



## DECENTRALIZATION AND DIVERSIFICATION IN FOREST MANAGEMENT REGIMES IN TANZANIA: CASE STUDY OF ULUGURU NATURE RESERVE AND IHANGA FOREST IN MOROGORO

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### ABSTRACT

In recent years in many African countries, including Tanzania, there has been a shift of paradigm from centralized and state driven forest management regimes to decentralized and people-centred forest management regime. The inception of a Tanzania forest policy of 1998 resulted in the institutionalization of community involvement in forest management and utilization. This process involves both decentralization in forest ownership and decentralization in responsibility for forest management. In respect to forest ownership, four basic types are recognized i.e. state, districts, community and private ownership. In respect to decentralization in forest management responsibility two specific processes are taken place, i.e. devolution of responsibility from the state to local communities resulting in Joint state-community forests management, and deconcentration of central state authority to district authority resulting in district forest management. These two processes of decentralization in forest management have been compared in respect to their specific characteristics.

This study explored and compared the main characteristics of joint state-community (Uluguru Nature Reserve - UNR) and the District forests management (Ihanga Forest Reserve - IDF) regarding principles and norms, rules and procedure, decision and benefits sharing. The study was guided by theoretical considerations in respect to the concepts of decentralization and forestry

regime. Both cases are located in Morogoro region. Data were collected from both primary and secondary sources. The data were analysed using text analysis and simple descriptive statistics.

Regarding organization and decision making; in joint state-community the local communities are empowered to make decision and are participating in forest management, whereas community involvement in managing district forests is less intensive with less empowerment to make decision. Regarding the principles and norms for managing the UNR, much attention was given to ecological issues and ecotourism, while for IDF much attention was given to social needs for local communities and economic needs for district authority. The forest officials often prioritized ecological and environmental issues, while the community respondents prioritized social and economic issues.

In respect to the rules and procedures, the national forest Act of 2004 is the basic legal document used in structuring forest management in both cases. The joint state-community regime is recognized in village by-laws, has an approved management plan, and a signed joint management agreement. The Ihanga districts forest lacks recognition in village bylaws, and has neither management plan nor a signed joint management agreements.

Regarding benefit sharing, the Uluguru scheme receives adequate national and



international financial supports, and assistance for income generating activities. This is often the case for these kinds of forest management regimes. On the other hand, the Ihangha scheme, like most district forest schemes, is lacking these opportunities. These forests are often used for income generation for the district authorities. This often creates conflicts with local communities, who are excluded from timber use and only can collect non-timber forest products.

The regime characteristics as found in the Uluguru Nature Reserve and the Ihangha district generally reflect the common characteristics of joint forest management schemes and district forest schemes respectively. The management arrangements in district forests often result in over-exploitation and forest degradation; in some cases they were even illegally converted to settlements or agricultural lands. In contrast, the management regimes in state forests jointly managed with local communities is often more successful. In these forest management regimes organisational issues such as decision making and law enforcement are relatively well organized with clear definition of rights, returns, responsibilities and adequate incentives. Hence, decentralisation of forest management by partial devolution of state responsibility to local communities has been more effective for stimulating sustainable forest management than bureaucratic decentralisation to district authorities.

**Keywords:** District Forest Management; Joint-state Forest Management; Devolution; Deconcentration; Decentralization

## **INTRODUCTION**

### **Trends in forestry decentralization in Tanzania**

The management of Tanzania Forest reserves dates back to the German colonial period and has historically mainly been

characterized by policing exclusion and enforcement of laws. The forest sector in Tanzania was managed centrally through the forest and beekeeping division (FBD) under Ministry of Natural Resources and Tourism (MNRT). The management was characterized by extensive state control with inadequate involvement of local communities. This exclusion has over the years been the disincentive for the local communities and limited their participation in forest management. The result has been massive forest degradation and deforestation through illegal activities (Wily and Dewees 2001) and subsequently a marked decrease in forest cover. To prevent further destruction of forests, the government noted in the late 1980s the need to involve local communities in forest management and committed to a new form of forestry that involves the communities in forest management (MNRT 1998). This development followed the broad international movement that started in the mid of 1980s in Asia and rapidly spread to Africa, stressing the decentralization and delegation of forest management rights and responsibilities to the local level to enhance sustainable forest management (Wily 2002).

The involvement and participation of communities in forest management was institutionalized when Tanzanian government enacted a new forest policy in 1998, followed by the Forest Act Cap 323 [R.E.2002] (URT 2002) which officially decentralized forest management to the local level and put in place a participatory forest management (PFM) program with the goal of ensuring sustainable use and management of forests through community involvement (Blomley and Ramadhani, 2006). As a result, several types of forest management regimes were recognized: Joint Forest Management (JFM), community-based forest management (CBFM), traditional forest management and local authority forest management.



In CBFM the role of the central government is reduced. The district authorities have the role to facilitate the processes and to monitor the implementation of participatory approach. Most of the CBFM schemes have an important production role. Joint forest management concerns a participatory management approach where forests are managed through the coordinated effort of both the state forest agency and forest users with the aim of conserving and managing the environment sustainably (URT 1998; Carlson and Berkes 2005). JFM takes place mainly on the reserved land that is owned

by the central government, and managed by central government in collaboration with the local communities.

Normally, the forests under JFM are categorized as the protection forests. These forests are mainly for water catchment and biodiversity conservation purposes (URT 2002). Another category of joint management arrangement are the forest reserves that have been classified as production forests. The Table 1.1 below gives an overview of forest distribution by ownership and management regimes in Tanzania.

**Table 1: An overview of the forest reserve ownership status in Tanzania**

Ownership	Productive No.	Protective No.	Total No.
<b>Declared or gazetted forest reserves</b>			
Local authority forest reserves	95	74	167
National forest reserves	223	225	448
Private forest reserves	3	1	4
Village land forest reserves	81	187	268
<b>Subtotal reserve forests</b>	<b>402</b>	<b>487</b>	<b>889</b>
<b>Unreserved forests</b>			
Proposed local authority forest reserves	20	43	63
Proposed National forest reserves	15	57	65
proposed village forest reserves	442	392	834
Forests on general land	N/A		
<b>Subtotal unreserved forests</b>	<b>477</b>	<b>492</b>	<b>969</b>
<b>Total reserve and unreserved forests</b>	<b>879</b>	<b>979</b>	<b>1858</b>

**Source:** Akida and Blomley, 2008

Although various forest management regimes have been developed, the characteristics of the various regimes are still somewhat hazy. To date several studies have been carried out assessing the nature of the decentralized forest management regimes. These studies have mainly focused either on the role of the central government or of local communities (Wily 2002, Akida and Blomley 2008). Still little attention has been given to assess the role of the district authorities. In order to gain an insights into the question whether decentralized forest management under district authority has different features compare to decentralized forest management under joint state-community, this study aims at assessing the

management regimes of joint state – community forest management in protection forests and local authority forest management of production forests. The study also explores and compares the characteristics of the two types of decentralized forests management regimes.

#### **Study objectives**

The overall aim was to explore and compare the characteristics of two major types of forest management regimes (i.e. joint state-community versus district forest management) in respect to their principles, norms, Rules, procedures, the organization set up and the role of district authorities and local communities in decision-making and



benefit sharing. This objective is further operationalised in three empirical research questions in respect to (a) the main comparative characteristics of the two regimes, (b) opinions of local people and forestry professionals on the regimes, and (c) the effectiveness of the regimes.

## RESEARCH DESIGN AND METHODOLOGY

This study used both explorative and comparative case study. The approaches enable to study a social phenomenon through a thorough analysis of specific cases. The case study aims to understand a given phenomenon through the in-depth examination of one specific or multiple cases and develop an in-depth understanding of a contemporary phenomenon within its real-life context.

### Selection of research location

On the basis of prior experience and working contact, two cases were selected. In view of the time available and to limit geographical variation, one case of Joint state-community and one case of district forests were selected in the Eastern part of Tanzania. The Uluguru Nature Reserve (UNR) and the Ihanga District Forest Reserve (IDF) were selected. The cases are not only differing in respect to their management organization but also in respect to their objectives. This illustrates an important difference in the principles of management between these two cases. This will be elaborated in chapter 4.1.

### Study site

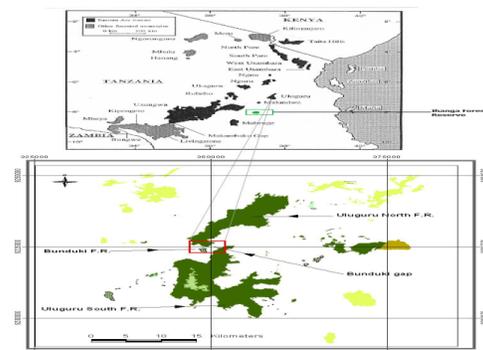
The Uluguru Nature Reserve is part of the Eastern Arc Mountains (EAM), which run from Taita Hills in Southern Kenya to the Udzungwa Mountains in South Central Tanzania. The reserve is surrounded by 57 villages involved in its management. It falls under Morogoro Municipality and Morogoro Rural and Mvomero districts. The Uluguru Nature reserve (UNR) is

located in the Eastern part of Tanzania about 180 km from Dar es Salaam along the Dar es Salaam – Malawi and Zambia highway via Mbeya region in Tanzania.

The Ihanga forest reserve is also located along the Eastern Arc mountains blocks. The reserve is located between latitudes 8° S and longitudes 37° E the reserve is surrounded by two villages namely; Machipi and Ihanga. The reserve falls under Kilombero district in Morogoro region and is also located along Dar es Salaam - Malawi and Zambia highway (Figure 1).

### Selection of respondents

The study focused on key respondents. The respondents were selected by purposive sampling (expert advice and snowball sampling). The representatives from each village were selected basing on prior information. A total of 73 respondents were selected and interviewed. Out of this, 63 informants are community's representatives, 10 were forest officials. The selected respondents were mainly from village natural resources committees and forest officials of each particular forest management regime.



**Figure 1:** Location of Uluguru Nature Reserve and Ihanga Forest reserves in Morogoro -Tanzania **Source: Batulaine, 2007.**



### **Data collection**

Data were collected through two main sources; primary and secondary data. Primary data were collected through observation and interview methods. Secondary data in the form of policy documents, Act, guidelines, management plans and bylaws, articles, case studies, journals artefacts were used to obtain information on the formal arrangements of the different regimes.

### **Data analysis**

The collected data were analyzed using the text analysis and simple descriptive statistics. The text analysis was primarily based on coding of field notes and interviews transcripts. The simple descriptive statistic summarizes the information and captures the similarities and differences in the way people perceived and responded to UNR and Ihanga District forest management regimes.

## **RESULTS**

### **The main characteristics differentiating Joint state-community and District authority management regimes**

The main features distinguishing these types of forest reserves are their management objectives. In principle, both forest regimes consist of either production or protection forests. However, in reality most of the protection forest are under devolution decentralization while, most of the production forests under district forests are managed through bureaucratic deconcentration. The two management regimes have distinct features. Apart from its management objectives, other features distinguishes these forests. i.e the forest officers managing the protective forests are employed and paid by the principal secretary for the Ministry Natural Resources and Tourism. On the other hand, forests under local authority management are heavily destructed, and the forest officers are employed and are paid by the District Executive Director.

### **Organizational set up**

Organizational set up of UNR and the Ihanga forest reserve falls under the different administrative structure. The two cases represent the dual structure of Tanzanian forest administration. The forestry administration in Tanzania is divided into two structures; one is Ministerial (Central government) managing National forests reserves, and the regional administration managing district forests.

UNR and the Ihanga forest management have different chain of command administratively. At the district level the District Forest Officers (DFOs) are answerable to the District Executive Director, while for the joint state-community case all forest professional are answerable to the Director of Forestry under the Ministry of Natural resources and Tourism.

The management responsibilities for the UNR is partially delegated to local communities. At village level, the village community is represented by Village Natural Resources committees (VNRCs) in the management of forest. This committee is answerable to the village government and has to report to the village council. The members of the committee are selected by the village communities through the village assembly. The committee serves for five years, and is granted executive rights in preparation and implementation of forest management plans, bylaws, participatory forests resources assessment and signing of joint management agreements. Also, the management of Ihanga district forest is partially delegated to local community. The criteria for selection of village Natural Resources Committees are the same for both joint state-community and the district forest management.

### **Decision making**

In both Joint state-community and District forest management regimes the decision making is made by all stakeholders (community, district forest officers, state forest officers, environmental NGOs,



institutions and funders) involved in the management this represent 80% of respondents interviewed while only 20% pointed out that decision in management of forest is made by villagers represented by village Natural resources committees.

On the other cases, decision is made depending on what the decision is about, as well as the management levels. The decision on formation of forest policy and legislation is made by the Central government, while the decision concerning bylaws i.e. district bylaw is formed at district level which comprises the laws of various sectors in the district and by VNRCs at village level on behalf of the village government, then reviewed by village council and approved by district council.

The bylaw concerning forest issues is formed basing on the mother laws (National forest Act and regulation and Environmental Management Act and regulation). The decision concerning the

implementation of these by- laws is made at the respective levels. Moreover the study revealed that decision concerning district forests is a bit complicated, especially the decisions on harvesting of forest products is done without involving the village community.

### Opinions of local communities and forest officers

#### *The principles and norms used in forest management*

The results showed that there is a variation in views and priorities among the forest officials and community representatives. The respondents for UNR indicated that the The National Forest Policy of 1998 and Forest Act Cap 323 [R.E.2002] encourage community participation in forest protection, management and utilization. Also, the approach has led to equitable sharing of costs and benefits between communities and forest owners in order to ensure forest sustainability in meeting social, economic, ecological and cultural needs (Table 1).

**Table 1: Opinions on specific rules and procedures structuring forest management in UNR and IDF**

Forest type Category label	UNR		Ihanga forests reserve	
	Comm. views (%)	Forest officials views (%)	Community views (%)	Forest officers views (%)
Forest Act and Regulations	25.1	26	24.3	24
Bylaws	14.8	8	34	5
National Forest Programme	14.6	18	8.7	17.3
National Forest Policy	12.2	20	4.6	19.7
Eastern arc strategic plan	10.4	9	-	-
Traditional laws especially. ritual sites, worship	9.1	5	6.7	3
Village Land Act 1999	7.3	-	5.7	7
Environmental Management Act 2004	6.5	12	6.3	6
Local Government Act 1982	-	2	9.7	18

### Cost and benefits distribution among stakeholders

In the case of UNR, the communities are benefitting from non timber products and some environmental services like water, biodiversity, eco-tourism and land beauty. This may be due to its management objectives. The number of respondents

have pointed out that 34% of benefit received are social and 34% are economic while cultural benefits ranked as the least of their priority which represents 15% (Table 4.2).

On the other hand, the responses show that, for the district forests the involvement of



communities is not clearly known. Communities are partially involved in forest management, what is existing is only VNRC; there is no management plan, joint management agreement as well as village bylaws. The informants indicated that Ihangha forest reserve provides the benefits

as shown in the Table 2. Out of the total score, economic benefits score 32% followed by social benefits 30%. However, the informants pointed out that, the village community receives inadequate benefits as expected.

**Table 2: Community opinions and actual Benefits distribution by % of respondents**

Benefits	Uluguru nature reserve	Ihangha district forest
Economic	34	32
Social	34	30
Cultural	15	18
Infrastructure	17	21

Furthermore, the adjacent communities are willing to participate in forest management, as they receive forest benefits, i.e. income generating activities support to suffice their

needs. Apart from the benefits and ecosystems services, the local communities receive several as in Table 3.

**Table 3: Opinions on forests benefits and services from forest management**

Category	Uluguru Nature Reserve			Ihangha District forests		
	Community views(%)	Forest views (%)	officials	Comm. views(%)	Forest views (%)	officials
Poverty eradication	26.3	7.6		28	8.3	
Payment Environmental Services (PES)	15.8	10.7		17	10	
Get support through REDD	15.6	13		-	9	
Secure additional funds	10.6	12		21	17	
Development of cultural tourism	10.5	10.2			8	
Reduction of illegal tree cutting	8.3	16		9.7	19	
Carbon trading	5.3	3.1		11.9	10.7	
Well protection of forest	5.3	21		-	5	
FSC	2.3	6.4		10.4	13	

### Effectiveness of the two regimes

During the study it became apparent that the two regimes differ in effectiveness. The evidence of indirect link between the Ministry and the District administration as indicated in chapter 4.1.1 has weakened the forest management practices in the study area. Also, the district forests management is dominated with conflicts and poor governance. The management of joint state–community forests is still in question due to the lack of cost and benefits sharing mechanisms for joint forest management.

Likewise, the provision of financial supports to run income generating activities has reduced pressure on forests resources hence improves forest conditions and peoples livelihoods. Moreover, the provision of payment for environmental services (PES), REDD initiatives, forest stewardship certification (FSC) will contribute to sustainable forest management and utilization hence improves forest condition as well as peoples livelihoods.



The study also shown that in both cases, forest Act and policy provides the legal basis for management and utilization of these forests, at district level these are supplemented by district bylaws. If communities are to be fully protected and empowered to manage forests for their own benefits, there is a need to ensure that participatory processes comply with legal requirements set out in the law. Despite the strong local protection provided, there is a danger that without the full protection of the law, these forests are vulnerable to external pressures or development, thus communities may be unable to defend these forests from destruction.

## **DISCUSSION**

### **Empirical reflections**

As indicated in chapter 1.1 the Tanzania government has committed itself to decentralized forest management. This process involves conscious efforts at devolution by stimulating community involvement. This involvement in woodland and forest management does not merely constitute a redistribution of access rights but represents also a fundamental socio-political shift in state people relations (Wily and Dewees 2001). The district forest reserves are experiencing forest degradation and loss of forest cover due to limited financial resources and pressing development demands and investments in forest management is often limited. The Limited access to forest areas, capacity and limited transport has contributed to inappropriate forest management practices (Akida and Blomley 2008). On the other hand, Joint state-community forests, receives national and international funding supports through biodiversity conservation projects (Babili and Wiersum 2010).

The principles and norms including forest policies have encouraged legitimate community tenure rights to forest which helped in promotion of participatory decision making in forest management. It is also reported that some joint state –

community and the district forests have been operated for many years without formal legal arrangements; instead they have been operating using forest principles and traditional norms.

The study conducted in Tanzania by Lund (2007) mentioned various policies, programmes and legislation to support forest conservation and management. These have provided substantial rights to, and power over forest resources to local democratically elected bodies (Blomley and Ramadhani 2006). Moreover, Wily (2001), had pointed out that, the devolution of power to local communities in forest management in Tanzania desires democracy. Blomley (2006) pointed that, the economic return from joint state community forests are far from being non-viable in long term but, it appears to be more effective over time. The study carried out in several regions of Tanzania in particular for the joint state –community forests (Tanga, Morogoro, Arusha and Kilimanjaro), has shown that, the actual economic value of forests was rated at USD 496 million/year. A fraction of this value is going back to the local communities as payment for ecological services (Zahabu, Malimbwi and Ngaga 2005).

However, Veltheim and Kijazi (2002) suggested that, it is unrealistic to assume that villagers would take the burden of all forest management activities without any tangible benefits. This reflect that, the communities and other stakeholders will only participate in the forest activities with sort of incentives and also when the forest activities are of their interests. The study by Vyamana (2009) shows that JFM have much restriction on harvesting of forest products, as these forests are primarily for water catchment and biodiversity conservation, but it provides more income generating activities (IGAs) hence improves forest condition.



### Theoretical reflections

This study applied two theories which are consistent to the research objective. These theories are Regime and Decentralization theories. The regime theory (Levy *et al.* 1995), and the decentralization theory (Agrawal and Gibson 1999), provide the basis to analyze the management characteristics of joint state-community and district forest in the study areas. The two theories were found to be complimenting each other, but it was possible to identify some empirical management problems.

However, the study revealed that most of the forests under bureaucratic deconcentration are lacking management plans, village bylaws and joint management agreements. There is also lack of transparency in decisions concerning forest earnings and licensing procedures. Moreover, there is existence of poor link between the central government administration and the district forest administration, this situation has resulted to overexploitation of forest resources. To this end, the combination of regime and decentralization theories makes this research in its theoretical framework. Considering other researchers like Larson (2003), Ribot (2002), Berkes *et al.* (2003), Redgivist (2006), Ribot *et al.* (2006), Blomley and Ramadhani (2004), revising these regimes by basing on their principles, norms, rules, procedures, organisations, decision making and benefits/cost sharing their concern was whether these social institutions are ecologically attractive, socially desirable and economically lucrative. Thus, the concept of regime and decentralization theories in devolution and deconcentration offers a relative understanding on how the effort to avoid deforestation and to improve livelihoods can be institutionalize.

### CONCLUSION

The study concludes that regarding organization and decision making; in joint state-community the local communities are

empowered to make decision and are participating in forest management, whereas community involvement in managing district forests is less intensive with less empowerment to make decision. Regarding the principles and norms for managing the UNR much attention was given to ecological issues and ecotourism, while for Ihanga forest reserve much attention was given to social needs for local communities and economic needs for district authority. The forest officials often prioritized ecological and environmental issues, while the community respondents prioritized social and economic issues.

With respect to the rules and procedures used in structuring forest management in both cases the basic legal for management and utilization of forest resources is the Forest Act. This Act is supplemented with the Environmental Act of 2004 and Local Government Act 1982. The joint state-community regime is recognized in village by-laws. The Ihanga districts forest lacks recognition in village bylaws, and has neither management plan nor signed joint management agreements.

Regarding income generation and benefit sharing, the Uluguru scheme receives adequate national and international financial supports, and assistance for income generating activities. This is often the case for these kinds of forest management regimes. On the other hand, the Ihanga scheme, like most district forest schemes, is lacking these opportunities. These forests are often used for income generation for the district authorities. This often creates conflicts with local communities, who are excluded from timber use, and are only involved in forest protection activities through patrolling.

The regime characteristics as found in the UNR and the Ihanga forest reserve, generally reflect the common characteristics of joint forest management schemes and district forest schemes respectively. In contrast, the management regime in state forests jointly managed with



local communities is often more successful. In these forest management regimes organizational issues such as decision making and law enforcement are relatively well organized with clear definition of rights, returns, responsibilities and adequate incentives. Hence, decentralization of forest management by partial devolution of state responsibility to local communities has been more effective for stimulating sustainable forest management than bureaucratic decentralization to district authorities.

### Recommendations

Further studies are recommended to explore the effectiveness of the regime based on principles of deconcentration decentralization as this form of decentralization in forestry have received much less attention than decentralization regimes based on devolution of management responsibility to local communities.

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