can draw on its own (local or migrant) resources. It can also be indirect, as when the community has the skills and knowledge allowing it to secure financial resources from private lenders or through grants.

E8 **Substitution for Public Investment** **To what extent were expected revenues from CBNRM seen as a possible substitute for public investments?**

For communities to go through the effort and trouble of organizing themselves for efficient CBNRM, they must perceive that benefits from the activity represent a **net gain**. They will not do so if benefits from their work merely are a substitute for investments in public services and infrastructure that they would normally expect the government (or perhaps, donors) to provide. A community may decide to invest in a local school or clinic, but this is seen as a net gain only if the community members are reasonably sure that such an investment would not have been made by the government or some other group.

B0 **Biophysical Factors** **The following questions address the degree to which biophysical factors played a positive or negative role in the implementation of this CBNRM activity.**

B1 **Weather** **To what extent did weather extremes induce diversification of use of natural resources by the community?**

Uncertainty

The relationship between weather uncertainty and degree of CBNRM success is complex. On the one hand, communities living under long-term weather uncertainty have generally developed a number of coping strategies and risk-spreading mechanisms including household economy diversification. On the other hand, the extent to which these practices can facilitate their taking up successful CBNRM activities depends on two things: (a) the extent to which their coping strategies lend themselves to a resource-based application, and (b) the extent to which weather uncertainty allows or rules out opportunities for resource-based community activities.

B2 **Natural Hazards**

To what extent did natural hazards affect the decision to implement a long-term CBNRM activity?

For instance: “Should local communities be selected for implementing CBNRM projects without taking an in-depth or long-term view of the natural hazards that might impede or even eliminate an otherwise successful project?” In other words, are local communities and potential successful projects placed in jeopardy because project planners and implementers do not assess long-term records on floods, mass land movements (mud slides), earthquakes, volcanic activity, tidal waves, etc. Also, should development proceed without an assessment of randomly occurring natural disasters or should developers insure to the best of their ability that the probability of a natural disaster occurring is practically nil?

B3 **Resource manageability**

From a biophysical point of view, to what extent did the resources lend themselves to management by the community?

This is the reciprocal of a community's capacity to carry out CBNRM. Because of the type of access or tenure (e.g. common property as opposed to open access resource) certain resources are easier to manage than others. Scale can be a factor (e.g. a large pond rather than a sizable lake, or watershed), the extent to which the resource is mobile (marine fishery, wildlife) can also be important, relative to the size of the community or groups or communities.

B4 **Resource Use Patterns**

At the time of initiation, to what extent were patterns of resource use ecologically sustainable?

There is obviously no point in trying to establish CBNRM on the basis of patently unsustainable patterns of resource use. In fact, most of the rationale for CBNRM is that the new patterns of tenure and management for the resource will lead to a much more efficient and sustainable mode of resource use.

B5 **Extent of changes in NRM Practices**

To what extent did the planned change in NRM practice require a significant modification in modes of resource management and use?

In some cases the shift from the previous pattern of resource use to a more sustainable CBNRM approach is relatively simple. In other cases, the state of resources or other constraints force the community to undertake a major shift in knowledge, practices, mentality and patterns of resource use.