PERSPECTIVES ON LOCAL RESOURCE MANAGEMENT: SOME CRITICAL ISSUES IN BABATI DISTRICT, TANZANIA

Faustin P. Maganga

Centre for Development Research and IDS, Roskilde University

1. Introduction

In recent years, many studies have been conducted on the role of local institutions in resource management. Whereas some studies have argued for an increased role of local institutions in resource management (e.g.Runge, 1986), there are other studies which have highlighted their limitations, noting that these institutions have been undermined by colonial and post-colonial political and administrative changes (Lawry, 1989a and b). This paper considers some conceptual and theoretical perspectives related to resource management in Tanzania. Particular attention is directed to tenure issues and their relation to sustainable development, as well as the role of the state and local institutions in resource management. The aim is to raise some theoretical and research issues related to a forthcoming study on local institutions and resource management in Babati District, Tanzania.

2. The Study Area

With headquarters in Babati town, Babati district covers 6069 sq. km., and it lies mostly between 1000 and 2000 m. above sea level. The district has a population of over 208,000 within its 21 wards and 81 villages, and it has been facing resource management problems, especially related to water and land. Rapid population growth is

one of the factors that have contributed to these problems. For example, between 1967 and 1978 the population of the former Hanang district, where Babati used to belong, doubled. This was due to high birth rate as well as a large in-migration, which resulted in the high population growth rate of 3.5% per annum.

Because of its attractive climate and the promise of fertile land, Babati district has managed to attract within its boundaries a multitude of ethnic groups which differ linguistically, culturally, as well as economically. Thus, in addition to the indigenous Gorowa and Iraqw who practice agro-pastoralism, there are pastoralists such as the Maasai and the Barabaig, and the predominantly agricultural people like the Wameru and Wachagga. The influx of these immigrants has led to competition for scarce land and water resources between themselves and the indigenous people of Babati.

The district's socio-cultural complexity makes Babati an excellent choice for a study aimed at investigating the role of local institutions in managing natural resources under different modes of production. Within the district it is possible to find market-oriented farmers who use tractors for extensive cultivation, without taking any measures to sustain the fertility of the soil; there are the Iraqw who are used to manuring their farms; also there are the Rangi who are accused of having shifted to Babati after wearing and depleting the fragile Haubi soils in the adjacent Dodoma region. The expansion of agriculture into the Maasai and Barabaig grazing areas (which are usually found in comparatively arid and semi-arid areas) is said to have severely affected these people's means of livelihood and forced them into other marginal areas. Since these areas often face acute shortage of water, these pastoralists move from one area to another, especially during the dry season. In order to check the spread of tsetse flies and to reduce ticks which thrive in tall grasses, fire is often employed, and such fires have often resulted in deforestation, destruction of good pastures, soil erosion and depletion of water sources.

Over the years several attempts have been made to try and arrest the process of land degradation which has resulted in Babati district as a result of the problems outlined above. Earlier efforts concentrated on afforestation activities. Since 1967-68 the Government of Tanzania started promoting "village forestry", under which policies all the villages were supposed to establish woodlots in order to ensure self-reliance in firewood and poles. However the performance of communal woodlots were not very encouraging, so during the early 1980's a project named "Forests, Trees and People" was started in Babati district, with Swedish assistance. The aim of FTP was to identify and develop the most effective ways of supporting people in their efforts to grow, manage and utilize trees and forests. The experience gained under the FTP have shown that tree planting by itself is too narrow a concept, so another project was launched recently, the Babati Land Management Pilot Project (LAMP), under which tree planting will be combined with other more general land and resource management activities such as soil conservation. This broader view regarding resource management activities requires a balanced approach that combines both ecological and technical considerations as well as an institutional perspective, which is the concern of the proposed study.

It was against the above background that it was proposed to investigate the role of local institutions in managing land and water resources in Babati district, bearing in mind its socio-cultural complexity, rapid population growth and limited land and water resources.

3. Conceptualizing "Resource Management" and "Local Institutions"

Before undertaking a project like the proposed study it is imperative to establish conceptual clarity about such concepts as **resource management** and **local institutions**. This is important because the choice between different conceptual approaches has a bearing on what one wants to unearth and on what to emphasize. For instance, a study by Talle (1990) found that a Swedish-assisted afforestation project in Babati District which addressed the problem of deforestation in the "classical" way, had the effect of marginalizing the indigenous poor, although the project was ideologically focused on the poor as a target group. According to Talle, the tree planting activities of the project led to privatization of land and consequent marginalization of the indigenous Gorowa and Barabaig people, who do not have a tradition of planting trees like the immigrant

Chagga farmers. Also, in the current debate on environment and sustainable development, writers such as Tobisson and Rudqvist have cautioned about the bias towards natural science and economic aspects of environment, and how this bias works against the involvement of local people. Therefore, for the purpose of the Babati study, resource management was defined so as to cover resource allocation, use and development, not just resource conservation. In this context, it was found useful to distinguish resource management from resource conservation, as observed by O'Riordan:

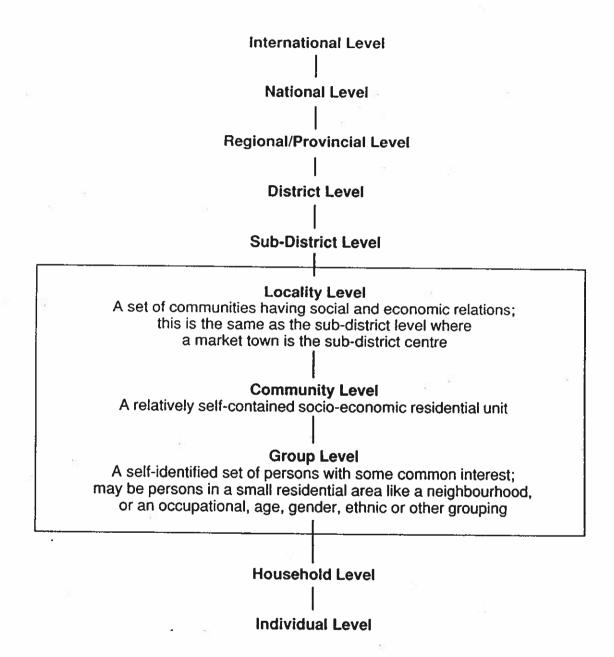
Resource management is a more comprehensive and positive term than conservation, and may be defined as a process of decision making whereby resources are allocated over space and time according to the needs, aspirations, and desires of man within the framework of his technological inventiveness, his political and social institutions, and his legal and administrative arrangements (O'Riordan, 1971: 19).

With regard to the concept <u>institution</u>, it was decided to avoid some of the narrow definitions which restrict the term to mean just formal organizations, as pointed by Uphoff (1986):

When planners and managers remark that "local institutions" are very weak, they are usually referring to the so-called "modern" institutions that have been assigned specific development tasks by the government. Localities vary in the extent and vitality of their so-called "traditional" (indigenous, informal) institutions, evolved and supported by rural people to deal with diverse problems - economic, social, cultural, religious, political etc. Some such institutions almost always exist though they may be hard to find or to work with (Uphoff, 1986: 6).

Hence, for the purpose of this study it was decided to adopt Gunnarsson's (1991) broad definition under which institutions include "rules, norms and customs and their enforcement characteristics, which determine rights and obligations between people". Also, when talking of local institutions it is imperative to remember that there are different ways of conceptualizing what is meant by "local" - it can be ecological, geographical or political. In the context of this study, we found Uphoff"s (1992) categorization of institutions according to levels of decision making and activity, very helpful (see figure 1).

Figure 1. Ten levels of decision making and activity



Source: Uphoff 1992:5

Many policy studies concerned with relationships between local institutions and natural resource management (e.g. Runge, 1986) have attributed poor management to intrusive state policies which are alleged to have interfered too much on the local scene and undermined local institutions, hence preventing these local institutions from playing their part in regulating resource use. As noted by Lawry:

States have pursued their resource-policy objectives in part through tenure policies and particularly through reforms which concentrate rights to resources in the hands of states and their resource-management agencies...In many cases, state assumption of administrative rights to common property resources has reduced the ability of local communities to manage local pastures, forests, and fisheries. Ambivalent state attitudes toward customary tenures and a lack of clarity over farmer rights to farmland and trees have affected farmer incentives for investing in desirable soil and agricultural management practices (Lawry, 1989a:1).

Bromley and Cernea (1989) concur that colonial and post-independence political and administrative changes seem to have undermined local regulation of resource use, hence opening way for unregulated exploitation and even abuse of resources. This process of undermining the role of local institutions in resource management is presented by Bromley and Cernea (1989) in the following terms:

Resource degradation in the developing countries ... actually originates in the dissolution of local-level institutional arrangements whose very purpose was to give rise to resource use patterns that were sustainable. The dissolution of community based institutional arrangements often arose from a combination of interference by powerful rulers at some remove from the village and by colonial administrations, and the rise of the nation state. The dissolution of common property institutions has also been a result of the socio-economic differentiation and growing stratification processes within communities that initially were much more homogeneous (Bromley and Cernea, 1989:7-8).

Lawry (1989) argues that, however effective they were previously, local institutions now face significant constraints as far as mobilizing collective action is concerned, and hence they cannot be relied upon alone in resource management.

4. The Need for a Multi-disciplinary Approach

Until very recently problems of resource management were regarded primarily as ecological issues. Then in 1985 Piers Blaikie published his book on the political economy of soil erosion, linking land use with class relations (Blaikie, 1985). Soon after, Norman Uphoff (1986) followed with his analysis of the relations between national and local institutions and how each can play a role in resource management. Useful research has been carried out in Kenya under the **From the Ground Up** project, initiated by the World Resources Institute and Clark University. The aim of their research is to analyse effective community-level efforts in natural resource management, and interesting case studies have recently been published (Thomas-Slayter and Ford 1989; Thomas-Slayter et al 1991 and Thompson 1991). In line with the problems facing Babati District and with the above conceptual framework, it was proposed to pursue the following objectives in Babati:

- a. To describe the livelihood systems of different ethnic groups in Babati District, and indicate cases of success and failure in land and water resource management.
- b. To highlight competing and conflicting interests regarding natural resources.
- c. To identify local institutions involved in resource management and to analyse how they articulate and mitigate interests of the different groups.
- d. To suggest strategies which may assist, facilitate or promote local institutional development for resource management.

Having thus identified the research problem and approach to the study, one is left with the task of searching and reviewing the relevant literature on the subject. Below are some of the themes which emerged from this exercise.

5. Resource Management and Sustainable Development

Since the 1972 Stockholm Conference and the publication of the Brundtland Commission Report (WCED, 1987) concern with environment and sustainable development has been popularized and made into an important part of the development debate. This concern with the environment and sustainable development has resulted in heated debates about the interaction between environment and resource use. Of special interest to our proposed study is the debate about the rationality or otherwise of pastoral systems of production. One approach which strives to show the irrationality of such systems is expressed by Walker (1979):

The semi-arid ecosystems have... often been managed by a segment of the population which constitutes the least capable, least innovative group, often disinterested in what they are doing, but not capable of changing their circumstances (Quoted in Birley, 1982:1).

On the other hand, there are other researchers who have tried to show how indigenous knowledge in resource use has been underestimated, and how, for example, pastoralists have traditionally practiced careful management of degradable pasture resources. Charles Lane's study of Barabaig resource management is a case in point (Lane, 1990). This study describes how the Barabaig transhumance movements used to exploit the forage regimes of the Hanang plains at different times of the year, and Lane argues that this was the best resource management system for the semi-arid conditions of the area. The study shows how the Barabaig developed an intimate knowledge of their environment, and governed the use of the grazing lands which were held in common through a hierarchy of jural institutions that controlled access to and use of land, interpreted customary rules, and adjudicated in conflicts over rights and duties. Lane outlines the threat posed to this sustainable land use system by a wheat project which was initiated by the governments of Tanzania and Canada. This project took away 12% of the land belonging to the Barabaig (the best watered, hence a critical dry season pasture area). The withdrawal of this land has adversely affected Barabaig transhumance patterns, leading to more unsustainable grazing in the poorer lands at their disposal. The process has also depleted the most popular grass types for the pastoralists, leading to more intensive use of the poorer grass types in the drier confines. Lane goes on to show how, under wheat cultivation, the soils are left bare between the July harvest and planting in February, leading to their greater vulnerability to wind and water erosion, and he observes that already deep gullies have appeared, and the local lake is fast silting. Traditional resource management mechanisms have given way as most herders turn desperate in an area of limited innovative opportunities.

While noting some of the positive aspects of traditional resource management such as that of the Barabaig as outlined above, it is also important to remember the limitations of extensive systems of land use such as pastoralism in areas of rapid population growth such as Babati, especially bearing in mind Tanzania's ideal of promoting peaceful co-existence between different ethnic groups. Hence it might be necessary to reconcile what is rational for a Barabaig pastoralist with what is rational for other inhabitants of Babati district. Ethnic differences need not be over-emphasized, and efforts should not be expended to "preserve" the Maasai and the Barabaig. The area once occupied by Mbulu district which includes the present Mbulu as well as Hanang' and Babati districts has numerous examples of ethnic accomodation, as illustrated by the peaceful immigration of the Iraqw into Barabaig and Gorowa territories. Also, it should not be forgotten that all human productive practice, however marginal, transforms the natural resource base. For instance, it is normal to find pastoralists using fires at the end of the dry season in order to kill parasites and other pests that inhabit the woody plants, as well as to remove the dense vegetation from the perennial so that new grasses will have a better advantage when the rains come. These practices do affect the natural resource base, and may have a major negative impact.

With regard to the present concern with environment and sustainable development, it is imperative to guard against global perspectives which may end in empty moralizing about sustainable development. As Tobisson and Rudqvist have underlined, all citizens of the world *do not* share common interests, and not everyone is prepared to take responsibility and action for the betterment of the environmental state in a global perspective. They stress:

Local groups who are marginalized and who fight a loosing battle in the struggle to meet their daily subsistence needs, may for intelligible reasons have problems in planning for the future. If there is an option of using a piece of land to plant trees for the benefit of ones grandchildren, or planting cassava or maize for more immediate family consumption needs, tree-planting is unlikely to be a priority no matter how much the trees would promote sustainable development (Tobisson and Rudqvist, 1992: 6).

With the above perspective in mind, Tobisson and Rudqvist argue convincingly that "nature" and "environment" should not be treated as concepts having universal applicability. Rather, researchers should approach the complex relationship between people and the environment by trying to find out which are the social and cultural factors and processes that ensure sustainability of a certain mode of production - these should be simultaneously sufficiently productive as well as being environmentally sound for the area under study. Also, it is important to investigate how the different social groups forming a community comprehend and explain the reproduction and regeneration of the natural resources they are dependent upon, and what is the perception of their role and position in relation to this process.

Generally, there are several conflicting views regarding ways of ensuring sound resource management and sustainable development. The first view favours increased role for the government in order to solve resource degradation and ensure more "scientific" management. Proponents of this view are inspired by Hardin's (1968) article, which was a critique of individual decision making where resources are used in common. According to Hardin, the main source of rangelands degradation is the product of the contradiction between private ownership of livestock and free access to pasture. Hence, they argue, common property is doomed to overexploitation. As noted by Ostrom (1990), writers such as Ophuls argue "because of the tragedy of the commons, environmental problems cannot be solved through cooperation... and the rationale for government with major coercive powers is overwhelming."

The second view (Runge, 1986) argues for local-level common property management, and it results from the critique of Hardin's article. Over the years many weaknesses of the "tragedy of the commons" school have appeared (e.g. Ciriacy-Wantrup and Bishop 1975; Bromley 1989 and Bromley and Cernea 1989). One of its major flaws is that its proponents "have an imperfect understanding of property" and confuse open access, characterized by "mutual privilege and no rights" with common property where there exist re-

source decision units with socially recognized and sanctioned regulations defining ownership, access and exclusion (Bromley, 1989). Bromley and Cernea (1989) suggest a more rigorous use of the term "common property":

The term "common property" has been largely misunderstood and falsely interpreted for the past two-three decades. Common property regimes are not the free-for-all that they have been described to be, but are structured ownership arrangements within which management rules are developed, group size is known and enforced, incentives exist for co-owners to follow the accepted institutional arrangements and sanctions work to insure compliance (Bromley and Cernea, 1989: iii).

Bromley and Cernea maintain that there are three other property regimes in addition to common property: they are state property, private property and non-property. They go on to elaborate that a resource regime is a structure of rights and duties characterizing the relationship of individuals to one another with respect to that particular resource, and sets of institutional arrangements are continuously established to define the property regime over land and related natural resources. They observe: "We can define property relations between two or more individuals (or groups) by stating that one party has an interest that is protected by a <u>right</u> only when all others have a <u>duty</u>... When one has a <u>right</u> one has the expectation in both the law and in practice that their claims will be respected by those with <u>duty</u>."

The third view as expressed by Lawry (1989b) questions policies which rely upon local-level common property arrangements as the principal means for improving resource management in Sub-Saharan Africa. He argues that the decline of local control and the rise of national authority over natural resources should be seen as features of national economic and political integration. The modernization process has reduced incentives for individuals to participate in localized collective arrangement, has undercut the economic viability of common property institutions, and has reduced the political legitimacy of local management authorities. According to Lawry population growth and technological change have increased pressures on natural resources and:

Local institutions, weakened by far-reaching economic changes, are unlikely to engender support at the local level for imposition of intensive controls, especially where there is little precedent for direct regulation (Lawry, 1989b: 6).

The thrust of Lawry's argument is that local institutions cannot be left alone to manage natural resources. He suggests a greater balance (relying solely neither on state government nor on local community control) in the form of a co-management model. This argument sounds attractive for the Babati situation, with its sociocultural complexity.

6. Land Tenure and Resource Management

Given our definition of the concept "institution", it is obvious that land tenure systems should be among the most important institutions to be considered in relation to resource management. Land tenure is defined as "those institutions that are part of an interrelated system which embodies the legal and contractual or customary arrangements whereby people gain access to opportunities on the land" (Dorner and Thiesenhusen, 1992: 1). The literature on African land tenure systems is vast, and recently there have been substantial improvements in the understanding of the subject. Writers such as Bruce (1988b) have argued for rigorous use of concepts, and against such terms as "customary" or "traditional" when analyzing indigenous tenure systems in order to show that tenure systems change and evolve quite rapidly. The complexity of land tenure issues in Africa is documented by Tobisson and Rudqvist:

Land tenure is a *bundle* of rights, claims, privileges and liabilities associated with a particular tract of land. There are rights of intervention applying to all land tenure systems, including systems where individual rights are strongly developed. Indigenous social mechanisms for the permanent or temporary transfer of rights (e.g. inheritence, borrowing, renting, sharecropping, etc.) and for determining how long the rights prevail. Tree-planting is one way whereby individuals can secure long-term rights of access to the commons. Moreover, the same piece of land can be used for cultivation and grazing, rights to trees and wild plants, rights to the water in springs and streams, etc. Some of these rights will be held by individuals, others by groups (Tobisson and Rudqvist, 1992: 12).

7. Land Tenure and Property Rights

It should be noted that indigenous land tenure systems are very strong in Africa, even in countries where the government has tried to institute "modern" tenure forms. Hence, although according to Tanzanian law all land belongs to the Tanzanian state, local, ethnic traditions, especially those related to land rights of occupiers and inheritence are quite strong, and they often hold sway when it comes to land allocation and use. After the villagization programme of the mid-1970s the state allocated land to registered villages and the village councils allocated land to the households. Villages also hold communal agricultural land, grazing areas and forest areas. In practice, a lot of factors influence the size of farm a household can occupy, including the size of the family, how long the household has lived in the area, and whether they use implements such as plough or tractor.

As it was pointed out in the beginning of this paper, in Babati District people representing different livelihood systems interact and compete for scarce land and water resources. Examples of potential clashes includes competition between agriculturalists and pastoralists; leaseholders and squatters; also between indigenous people and the immigrants. Like the rest of Tanzania, land tenure in Babati District is characterized by two systems, the official (statutory rights) and the traditional (customary rights). The Right of Occupancy is split into Granted Right, issued by the President and the Deemed Right, where the law deems customary land owners as lawful occupiers (Tenga, 1992). The ambiguity created by this duality of tenure systems has led to some situations where the two systems clash, with adverse repercussions for the indigenous people, the Gorowa and Barabaig. Lane (1990) has indicated how detrimental such a clash can be to sustainable resource management, with a case of the Barabaig in adjacent Hanang' District. Bohlin (1992) has made the following comment regarding the conflict of interests between indigeneous people and the immigrants:

The effects of statutory tenure system have not been appreciated by the original inhabitants of the area. The Gorowa resented in some cases being obliged to abandon ancestral graves. To the pastoral Barabaig and Maasai, living in village clusters is incompatible with their way of life, and the eventual future allocation of their grazing land for agriculture may prove to be an even greater threat. Since one principle for the land allocation is that you will be accorded as much land as you can cultivate, there is a grave danger that the commons will be split up among the wealthy, who can hire labour and tractor services, while the poor get marginalised (Bohlin, 1992: 23).

8. Security of Tenure and Resource Management

Writers who have touched the issue of security of tenure have stressed its importance in order to motivate farmers to make long-term investments in their land. Hence the primacy of security of tenure in sustainable resource management has been underlined by Bruce (1988b); also by Tobisson and Rudqvist (1992):

A condition for local natural resource management is that social groups and individuals have secure access to land and other natural resources required for livelihood. It is the right to occupy and utilize land for a long enough period that can motivate people to carefully manage natural resources with a view to long-term sustainability (Tobisson and Rudqvist, 1992: 10).

Bruce (1988b) has noted that insecurity in African tenure systems is usually attributed to rights having short duration or their termination as soon as one ceases to cultivate a particular piece of land. Regarding the possibility of indigenous systems to offer enough security to encourage investment, Bruce (1988b) notes that systems such as shifting cultivation offers only "farm tenure" rather than "land tenure". However, since there is no absolute security, but only degrees of it, this "farm tenure" can be adequate in the context of subsistence use of relatively plentiful land. It is only when population pressure increases and land become scarce when insecurity sets in. Bruce (1988b) also notes the limitations of relying on traditional rules and institutions alone when commercial agriculture develops.

9. Conclusion

The trouble with most development initiatives is that they tend to move from one extreme to another - from pure statist prescriptions to extreme devolution. In the case of Tanzania, the justification for the increased role of the state in resource management and nationalization of land was prompted by concerns that superimposing western configurations of property rights on African societies would lead to increasing landlessness and land concentration on a few powerful individuals. It was in relation with these equity concerns that the first president of Tanzania opposed the colonial government's attempt to replace customary land tenure with individual freehold in the following words:

If we allow land to be sold like a robe, within a short period there would only be a few Africans possessing land in Tanganyika and all the others would be tenants... If two groups of people were to emerge - a small group of landlords and a large group of tenants - we would be faced with a problem which has created antagonism among peoples and led to bloodshed in many countries of the world (Quoted in Coulson, 1982:146).

Despite the much publicized attempts to pursue these equity objectives, tenure reforms in Tanzania have not succeeded to prevent totally the dispossession of the powerless when land assumes value. As it was noted by Bruce (1988b) the results of most of the attempted "tenure reforms" -whether capitalist or socialist - have either been land grabbing by a few, or the national bureaucratic and economic elites have sought to obtain control of land and the power such control confers. In Babati the land near Babati township has assumed value because of the town's commercial importance, and some poor farmers have had their land confiscated, and "powersthat-be" are now using it for diary farming.

After experimenting with some of the extremes of statism, there is now a danger that African countries like Tanzania might be induced by the current calls for the "retreat of the state" and go for extreme devolution. Under the circumstances, policy makers should heed Ostrom's observation that the reality lies somewhere in between:

Some scholarly articles about the "tragedy of the commons" recommend that "the state" control most natural resources to prevent their

destruction; others recommend that privatizing those resources will solve the problem. What one can observe in the world, however, is that neither the state nor the market is uniformly successful in enabling individuals to sustain long-term, productive use of natural resource systems. Further, communities of individuals have relied on institutions resembling neither the state nor the market to govern some resource systems with reasonable degrees of success over long periods of time (Ostrom, 1990:1).

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