Making community-based forest management work: a case study from Duru-Haitemba village forest reserve, Babati, Arusha, the United Republic of Tanzania

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SUMMARY

The Tanzanian Government's capacity to protect forests and woodlands has progressively declined, with a reduction in budgets and retrenchment of workers. Hence a question has emerged in recent years as to whether the main model of forest resource management involving protection by policing is the right way forward. One model that has emerged and gained ground is community-based forest management. The guiding principle underlying the community-based forest management model is that local communities have the right to control and manage the forest resources on their land. This builds on a rather unique and favourable situation in the United Republic of Tanzania, where decentralized governance allows the village to own property in its own right as a corporate entity. Communities at Duru-Haitemba exploited this situation and adopted the communities' discontent at the way the 9 000 ha of remaining woodlands were being managed by the government. The woodlands, which were in a state of acute decline before local community participation, with loss of area and species, have been transformed into woodlands with boundaries that are intact, where incursion is limited, flora and fauna are recovering and management and protection are effective and at minimum cost.

Introduction

In the United Republic of Tanzania, the central tenet of forest management has inevitably come to focus on protection, with the forester having a key role. However, it is unrealistic to expect low-paid forest guards, recruited mainly from rural areas, to protect the forest resource effectively from fellow villagers who are in need of forest products for basic subsistence (Kajembe and Malimbwi, 1996). Furthermore, in the wake of declining budgets and the retrenchment of workers, government's capacity to protect forests based on this model has progressively declined (Wily, 1995). More important, foresters in recent years have begun to question whether the "policing model" of forest management is the right way forward. These and other developments have led to a paradigm shift: the only viable alternative to forest protection is to make the people living adjacent to forests the guardians of the forest resource, and this has led to the birth of the concept of communitybased forest management (CBFM).

The Duru-Haitemba village forest reserve

The Duru-Haitemba Forest comprises typical dry miombo woodlands in the Rift Valley, about 20 km south of Babati Township. With an area of 9 000 ha, the woodlands represent the only remaining tract of forest of any significance in the otherwise well settled and cultivated Babati District.

The woodlands occur along a series of related high ridges of up to 1 850 m above sea level. The ridges form an undulating landscape, and the peaks along them give an impression of being distinct hills. About 145 species of trees and shrubs, including climbers and creepers, have been identified in the Duru-Haitemba woodlands. There are eight registered villages adjacent to Duru-Haitemba Forest (see Table 1). All of the villages were included in the study.



| | in Duru-Haitemba village forest reserve, United Republic of Tanzania | | | | | | | | |
|--------------|--|----------------------|-------------|---------------------------------------|---|--------------------------------------|---------------------------------|---|---------------------------------------|
| VILLAGE | NO. OF SUB- VILLAGES | NO. OF HOUSEHOLDS | POPULATION* | ENTITLED** VILLAGE AREA (ha) | % OF VILLAGE AREA STILL FORESTED | VILLAGE FOREST RESERVE (ha) | FOREST AREA PER HOUSEHOLD | NO. OF SUB- VILLAGES WITH FOREST | NO. OF VILLAGE FOREST GUARDS |
| 1 Gidas | 5 | 694 | 3 445 | 4 250 | 21 | 875 | 2.6 | 4 | 12 |
| 2 Bubu | 4 | 355 | 2 430 | 4 690 | 49 | 2 300 | 8.8 | 3 | 14 |
| 3 Ayasanda | 5 | 326 | 2 931 | 1 660 | 30 | 500 | 1.4 | 5 | 10 |
| 4 Endanachan | 4 | 445 | 2 503 | 2 130 | 21 | 400 | 1.1 | 3 | 4 |
| 5 Riroda | 9 | 705 | 4 506 | 4 610 | 38 | 1 800 | 1.8 | 8 | 34 |
| 6 Endagwe | 6 | 501 | 3 112 | 4 300 | 28 | 1 220 | 2.6 | 6 | 12 |
| 7 Duru | 5 | 308 | 2 816 | 3 720 | 35 | 1 500 | 2.7 | 5 | 15 |
| 8 Hoshan | 3 | 402 | 3 520 | 2 290 | 17 | 400 | 1.2 | 3 | 6 |
| All villages | 41 | 3 726 | 25 253 | 27 450 | 32 | 8 995 | 2.4 | 37 | 108 |

TABLE 1 • Socio-economic characteristics of the study villages n Duru-Haitemba village forest reserve. United Republic of Tanzan

Sources: Field data; Wily.

* Population in the year 2000.

** Entitled village area includes the forest.

CBFM initiatives at Duru-Haitemba village forest reserve

Discontent among local people

As one of the few remaining tracts of miombo woodlands in Babati District, the Duru-Haitemba woodlands had been targeted for gazetting as local government forest reserve in 1990/1991. In 1992 the Swedish-funded Regional Forestry Programme facilitated implementation of an inventory, survey and boundary demarcation process as a prerequisite for formal gazetting. However, the programme caused discontent among local people. Indeed, the process and the attempt to withdraw the forest from the public domain and put it into the hands of government was the catalyst for both local concern and the ultimate decision to find a more acceptable and more workable management regime (Wily, 1995). After a long process of dialogue, the situation was resolved through the decision to abandon gazetting in favour of allowing and assisting each of the eight villages to take full rights and responsibility for conservation of the woodlands.



The success of CBFM at Duru-Haitemba

The success of CBFM at Duru-Haitemba can be attributed to the following factors:

- clearly defined boundaries;
- congruence between appropriation and service delivery (provision) rules and the local conditions;
- good collective choice arrangements;
- conflict resolution mechanisms;
- clearly defined resource property rights;
- villagers' right to devise their own institutions without being challenged by external government authorities;
- villagers' ability to develop a common pool resource institution.

Clearly defined boundaries

The study showed that all of the villages studied have secure boundaries, which gives the villagers power to take action against anybody who violates them. Boundaries of common pool resources (CPRs) need to be defined clearly for the benefit of owners and to facilitate action. The confidence and security of tenure of owners of a CPR will be enhanced if the limits of their jurisdiction are clearly defined. In this way, they are not afraid to invest in the CPR because they do not fear that their investment may be expropriated, or that they can do nothing to reappropriate lost investment (Ostrom, 1996). Village governments in Duru-Haitemba have worked out rules that clearly define appropriation and provision, and these rules have facilitated improved protection and management of the village forest reserves. The establishment of these rules is in accordance with the Village and Ujamaa Villages Act of 1975, which empowers villages to make rules in the form of by-laws that are recognized in courts of law (Kihiyo and Kajembe, 2000).

Good collective choice arrangements

All of the eight study villages maintain strong and effective forest committees, which are responsible for rule enforcement and are gender-sensitive. The composition of village forest committees has steadily shifted from village leaders to ordinary villagers.

The forest guards, selected from various sub-villages, protect the forest against both non-villagers and offenders from within the villages. Offenders who violate operational rules are subject to graduated sanctions, depending on the seriousness and context of the offence. Marrow and Hull (1996) state that graduated sanctions are common in long-lasting CPR institutions in order to allow flexibility in the system. On the basis of this premise, it is prudent to treat with leniency a person who normally abides by the rules but who has committed an offence because of a dire need for a prohibited resource. The contrary applies to a frequent offender who has shown little adherence to the rule structure of the institution.

The presence of village forest committees and patrollers has led to a significant reduction in the number of offences in each village. Furthermore, CBFM has improved group cohesion and provided a platform for other development activities in the villages. It has also promoted local capacity by forging new social relationships and by redefining old ones.

Conflict resolution mechanisms

It was observed in this study that local conflicts are resolved through village reconciliation committees. These are recognized by the formal village by-laws and are constituted through the involvement of village elders who are perceived to be wise. In the event that traditional laws fall short of addressing certain conflicts, formal by-laws are applied.

The by-laws must be those already approved by the minister responsible for the local governments before they can be operational, as per the United Republic of Tanzania Local Government Act No. 7 of 1982 (URT,

1982). The resolution of conflicts in the village setting is in accordance with the principle that proprietors and their leaders must have rapid access to low-cost local arenas in order to solve conflicts (Ostrom, 1996). In the study area, the main conflicts were associated with competition for land use among farming, grazing and forestry.

Clearly defined resource property rights

The study found that all eight villages had applied for ownership of their land, which includes traditional woodland areas. Title deeds have since been granted. Therefore, through both statutory local government regulation and statutory entitlement the eight villages are legal owners and managers of the Duru-Haitemba Forest Reserve. This has been made possible by means of the unique advantage that Tanzania has over several other developing countries in that villages possess the capacity to be registered as the grassroots local level of governance.

Therefore, villagers in Duru-Haitemba recognize that they live in a bounded local area, have clearly defined property rights over the resource and can exercise legal claims over that resource. This is in accordance with Morrow and Hull (1996), who state that having legal title to the land is a prerequisite for the villagers to define the boundaries of their forests and their legal rights to defend those forests.

The right of villagers to devise their own institutions without being challenged by external government authorities

The CBFM initiatives at Duru-Haitemba village forest reserve were a result of discontent in local communities. This emerged when the Swedish International Development Agency (SIDA)-funded Regional Forestry Programme introduced efforts to work with villages in and around the woodlands to encourage them to support the gazetting of the proposed forest reserve (Wily, 1996). It was clear from the outset that the local people did not want their adjoining individual woodlands to be placed into government hands. Consequently, they deliberately exploited the woodlands as quickly as possible before gazetting, with the result that by 1994 the woodlands were heavily degraded.

Exploiting this potentially explosive situation, and with informal local support from the local Forestry Officer, one consultant working for the SIDA-funded Regional Forestry Programme introduced the process of exploring if and how local communities could engage in conservation and management of the woodlands around them. The initial positive response of the local people convinced the government to suspend gazetting, pending demonstration by the villagers that they really were poised to cooperate and halt degradation of the woodlands.

Consequently, the villagers became the de facto controllers and managers of the Duru-Haitemba Forest Reserve. On the basis of this tentative and informal go-ahead to control the woodlands, the villagers launched a highly dynamic process of reviewing each and every aspect of the woodlands to determine just what was required to restore them and to keep them intact for future use.

The villagers' ability to develop a common pool resource institution

The introduction of CBFM at Duru-Haitemba village forest reserve addressed the issue of control and authority over the woodlands resource. The local people were empowered and motivated to make decisions and to take responsibility for those decisions as the main guardians of the woodlands resource. This restructuring redefined the asset structure, so that ownership of the woodlands was now in the hands of the local people, and through this transformation the government secured a new relationship with the very people who it had earlier considered to be a threat to forest conservation.

Conclusion

This study leads to the conclusion that devolution, democratization, empowerment and sense of ownership have induced the local communities surrounding the Duru-Haitemba village forest reserve to invest their labour and time in sustainable conservation and management activities.

This is the basis of the present situation. The villagers are managing the woodland resources in such a way that those woodlands that were in a state of acute decline before the initiation of CBFM, with loss of area and species, have become woodlands with boundaries that are intact, where incursion is limited, flora and fauna are recovering and the woodlands are managed and protected effectively at a minimum cost.

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