

Forestland tenure systems in Tanzania: an overview of policy changes in relation to forest management

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Preface

Land tenure systems have implications for the management of forest resources. Tanzania has embarked on reform programs aimed at among other things improving the management of natural resources. Most of these reforms however, have not brought about the expected results, most likely because of flaws in either their conception or their implementation. There is, therefore, a need to take stock of the current experiences and draw lessons from land policy reform strategies and processes in order to address the challenges that Tanzania face in this area.

This paper reviews and discusses the role of forestland tenure systems in Tanzania, and how the different forestland tenure approaches and reforms have influenced forest management. The paper is the result of cooperation between the Department of Ecology and Natural Resource Management, Norwegian University of Life Sciences and Department of Forest Mensuration and Management, Sokoine University of Agriculture. The work is done as a part of the project “Assessing the impact of forestland tenure changes on forest resources and rural livelihoods in Tanzania” (project no. NUFUTZ-2007/10226) under the Tanzania - Norway NUFU Programme 2007-2011.

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Summary

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A review of the role of forestland tenure systems in Tanzania, and how different forestland tenure approaches and reforms have influenced forest management is presented. The complexity of land reforms and processes that have taken place in Tanzania during the pre-colonial, colonial and post-independence periods is discussed. The pre-colonial period, though not much is written, was characterised by forest management through traditional institutions, low population and low forest resources exploitation. Colonial governments undermined the role of local traditions in managing the forests related to for example burial areas and springs. They also established forest reserves and in some areas cleared indigenous forests to establish tea, coffee and exotic fruit and timber plantations. Different land reforms that were geared towards sustainable development occurred after independence, forests depletion continued, however. Currently, it is observed that there coexists state, village, private and collective rights on forests without clear ownership. This is greatly linked to the ongoing deforestation and forest degradation in the country. In this situation, sustainable forestland use may be attained through establishing an enabling environment that allows effective local communities' participation in forest management. Sustainable management, however, always presupposes effective control of harvesting and other activities to secure the carrying capacity of forests and woodlands, whether it is undertaken by central authorities or local people. Studies on forestland tenures and rights, and the impact of changes in tenures and rights on forest resources and rural livelihoods are therefore important. Such studies are required for the provision of facts for the establishment of proper future policy means that aim at reducing forest degradation and improving livelihoods in Tanzania.

Sammendrag

Zahabu, E., Eid, T., Kajembe, G. C., Mbwambo, L., Mongo, C., Sangeda, A.Z., Malimbwi, R. E., Katani, J.Z., Kashaigili, J.J. and Luoga, E.J. 2009. Forestland tenure systems in Tanzania: an overview of policy changes in relation to forest management [Eiendomsforholdene for skogarealer i Tanzania: en oversikt over policyendringer i skogforvaltningen]. INA-fagrapport nr. 14, 24 pp.

Rapporten gir en oversikt over eiendomsforholdene for skogarealer i Tanzania og hvordan ulike reformer knyttet til dette har påvirket skogforvaltningen. Kompleksiteten i landreformene, og prosessene som har blitt gjennomført i forbindelse med disse, i før-kolonial og kolonial tid og i tida etter uavhengigheten, blir diskutert. Den før-koloniale tida bar preg av et skogbruk som ble gjennomført etter tradisjonelle og lokale ordninger, av lav befolkningstetthet, og av en relativt liten utnyttelse av skogressursene. Kolonimaktene underminerte rollen som lokale tradisjoner hadde knyttet til for eksempel gravsteder og vannkilder i skog. Det ble også etablert sentralstyrte skogreservater og i noen områder ble den tradisjonelle bruken av skogområder omdisponert til te-, kaffe og fruktplantasjer, og til plantasjer for tømmerproduksjon basert på innførte treslag. Etter frigjøringen fra kolonimaktene ble det gjennomført ulike reformer, uten at dette i særlig grad forbedret situasjonen for skogressursene og forvaltningen. I dag ser en at det eksisterer ulike rettigheter og plikter knyttet til statlig land, land tilhørende landsbyer og privat land, uten at eiendomsrettighetene er fullt ut klarlagt. Det antas at denne situasjonen i stor grad bidrar til avskoging og degradering av skogarealer i Tanzania. For å få til en bærekraftig utvikling er det derfor viktig at det etableres institusjoner og regelverk som helt klart definerer roller, rettigheter og plikter til alle, og særlig lokalsamfunnene, som er involvert i forvaltning og bruken av skogressurser. I tillegg er det også viktig at det etableres effektive kontrollmekanismer, administrert sentralt eller lokalt, som gjør det mulig å overvåke at avvirkning og annen aktivitet knyttet til skogarealene forgår på en bærekraftig måte. Det må derfor gjennomføres en systematisk kartlegging av eiendomsforhold og rettigheter, og de innvirkninger dette kan ha på skogressursene og leveforhold på landsbygda. På denne måten vil styresmaktene kunne ha et godt faktagrunnlag når de skal utforme sin politikk for å redusere avskoging og forbedre leveforhold i Tanzania.

1. Introduction

Until 1999, the Land Ordinance of 1923 was the principal governing statute regarding land tenure and management in Tanzania. This was replaced by two pieces of legislations, the Land Act No. 4 and Village Land Act No. 5 of 1999. The Land Acts divide land resources into three categories, namely reserved land, village land and general land (URT, 1999). The Land Act deals with the management of reserved land and general land while the Village Land Act is concerned with the village land. In addition to the Land Acts, the reserved land falls under sectoral pieces of legislations including Forest Act, National Parks Ordinance, Wildlife Conservation Act, and Town and Country Planning Ordinance.

The Village Land Act of 1999 establishes and defines village land. Generally, the village boundaries may be legally determined or merely agreed between the bordering villages. Certain reserved lands such as forests and game controlled areas may be found within village lands. As such there are obvious overlaps between the Land Act and the Village Land Act. However, 16 out of the 35 million ha of forest land in Tanzania are unreserved, and most of these forests are in village lands (Table 1). The unreserved forests are either free access or customary managed by local institutions. In this context, forest land tenure in Tanzania is defined as a combination of legally or customarily defined forest ownership rights, and arrangements for the management and use of forest resources (Reeb & Romano, 2007).

Land tenure systems have implications in the management of forest resources (Njuki, et al., 2004). The nature of property rights over forests and their economic value have been identified as major causes of deforestation in several developing countries (Ligon & Narain, 1999; Dolisca et al., 2007; de Oliveira, 2008). The study carried out by Dolisca et al., (2007) in Haiti indicated that land tenure significantly affects farmers' decisions, and farmers who use lands illegally are likely to clear more forests for agriculture. This is probably the case in Tanzania too. Generally speaking there is no strong consensus on the type of tenure that would yield greater security or efficiency in natural resource management, but it seems to be generally accepted that unclear and disputed tenure is not conducive for efficiency and sustainability of forest management. Furthermore, Tanzania has no adequate capacity for land regulation and administration. This was a major constraint to the implementation of the new land policies of 1999. While in these unresolved controversies, Tanzania has embarked on political and economic reforms to provide equity, reduce poverty, foster economic growth and improve the management of natural

resources. These include the “National Strategy for Growth and Reduction of Poverty” popularly known in Swahili as MKUKUTA (i.e. Mkakati wa Kukuza Uchumi na Kupunguza Umasikini Tanzania). This strategy is the development framework for five years, i.e. 2005-2010. It forms a part of Tanzania’s efforts to deliver on its National Development Vision 2025.

Most of these reforms have yet to bring the expected results, most likely because of the flaws in either their conception or their implementation. There is, therefore, a clear need to take stock of the current experiences and draw lessons from land policy reform strategies and processes in order to address the challenges that Tanzania faces in this area.

Table 1. Distribution of forest land area by use and ownership in Tanzania (Source: Malimbwi 2002, FAO 2006 and URT 2008).

Ownership	Productive		Protective		Total	
	No.	Area (Ha)	No.	Area (Ha)	No.	Area (Ha)
Declared Forests						
L.A.	95	1,356,204.20	74	231,470.40	169	1,587,674.60
C.G	223	9,292,844.90	225	2,986,862.40	448	12,279,707.30
W.C.A & N.P				2,000,000.00		2,000,000.00
P.F.	3	20,547.80	1	23,188.00	4	43,735.80
V.F.					331	2,345,500.00
Subtotal	321	10,669,596.90	300	5,241,520.80	952	18,256,617.70
Proposed forest reserves						
P. L. A.	20	64,018.80	43	102,558.80	63	166,577.60
P. C. G.	15	352,557.30	50	443,367.00	65	795,924.30
Subtotal	35	416,576.10	93	545,925.80	128	962,501.90
Unreserved forests						16,037,880.40
Grand Total	356	11,086,173.00	393	5,787,446.60	1080	35,257,000.00

In this paper we review and discuss the role of forestland tenure systems in Tanzania, and how different forestland tenure arrangements and reforms have influenced forest management. The paper discusses the complexity of land reforms and processes that has been taking place in Tanzania since pre-colonial era to the current free market economy period. The complexities in terms of definitions, ownership patterns, and management and coordination issues are highlighted. The paper also reviews briefly the Tanzania Land and Village land Acts no. 4 and 5 of 1999 in connection to the Forest Act no. 14 of 2002. The main body of the paper is on policy changes and the implications on the management of the Tanzanian forest resource base and rural livelihoods.

2. Historical perspectives of forestland tenure changes in Tanzania

The forestland tenure changes in Tanzania can be traced in three periods namely pre-colonial, colonial and the period after independence. In this paper, the pre-colonial period is regarded as the period from where people started agriculture and settled in clans and chiefdoms up to the time of colonialism. The colonial period started in the late 1880s to 1961 when Tanganyika got its independence.

2.1. Pre-colonial period

There is not much written information on the state of the environment (Ylhäisi, 2003) and on forest management and policy for the pre-colonial times in Tanzania (Holmes, 1995). This period, was characterised by forest management through traditional institutions, low populations and minimal forest resources exploitation. People lacked technological capacity and markets to overexploit natural resources and thus their impact on the environment in general was low (Malimbwi & Munyanziza, 2004). The main anthropogenic impact on forest formations during pre-colonial times was probably modification of large savanna areas by fire (Harris, 1980). Due to low population the impact of shifting cultivation and grazing on the environment was quite limited. In Tanzania, like in other African countries, uncultivated land was owned communally before colonialism and people used forests extensively for their livelihoods. The forests were the sources of food, medicines, clothes, water and place for spiritual activities (CFA, 2007). Hunting was a fundamental activity for many cultures as it contributed significantly to the community's food supply. Management and use of forest resources was controlled through customary institutions including beliefs, taboos and customs.

In some African societies, local leaders were instituting management practices including issuing permission for trees to be cut for specific purposes (Grundy, 1990). Small scale commercial exploitation of forests and woodlands for timber in Tanzania started early in the 18th century when the Arabs came to Tanzania and specific tree species were selectively harvested (Malimbwi & Munyanziza, 2004). In many ways the people lived in a subsistence economy, and Ylhäisi (2003) for example, claim that they still do today. This is however, debatable. Many economists would insist that Tanzania peasants today are fully incorporated into the world-economy through international markets for raw materials that they produce, and agriculture inputs and consumables they purchase. There is also a functioning market for unskilled labour in Tanzania.

2.2. Colonial period

Exploitation of forests and woodlands in Tanzania continued during the German (1891-1914) and the British (1920-1961) colonial eras in the 19th and 20th centuries. Common to colonised African countries have been the policies that limit local people from benefiting from natural resources (Misana et al., 1996). The First World War (1914-1920) led to intensive forest encroachment and thus the first task of the British government after claiming Tanganyika was to reclaim encroached forests and reserving them. Traditional land use practices were regarded as detrimental to the environment and the State established protected areas, which restricted local people access to the natural resources upon which they depended for their livelihoods (Pendzich, 1994; Ylhäisi, 2003). This in overall has been one of the main factors undermining indigenous knowledge and management practices in Africa (Munyanziza & Wiersum, 1999; Kajembe, 1994). Colonial governments undermined the role of local traditions in managing the forest related to for example burial areas and springs. In some areas they cleared indigenous forests to establish tea, coffee and exotic fruit and timber plantations.

2.3. Post-independence period

The forestland tenure changes after independence can be depicted in two periods of socialism from 1960s to mid 1980s locally known as *Ujamaa* (African Socialism) and free market economy thereafter.

2.3.1. Ujamaa period

Post independent Tanzanian government adopted the same Colonial Forest Ordinance Chapter 389 of 1959 which continued to emphasise restrictions and prohibitions within forest reserves (Holmes, 1995). The government also continued expanding the protected areas (Malimbwi & Munyanziza, 2004; Ylhäisi, 2003). Policies that focused on preservation of forest reserves and wild animals have caused conflicts over resource use and conflicts between short-term individual and long-term communal interests (Bell, 1987). There has been little incentive for local people to manage and utilise the natural resources sustainably (Misana et al., 1996; Malimbwi & Munyanziza, 2004; Ylhäisi, 2003). Consequently, deforestation and forest degradation increased (Misana et al., 1996).

The Tanzanian population was around 11 million at independence, approximately 22 million in 1985, and is now estimated at 45 million (UN, 2009). This growth is the result of improved health services and nutrition and in this sense indicates a positive development. On the other

hand, there is no doubt that such population growth puts a strong burden on the natural resource base, forests in particular. This is especially so since there has been little technological development in Tanzanian agriculture during the same period.

Since independence, Tanzania embarked on policy and institutional reforms with the aim to revamp national economic growth. This notwithstanding, forest degradation has continued due to the fact that reforms focused on economic growth rather than environmental management. Forest degradation was also accelerated because of limited state regulatory capacity to implement sustainable forest management (Petersen & Sandhövel, 2001; URT, 1998). Until the 1973 Villagisation Act, the allocation of land for cultivation was the responsibility of the “Chief” (i.e. traditional leaders usually responsible for each tribe constituting of different villages) or was delegated to the headman of the village concerned. This responsibility now lies with the village Chairman as head of the village government (Banyikwa, 1991).

Generally, local governance institutions have provided the foundation for a relatively devolved land tenure management framework, as well as for recent efforts to support local jurisdictions for forests. A case study carried out in Tanzania by Warner (1997) revealed that some tribes like the *Sukuma* farmers expressed uneasiness about their tenure. The fact that people were relocated from their customary land into planned village settlements during operation Vijijini caused disruption of customary management systems of the natural resources (Banyikwa, 1991). Moreover, most of the established villages had formal registrations, but individual village members lacked title deeds- a situation, which also increased the insecurity over village land. According to Kessy (1998), this insecurity of tenure has resulted in a number of environmental problems including promotion of open access regimes, particularly in forests and woodlands.

Legal institutions had low capacity to deal with dynamics in land issues in Tanzania until 1980s. This situation plus the global economic reforms forced Tanzania to shift from command to market economies (Nhantumbo et al., 2003).

2.3.2. Free market economy period

Beginning in the mid-1980s, under the administration of President Ali Hassan Mwinyi, Tanzania undertook a number of political and economic reforms. Early 1992, the government decided to adopt multiparty democracy. Legal and constitutional changes led to the registration of 11

political parties. Two parliamentary by-elections (won by CCM) in early 1994 were the first-ever multiparty elections in Tanzanian history.

Economic reforms underlining the free market economy among other issues included growing interest in sustainable forest management. This brought changes in policies with significant shift in thinking towards development of participatory natural resources management processes. This has often been accompanied by political decentralisation or devolution of responsibilities and provision of community involvement in forestry (Petersen & Sandhövel, 2001; CFA, 2007). Reforms in forestland tenure have extensive ranges of propositions, which need to be understood clearly by the communities as well as policy makers. Understanding the implications of different forest tenure arrangements is therefore crucial for governments looking forward towards strengthening and formulating policies that are contributing to local management of forest resources, and for other stakeholders supporting community-based forest management (CBFM) (FAO, 2008).

The important role that local communities can play in the management and conservation of biological diversity has been recognised over the past two decades (CFA, 2007; Malimbwi & Munyanziza, 2004; Ylhäisi, 2003; Petersen & Sandhövel, 2001; URT, 1998; Kajembe, 1994) and is of considerable importance to land use strategies (Bell, 1987). The government of Tanzania is addressing the discrepancy between limited state capacity and enormous challenges in natural resource management through fundamental policy reforms including Agriculture Policy (1997), Land Policy (1995), Forest Policy (1998), Wildlife Policy (1998), Village Land Policy (1999) and the National Development Vision 2025 (Petersen & Sandhövel, 2001). The realization of these problems came due to the fact that when rural people are not involved as partners in the design and implementation of natural resource projects, the government efforts to address both local and national objectives are likely to fail (Pendzich, 1994). Thus, new approaches to forest and woodland management must incorporate the social and economic factors, which influence the way communities utilise these natural resources (Deweese, 1996).

Although it has been observed that security of tenure is an essential instrument in sustainable forest management, in Tanzania about 50% of forestland is in general land and is more or less under open access regime. To crown it all, the local population has often been excluded from the management of forest resources, hence sees these resources as a form of land use in competition with the use that meets their immediate needs. The Tanzania National Forest Policy advocates

community empowerment in forest management (URT, 1998) with emphasis on clear forest land and tree tenure rights (URT, 2002). Rights to the trees are intertwined with rights to the land on which the trees stand (Kajembe, 1994; Warner, 1997). Land tenure is of central importance to this effect (Deweese, 1999), especially when proposing management interventions (Campbell et al., 1993).

The current land policy aim at ensuring rights of Tanzanian citizens over land and other natural resources, create an enabling environment for economic development and promote investments in natural resources (URT, 1999; Nhantumbo et al., 2003).

Faced with forest degradation problems, Tanzania introduced a Participatory Forest Management (PFM) regime, first piloted in Babati district in early 1990s (Wily, 1997). This regime was adopted by the National Forest Policy (URT, 1998) with legal support of the Forest Act of 2002 (URT, 2002). PFM has two arrangements namely; Joint Forest management (JFM) and Community Based Forest Management (CBFM). Under JFM the government owns the forest and involves local communities in the management. On the other hand, in CBFM communities are the owners, right holders and duty bearers of forest management (Ylhäisi, 2003; Zahabu, 2006; URT, 2006). Under the two arrangements central issues for the local people are the rights of ownership, management and use of forest resources (Ylhäisi, 2003).

3. Policy changes and their implications to forest management in Tanzania

3.1. Forest policy and law reforms in Tanzania

The first Forest Policy and Law were enunciated during the colonial period and imposed changes on forestland tenure. According to Sheridan (2004) colonial political institutions had buttressed the conservation of forests in the then Tanganyika territory. Policy reforms that followed after independent Tanganyika have impacted forest and woodland resources in contemporary Tanzania. Land was nationalised as a means of production during the Arusha Declaration of 1967 followed by the introduction of the Villagisation Programme in the 1970s. The villagization programme resettled the large proportions of the rural population into planned centres by replacing the traditional peasant households with fairly large settlements each comprising at least some 250 families (Mapolu, 1985).

As a result of population concentrations, practising subsistence agriculture and high dependence on fuelwood, vast areas of forests were cleared (Ylhäisi, 2003; Bagachwa, et al., 1996). Furthermore, from the mid 1980s, Tanzania embarked on external market liberalisation which increased timber extraction (Bagachwa, et al., 1996). The implementation of these reforms plus limited resources led to the government failure in controlling forest resources, and created an open access regime which furthered degradation of the forest resources (Bagachwa, et al., 1996).

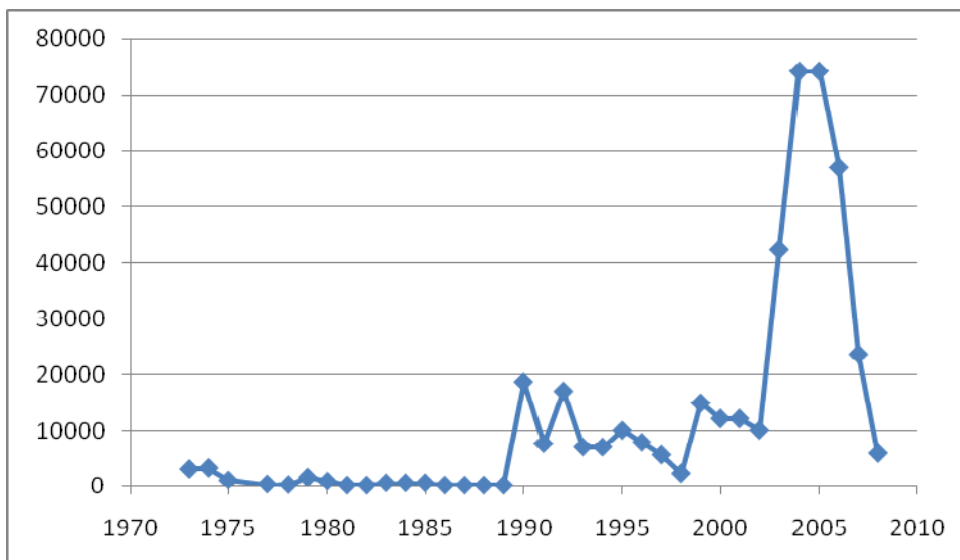


Figure 1. Export volume of industrial roundwood from Tanzania since mid 1970s (m³/year).
Source: FAO (2010)

Figure 1 illustrates the effect of trade liberalisation on timber export. The figure shows that there was a massive export of timber from 2002 to 2007. Among others this was contributed by massive timber exportation to China. This exportation was however, halted following intervention by the government and development partners.

Degradation and deforestation are among the major environmental problems facing forests in Tanzania. The rate of deforestation has been estimated at 412,000 ha annually (FAO, 2006). As a result of this environmental governance challenge, there has been a shift from centralised and state driven forest and woodland management of the colonial and post-independence periods towards decentralised forest management (URT, 1998; Petersen & Sandhövel, 2001; Ylhäisi, 2003; Malimbwi & Munyanziza, 2004; CFA, 2007). The government of Tanzania introduced decentralisation and privatisation policies in the 1990s to pave way for local people to participate in the management of forest resources by recognizing that local people are better placed to manage the resources efficiently (Gombya-Ssembajwe & Banana, 2000). Secure forest tenure and access to forest resources are a pre-requisite for sustainable forest management (FAO, 2007).

Most of the forests have been gazetted as forest reserves and managed by the state (central government). This is a typical tenure regime which has been adopted from the colonial period by most African countries, whereby forest governance is vested under state control, and thus alienated access and ownership rights for the local people who previously owned the resources (Kowero et al., 2003). However, this system failed to yield the expected results due to inadequacy in finances, facilities for patrolling forests and lack of people's participation. As a result, most of the forests were not adequately protected and hence prone to degradation, encroachment and fragmentation (Zilihona et al., 1998, Shangali et al., 1998). In order to improve control over some forest reserves, tenure status changes were introduced in some reserves to establish Nature Reserves. The first of its kind was the Amani Nature Reserve (ANR) in 1997, which became operational in 2000 (Amani Nature Reserve Management Plan, 2007). The objective of establishing ANR was to protect the unique forest ecosystem, and maintain biodiversity and natural processes for scientific and recreational purposes. ANR was a result of change of private forestland on farmlands (1,220 ha), private tea estate forestland (1,068 ha), private sisal estate forestland (150ha) and change of status of six forest reserves to a nature reserve, totalling to about 8,380 ha. Notwithstanding is the establishment of more nature reserves like Nilo and Uluguru. This establishment of nature reserves aims at tenure and status changes with the hope of strengthening forest protection.

The National Forest Policy of 1998 advocates decentralised management through community empowerment in the name of PFM. PFM takes place in all types of forests, including montane forests with high biodiversity values and lowland miombo woodlands with high levels of use and disturbance. However, this decentralised forest management have both positive and negative impacts on forest resources (species diversity, stocking, regeneration and cover). Success stories on the impact of PFM on forest resources have been recorded in Tanzania in terms of recovering flora and fauna and effective management at minimum cost (Kajembe et al., 2003, Blomley et al, 2008). On the other hand, PFM is also reported to have a number of problems associated with poor governance at the village level (Brockington 2007) that resulted in declining forest stock (Zahabu & Malimbwi, 2008).

3.2. Forestland tenure and sustainable forest management

In many African countries, customary tenure system through common property regime regulates access to, use and conservation of much land and many natural resources. This regime ensures access rights to the poorest and the vulnerable in the community. The complexity of customary tenure necessitates community empowerment through institutional arrangements and capacity building. It is also important to ensure recognition of indigenous systems - including customary tenure - that contribute to the sustainable use of resources (FAO, 2008). Government land titling has been observed in many instances to be sources of conflicts and insecurity for women and poor households.

The majority of the people in sub-Saharan African countries live in rural areas and largely depend on access to land and natural resources for their livelihoods (Chileshe, 2005). There is no doubt that land and its natural resources are closely linked with the socio-economic interests of these communities (Jakobsen et al., 2006). Non-timber forest products (both plants and wildlife) are important for rural communities, both for subsistence and income generation. In their study, Ross-Tonen and Dietz (2005) reported that sustainable resource use for livelihood sustenance requires secure tenure arrangements and recognition of customary forest-user rights.

It has long been argued that the ownership of a resource to a large extent influences the way that the resource is used at present and managed for future use. The basic tenet is that when an individual owns a resource and can expect to own and profit from the resource in the future as well, the individual has an incentive to invest in the resource in the form of protective measures, restrained use and careful management (Talwar & Ghate 2004). Secure tenure of forests is an

important aspect of forest management, lack of which is a major reason why some local people do not commit themselves to participatory forest conservation (Waiganjo & Ngugi, 2001). Management of forest resources in Tanzania is done mainly by the government (central and local governments). The main problems are that there is a fragmentation of authority, and that resources are thinly spread to the extent that management of the resource suffers.

3.3. Possible impacts of forestland tenure on forest resources and rural livelihoods

The National Forest Policy advocates clear forestland and tree tenure rights for local communities (URT, 1998). According to this policy, it is only when the people can satisfy their needs, have control of the resource base as well as have secure tenure, that long term objectives of environmental protection can be satisfied. Insecurity of tenure promotes open access to forests and woodlands (Njuki et al., 2004; Kessy, 1998). Rights of use and access determine communities' decisions to manage forests, and forestland tenure is central to this effect (Deweese, 1999; Warner, 1997) when proposing management interventions (Campbell *et al.*, 1993). Rights to the trees are intertwined with rights to the land on which the trees stand (Warner, 1997; Kajembe, 1994).

Over 80% of the population in rural Tanzania live on village land or other land that is communally owned, which is otherwise subject to customary controls with the ultimate ownership of the land vested in the State (Kessy, 1998; Kajembe, 1994). The general trend of customary land tenure is to recognise existing customary land ownership. Land may also be allocated to villagers for cultivation and settlements as need arise. Grazing and forest resources use usually take place in communal land within the village. Customary land tenure is a *usufruct* system, because if the land is not used, the rights to it ends and the land becomes available for redistribution (Warner, 1997).

Rural people in poor countries are highly dependent on forests for their livelihoods, and most forests have been modified by human activities (CFA, 2007). Estimating the income of people whose livelihood depends on forests is the key to understand their wellbeing and use of the woodlands (Wollenberg & Nawir, 1998; Vedeld et al., 2007). Forests and woodlands form a part of important natural resources in southern Africa, and a large number of people depend on them for a variety of purposes (Deweese, 1999). However, laws that regulate their use often conflict with the needs of local people as the legal frameworks impact people's ability to meet their daily needs (Gosalamang et al., 2004).

Livelihood may be defined as comprising the capabilities, assets and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Chambers & Conway 1992 quoted in Carney et al., 1999). Various authorities mention forest uses (Campbell et al., 1993; Grundy et al., 1993) as essential to the wellbeing of rural communities (Grundy, 1990; Clarke et al., 1996; Dewees, 1996). Trading of woodland products for the majority of people is one of the strategies to meet specific cash needs and as a contingency in case of crop failure. This support large and small-scale enterprises and trading of woodland products such as charcoal, firewood, building poles and timber and is a major employer in Tanzania (Brigham et al., 1996, CHAPOSA, 2002). Based on this fact most woodlands and forests in southern Africa have been heavily disturbed because of their great local value measured by rural people in ways which differ from the ways natural resource managers have measured value (Dewees, 1996). Modes of livelihoods that prevail both within and between households are highly diverse and subject to rapid change over time (Murray, 2001) making studies on rural livelihood a great challenge.

4. Conclusions

It appears that land tenure systems in Tanzania and their implications for sustainable forest management have increasingly gained prominence in the development agenda. The issue is critical because the forest resource base, upon which the forest adjacent communities depend for their socio-economic development, has been greatly influenced by forestland tenure arrangements. The complexity of land reforms and processes that has taken place in Tanzania during colonial and post-independence periods is discussed. The pre-colonial period, though not much is written, was characterised by forest management through traditional institutions, low populations and minimal forest resources exploitation. Colonial governments undermined the role of local institutions in managing the forests. Instead the colonial regime established forest reserves and in some areas cleared indigenous forests to establish tea, coffee and exotic fruit and timber plantations. Different land reforms were implemented after independence, but forests continued to be depleted.

At present, it has been observed that there coexists state, village, private and collective rights on forests without clear ownership of rights. This is linked to the ongoing deforestation and forest degradation in the country. In this situation, sustainable forestland use can possibly be attained through establishing an enabling environment that facilitates more effective local communities' participation in forest management. Sustainable management, however, always presupposes effective control of harvesting and other activities within the carrying capacity of forests and woodlands whether it is undertaken by central authorities or local people. Studies on forestland tenures and rights, and the impact of changes in tenures and rights on forest resources and rural livelihoods are therefore important. Such studies are required for the provision of facts for the establishment of proper future policy means that will reduce forest degradation and improve livelihoods in Tanzania.

References

- Bagachwa, M., Shechambo, F., Sosovele, H., Kulindwa, K. & Naho, A. (1996). Case study from Tanzania. In: Reed, D. (ed.). *Structural Adjustment, the environment and sustainable development*. Earthscan Publications, London. Pp 108-127.
- Banyikwa, W.F. (1991). Constraints on sustainable use of natural resources in Tanzania. In: Suliman. M. (ed.). *Alternative Development Strategies for Africa, Vol. 2: Environment. Women*. The Institute of African Alternatives. London. Pp 97-105.
- Bell, R. H. V. (1987). Conservation with a human face: conflicts and reconciliation in African land use planning. In: Anderson, D. & Grove, R. (eds.) *Conservation in Africa: People, Policies and Practice*. Cambridge University Press, London. Pp 79-109.
- Blomley, T., Pfliegner, K, Isango, J., Zahabu, E., Ahrends, A. & Burgess, N.D. (2008). Seeing the Wood for the Trees: Towards an objective assessment of the Impact of Participatory Forest Management on Forest Condition in Tanzania, *Oryx* 42 (3):380-391.
- Brigham, T., Chihongo, A. & Chidumayo, E. (1996). Trade in woodland products from the miombo region. In Campbell, B (Ed): *The miombo in transition: woodlands and welfare in Africa*. CIFOR. Bogor.
- Brockington, D. (2007). Forests, community conservation, and local government performance: The Village Forest Reserves in Tanzania. *Society and Natural Resources* 20:835-48.
- Campbell, B. M., Grundy, I. & Matose, F. (1993). Tree and woodland resources: the technical practices of small-scale farmers. In: Bradley, P. N. and McNamara, K. (eds.). *Living with Trees: Policies for Forestry Management in Zimbabwe*. The World Bank, Washington, D. C. Pp 29-62.
- Carney, D., Drinkwater, M., Rusinow, T., Neefjes, K., Wanmali, S. & Singh, N. (1999). *Livelihood Approaches Compared: a brief comparison of the livelihood approaches of the UK department for International Development (DFID), CARE, Oxfam and the United Nations Development Programme (UNDP)*.
- Chileshe R. A. (2005) *Land Tenure and Rural Livelihoods in Zambia: Case Studies of Kamena and St. Joseph*. A thesis submitted in partial fulfilment of the requirements for the degree of PhD in Development Studies Faculty of Arts University of the Western Cape.
- Clarke, J., Cavendish, W. & Coote, C. (1996). Rural households and miombo woodlands: use, value, and management. In Campbell, B. (ed.). *The Miombo in Transition: Woodlands and Welfare in Africa*. CIFOR, Bogor, Indonesia. Pp 101-135.

- CFA (Commonwealth Forestry Association) (2007). Commonwealth Forests: An overview of the Commonwealth's forest resources. The Grib Dinchope Craven Arms Shropshire SY79JJ England. 163 pp.
- CHAPOSA (2002) Charcoal Potential in Southern Africa, Final project report, Stockholm Environment Institute. 304pp. http://www.sei.se/chaposa/documents/final_report/CHAPOSA%2520project%2520final%2520report_BW.pdf
- de Oliveira, J. A. P. (2008). Property rights, land conflicts and deforestation in the Eastern Amazon. *Forest Policy and Economics*, 10: 303-315.
- Dewees, P. A. (1996). The miombo woodlands of southern Africa: emerging priorities and common themes for dryland forest management. *Commonwealth Forestry Review* 75(2): 130-135.
- Dewees, P. A. (1999). Social and economic aspects of miombo woodland management in southern Africa: options and opportunities for research. CIFOR Occasional Paper No. 2, 1-7.
- Dolisca, F., McDaniel, J. M., Teeter, L. D., & Jolly, C. M. (2007). Land tenure, population pressure and deforestation in Haiti: the case of Forest de Pins Reserve. *Journal of Forest Economics* , 13: 277-289.
- FAO (2006). Global Forest Resources Assessment 2005. Food and Agriculture Organization of the United Nations, Rome, 320 pp.
- FAO (2007). State of the World's Forests. Food and Agriculture Organization of the United Nations Rome. [<ftp://ftp.fao.org/docrep/fao/009/a0773e/a0773e08.pdf>] visited on 19/5/2008.
- FAO (2008). Understanding Forest Tenure in Africa: Opportunities and Challenges for Forest Tenure Diversification. *Forestry Policy and Institutions*. Working Paper No. 19. Rome. pp 305-345.
- FAO (2010). <http://faostat.fao.org/site/626/default.aspx#ancor> (visited 4/1/2010).
- Gombya-Ssembajjwe, W. S. & Banana, Y.A. (2000). Community Participation in Forest Management: The Case of Buttobuvuma Forest Reserve, Mpigi District. In: Proceedings the International Workshop on Community Forestry in Africa, 26-30 April, 1999. Banjul, The Gambia.

- Gosalamang, D., Vedeld, P. & Gombya-Ssembajjwe, W. (2004). Impact of change of legal status of Mount Elgon Forest Reserve on household livelihoods. In: Shemwetta, D. T. K., Luoga, E. J., Kajembe, G. C. and Madoffe, S. S. (Eds.). Institutions, incentives and conflicts in forest management: A perspective. Proceedings of the IFRI East African Regional Conference, Moshi, Tanzania, 12th – 13th January, 2004. Pp 40-48.
- Grundy, I. M. (1990). The potential for management of indigenous woodlands in communal farming areas of Zimbabwe with reference to the regeneration of *Brachystegia speciformis* and *Julbernardia globiflora*. M. Sc. Thesis. University of Zimbabwe, Harare.
- Grundy, I.M., Campbell, B.M., Balebereho, S., Cunliffe, R., Tafangenyasha, C., Fergusson, R., & Parry, D. (1993). Availability and use of trees in Mutanda Resettlement Area, Zimbabwe. *Forest Ecology and Management* 56: 243-266.
- Harris, D. R. (1980). (Ed.). *Human Ecology in Savanna Environments*. Academic Press. London. 522 pp.
- Holmes, J. (1995). *Natural forest handbook for Tanzania Vol II: Forest policy, planning and utilisation*. Faculty of Forestry, Sokoine University of Agriculture, Morogoro. 362 pp.
- Jakobsen, J., Rasmussen, K., Leisz, S. & Quang, R. F. (2006). The Effects of Land Tenure Policy on Rural Livelihoods and Food Sufficiency in The Upland Village of Que, North Central Vietnam. Department of Geography, University of Copenhagen, Danish Center for Agricultural Research and Ecological Studies (CARES), Hanoi Agricultural University, Gia Lam, Hanoi, Vietnam. <http://www.sciencedirect.com/science>] 3/5/2008.
- Kajembe, G.C., (1994). *Indigenous Management Systems as a Basis for Community Forestry in Tanzania: A Case Study of Dodoma Urban and Lushoto Districts*. Tropical Resource Management Papers No.6. Wageningen Agricultural University.
- Kajembe, G. C., Monela, G. C. & Mvena, Z. S. K. (2003). Making community-based forest management work: A case study of Duru-Haitemba Village Forest Reserve, Babati Tanzania. In: Kowero, G., Campbell, B. M. and Sumalia, U. R. (eds.). *Policies and management structures in woodlands of southern Africa*. CIFOR, Bogor, Indonesia. Pp 16-27.
- Kessy, J.F. (1998). *Conservation and Utilization of Natural Resources in the East Usambara Forest Reserves: Conventional Views and Local Perspectives*. Tropical Resource Management Papers No. 18. Wageningen Agricultural University, Department of Forestry. 168 p.

- Kowero, G., Kaoneka, A. R. S., Nhantumbo, I., Gondo, P. & Jumbe, C. B. L. (2003). Forest policies in Malawi, Mozambique, Tanzania and Zimbabwe. In: Kowero, G., Campbell, B. M. and Sumalia, U. R. (eds.). *Policies and governance structures in woodlands of southern Africa*. CIFOR, Bogor, Indonesia.
- Ligon, E. & Narain, U. (1999). Government management of village commons: comparing two forest policies. *Journal of Environmental Economics and Management* 37: 272-289.
- Malimbwi, R.E. (2002). Forest extent and ownership in Tanzania. Consultancy report, Tanzania Conservation and Management Project (TCMP), Forestry and Beekeeping Division, Dar es Salaam Tanzania.
- Malimbwi, R. E. & Munyanziza, E. (2004). From local people to local people: forest management and policy in Tanzania over 100 years. *UNISWA Res. J. Agric. Sci. and Tech.* 7(2): 101-108.
- Mapolu, H. (1985). The state and the peasantry. Pp.107-33 in I.G. Shivji (ed.): *The state and the working people in Tanzania*. CODESRIA, Dakar.
- Misana, S., Mung'ong'o, C. & Mukamuri, B. (1996). Miombo woodlands in the wider context: macro-economic and inter-sectoral influences. In: Campbell, B (ed.). *The Miombo in Transition: Woodlands and Welfare in Africa*. CIFOR, Bogor, Indonesia. Pp 73-98.
- Munyanziza, E. & Wiersum, K. F. (1999). Indigenous knowledge of miombo trees in Morogoro, Tanzania. *Indigenous Knowledge and Development Monitor* 7: 10-13.
- Murray, C. (2001). *Livelihoods research: some conceptual and methodological issues*. Department of Sociology, University of Manchester. 16pp. <http://www.chronicpoverty.org/pdfs/05Murray.pdf> site visited 20.5.2008.
- Nhantumbo, I., Monela, G. C. & Kowero, G. (2003). Land policies in Mozambique and Tanzania: implications for forestry development. In: Kowero, G., Campbell, B. M. and Sumalia, U. R. (eds.). *Policies and governance structures in woodlands of southern Africa*. Centre for International Forestry Research (CIFOR). Pp 113-137.
- Njuki, J., Kowero, G. & Nair, C. T. S. (2004). What shapes forestry in Africa? A report prepared for the project; lessons learnt on sustainable forest management in Africa. CIAT, AFORNET, and FAO, 33pp.
- Pendzich, C. (1994). *The role of alternative conflict management in community forestry*. Food and Agriculture Organisation of the United Nations. Working Paper No. 1.
- Petersen, L. & Sandhövel, A. (2001). Forestry policy reform and the role of incentives in Tanzania. *Forest Policy and Economics* 2: 39-55.

- Reeb, D. & Romano, F. (2007). Forest tenure in Africa and south and Southeast Asia: implications for sustainable forest management and poverty alleviation. Paper prepared for the International conference on poverty reduction and forests: tenure, markets and policy reforms, Bangkok, 4-7 September 2007.
- Ross-Tonen, M.A. & Dietz, T. (2005). African Forests between Nature and Livelihood Resources: Interdisciplinary Studies in Conservation and Forest Management. Edwin Mellen press. Queenston. 429 pp.
- Shangali, C.F., Mabula, C.K. & Mmari, C. (1998). Biodiversity and Human Activities in the Udzungwa Mountain Forests, Tanzania. 1. Ethnobotanical Survey in the Uzungwa Scarp Forest Reserve. *Journal of East African Natural History* 87(1):291-318.
- Sheridan, M. J. (2004). The environmental consequences of independence and socialism in North Pare, Tanzania, 1961-88. *Journal of African History*, 45:81-102.
- Talwar, D. M. & Ghate, R. (2004). Community-Initiated Forest Management Without Land Tenure: How Feeble, How Strong? South Asian Network for Development and Environmental Economics, Kathmandu, Nepal and The Institute of Research and Development, Nagpur, India.
- UN (2009). World Population Prospects: The 2008 Revision. United Nations Population Division. <http://esa.un.org/unpp/p2k0data.asp> (Visited 10.02.2010).
- URT (1998). National Forest Policy. Government Printers, Dar es Salaam. 59 pp.
- URT (1999). Village Land Act (and Regulations) No. 5 of 1999. Ministry of Lands and Human Settlements. Government Printer. Dar es Salaam, Tanzania.
- URT (2002). Forest Act No. 14. Tanzania, Government Printers, Dar es Salaam. 99 pp.
- URT (2006). Participatory Forest Management in Tanzania- Facts and figures (First Edition). Extension and Public Unity, Forestry and Beekeeping Division, Ministry of Natural Resources and Tourism, Dar es Salaam. 6 pp.
- URT (2008). Participatory Forest Management in Tanzania- Facts and figures (Second Edition). Extension and Public Unity, Forestry and Beekeeping Division, Ministry of Natural Resources and Tourism, Dar es Salaam. 12 pp.
- Vedeld, P., Angelsen, A., Bojö, J., Sjaastad, E. & Berg, G.K. (2007). Forest environmental incomes and the rural poor. *Forest Policy and Economics* 9:869-79.
- Waiganjo, C. & Ngugi P. E. N (2001). The Effects of Existing Land Tenure Systems on Land Use in Kenya Today. Paper presented at the International Conference on Spatial Information for Sustainable Development Nairobi, Kenya 2-5 October.

- Warner, K. (1997). Patterns of tree growing by farmers in eastern Africa. In: Michael Arnold, J. E. & Dewees, P. A. (eds.). *Farms, Trees and Farmers. Responses to Agricultural Intensification*. Earthscan Publications Ltd., London. Pp 90-110.
- Wily, L (1997). Villagers as Forest Managers and Governments: “Learning to let go”. The Case of Duru-Haitemba and Mgori Forests in Tanzania. *Forest Participation Series, Forestry and Land Use Programmeme*, International Institute for Environment and Development. No. 9, 22 pp.
- Wollenberg, E. & Nawir, A. S. (1998). Estimating the incomes of people who depend on forests. In: Wollenberg, E and Ingles, A. (eds.). *Incomes from the Forest: Methods for the Development and Conservation of Forest Products for Local Communities*. Pp 157-187.
- Ylhäisi, J. (2003). Forest privatisation and the role of community in forests and nature protection in Tanzania. *Environmental Science and Policy* 6:279-290
- Zahabu, E. (2006). Case Study Handei village forest reserve, Tanzania. In Murdiyoso D. and M. Skutsch (eds). *Community Forest Management as a Carbon Mitigation Option Case Studies*. Bagor, Indonesia: Center for International Forest Research (CIFOR), 16-19 p.
- Zahabu, E. & Malimbwi, R.E. (2008). The Likely Mechanism for Implementing REDD Policy in Tanzania. Kyoto: Think Global Act Local, Research Project. Paper presented in TAF AGM 16-17 November 2008, Sokoine University of Agriculture, Morogoro, Tanzania.
- Zilihona, I., Shangali, C., Mabula, C.K. & Hamisy, C. (1998). Human Activities Threatening the Biodiversity of the Udzungwa Scarp Forest Reserve, Tanzania. *Journal of East African Natural History* 87(1-2): 319-326.