

The World Bank/WBI's CBNRM Initiative

Case Received: February 4, 1998

Author: Vincent B.M.S. Kihyo, Sokoine University of Agriculture

Tel.: +255 56 3718

Email: isinika@sua.ac.tz

FOREST POLICY CHANGES IN TANZANIA: TOWARDS COMMUNITY PARTICIPATION IN FOREST MANAGEMENT

ABSTRACT

This paper is about the emerging theme of joint forest management between communities and the government in Tanzania. As per the Arusha Declaration of 1967 which aimed at building a socialist state in Tanzania, forests were nationalised. However, the socialist experiment was beset by economic problems, which also affected the forest sector. The main problem of the management of forests in Tanzania during the thirty years of the socialist experiment is the large area which is under public lands and therefore virtually no management activities undertaken, although the central government is responsible for its management. These areas are actually open access. The areas designated as forest reserves, which are also under the government suffer from poor management because of the limited capacity of the government in terms of manpower and other resources. During the mid 1980s, economic reforms were initiated and the economy was liberalized, practically doing away with socialist economic policies. Liberalization in the forest sector include joint management of forests between the government and communities and other decentralized concerns, as a way of making management of this natural resource sustainable. A new forest policy has been formulated to cover these new management approaches. The new forest policy is discussed and the various aspects which aim at including communities in management of forests are highlighted. The various positive outcomes expected in this new management approach are also highlighted.

Key words: forests, policy, management, communities.

BACKGROUND: MACRO POLICY CHANGES

Ujamaa Socialism in Tanzania

Tanzania adopted the policy of *ujamaa* socialism to guide her socio-economic development in 1967, through the Arusha Declaration.

Ujamaa, a variant of African socialism is an economic and political philosophy, which is claimed to be essentially African in character. The choice of the name *Ujamaa* emphasises the African-ness of the policies pursued (Nyerere, 1968). Basically it involves building a society on the foundation of Africa's past, with emphasis on certain characteristics like extended family, cooperation and concern for the welfare of all members of the society. However, flexibility should be there to accommodate the challenges of life in the twentieth century.

Ujamaa required the state apparatus to control the major means of production and exchange, abolishing the exploitation of man by man thus eliminating social classes, reduce the income gap between the rich and the poor and between urban and rural areas in the country. It required that economic development should be based on self reliance, implying that development be carried out by the people using resources found in the country. Aid, loans and grants from outside the country are accepted, provided that they do not interfere with the political integrity of the country.

The Arusha Declaration recognised forests as major means of production and thus they were nationalised. The government, though the Forest Division, managed the forests and wood based industries were controlled by a parastatal, the Tanzania Wood Industries Corporation (TWICO).

Structural Adjustment Programmes in Tanzania

In the early 1980s there was a general feeling that the economy of Tanzania needed some adjustments. The economy had been weakened by a series of economic shocks since 1970s such as (Maliyamkono and Bagachwa, 1990; Bagachwa, 1992):

- the second round of oil price increases
- increases in the price of manufactured goods
- fall in prices of Tanzanian exports
- two successive bad crop years
- costs of the war against Uganda
- break-up of the East African Community

There were long term weaknesses of the economy which required rectification such as: poor performance of the agricultural sector, poor parastatal performance and to restructure the industrial sector such that it is export oriented rather than import dependent. Thus Tanzania embarked on an economic reform programme, typically called structural adjustment programme (SAP) in 1986.

Structural adjustment programmes (SAPs) typically involve a variety of economic reforms in monetary, fiscal, trade, regulatory policies and public sector management. These reform programmes have been based on the assumption that, if sufficient economic incentives are provided to producers, they will expand existing production and invest in new productive activities, thus providing the engine for sustained economic growth (Lancaster, 1993).

The main objectives of SAP were: bring about sustainable economic growth, restore sustainable balance of payments position, reduce budget deficit, cut down inflation, reform government trade policies and provide incentive to farmers so that production is stimulated and parastatal restructuring and privatization (Maliyamkono and Bagachwa, 1990; Bagachwa, 1992).

Aim of the paper

This paper discusses the formulation of a forest policy in an economy in transition from a state controlled economy to the liberalized economy. The paper show changes in the forest policy document which among other things advocates the joint management between the forest sector and communities in the management of forests. The paper further shows that the new formulated forest policy aim to tackle most of the problems affecting the forest sector.

FOREST RESOURCE AND OWNERSHIP

Forest area

Tanzania has an area of 886,000 square kilometres. About 33.5 million hectares, or 37.8% is covered by forests and woodlands. Out of this total 33.5 million hectares classified as forest land, almost two thirds consists of woodlands on public lands. The main vegetation types include Afro alpine heath and moorland, forests, woodlands and grasslands, bushlands and thickets, swamps, mangroves and man made forests. About 13 million hectares of this total forest area have been gazetted as forest reserves. Over 80,000 hectares of the gazetted area is under plantation forestry and about 1.6 million hectares are under water catchment management. The total forested area is distributed as follows:

Table 1: Forest area in Tanzania divided into forest type, use and legal status

Forest type	'000 ha
Forests (other than mangrove forests)	1,141

Mangrove forests	115
Woodlands	32,299
Total	33,555

Use of forest land

Production forest	23,810
Protection (including water catchment)	9,745
Total	33,555

Legal status

Forest reserve	12,517
Forest/woodland within national parks etc	2,000
Non-reserved forest land	19,038
Total	33,555

Source: FAO (1992); FDB Statistics (1997).

The forest estate has productive, protective and scientific functions. Productive benefits include: woodfuel, structural timber, roundwood etc. Protective functions include: soil conservation, environmental amelioration, habitats for fauna and flora and water catchment areas. The remnants of tropical high forests in the Usambaras, Ulugurus and Udzungwa (otherwise known as the eastern arc) provide good scientific research sites due to their unique flora and fauna and high levels of endemism (Mgeni, 1992; URT, 1997).

There are about 80,000 ha of plantation forests. These are designed to provide industrial wood. The plantation forests consists of 86% softwoods and the remaining hardwoods. The main softwood tree species are *Pinus patula*, *P. caribaea*, *P. elliottii* and *Cupressus lusitanica*. The main hardwood plantation tree species are *Tectona grandis*, *Melia excelsa*, *Acacia mearnsii*, *Eucalyptus saligna*, *E. maidenii* and *E. grandis* (Kowero, 1990).

Forest resource ownership

The central government owns most of the forest resource in Tanzania. It owns the gazetted forests, the woodlands in national parks, the plantations and the public lands (or non-reserved forest land) (see table 1).

Local governments own some forest reserves which are mainly protective in function. The current exact area is not known due to encroachment on many of these forests.

The small area of private forests is owned by corporations, e.g. TANWATT Co. Ltd., largely owned by the Commonwealth Development Corporation in Njombe, private individuals and NGOs. It is estimated to be nearly 70,000 hectares only (MNRT, 1989). It consists of mainly plantations established for specific productive functions. TANWATT, for example, established black wattle plantations (*Acacia mearnsii* De Wild) to produce tannin from wattle barks, mainly for export. Other private areas are established under the village afforestation programme and farm forestry for the market (see for example Kihyo, 1992).

FOREST MANAGEMENT BY THE GOVERNMENT AND PROBLEMS EXPERIENCED

Forest Management

Management of forest resources in Tanzania is done mainly by the government. The main problem is that there is fragmentation of authority and resources are thinly spread to the extent that management of the resource suffer.

There are three types of forest management regimes, namely:

- Central government manage forest reserves and forests on public lands and forest plantations, which are directly controlled by the Forest and Beekeeping Division (FBD)
- Forests on public lands - for which responsibility is supposed to be under both central government
- Local Authority forest reserves controlled by District Councils

The small area of private forests is managed by the owners themselves and the central government provide technical advice only.

Forests as common pool resources

Forests fall under common pool resources, i.e. resources which "are costly to or difficult to exclude potential users, but which are subtractable or rival in consumption (and can thus disappear) (McKean, 1996:6). The subtractability of consumption means that *de facto* open access arrangements lead quickly to resource depletion. Continued harvesting of a forest, without taking into account its capacity to replace the volume which has been harvested i.e. sustainable harvesting, will lead to the depletion of the forest, and with time the forest might disappear completely.

The biggest threat to forests in Tanzania is deforestation. Deforestation can be defined as: ".. change of land use with depletion of tree crown cover to less than 10 percent" (FAO,1993:3). Tanzania is one of those countries suffering from deforestation. According to FAO (1993), natural forests in Tanzania decreased by about 12.7% from 1980 to 1990 and the various sources put the rate of deforestation per year at about 300,000 - 400,000 ha per year.

Management problems related to administration of the forest sector

Administratively, the forest sector in Tanzania is embedded in three main, almost "parallel organizations". These include: Forestry and Beekeeping Division (FBD); under the Ministry of Natural Resources and Tourism (or its equivalent); the regional organization, under the Prime Minister's Office (PMO); while the district organization is under the Ministry of Local Governments (see also chapter 2.2 above).

The draw back of such a system is that at times there are unnecessary duplication of efforts and conflicts of interests. According to Husch (1987), better conservation of natural resources in developing countries is affected by weaknesses in legislation and applying it. The main causes of these weaknesses are political and legislative, socio-economic and institutional. Husch (*op cit.*:50) points out that:

"dispersion in different ministries and agencies of forestry activities or related responsibilities with overlapping, jurisdiction conflicts, jealousies and confusion....." has negative effects on management of natural resources.

The decentralization programme of 1972 [Decentralization (Interim Provisions) Act, 1972] fragmented the administration of the forestry sector into two Ministries ie. the PMOs' and the one responsible for natural resources. The Local Authorities Ordinances increased it to three. Although the aims of both decentralization and the Local Authorities Ordinance of 1982 were intended to bring decision-making closer to the people, necessary control and support is still largely lacking. Lack of control has led to a situation whereby the forest staff do not operate according to professional ethics (MLNRT, 1989).

Such a set up affect administration of the forestry sector even if in these effects cannot be easily quantifiable.

In general funding to the forest sector by the government has been very moderate. It has consistently been less than 1% of the

total national budget, and much less than the budgeted requirements of the sector. External donors to forestry projects have been over 90% of the total sector funding (URT, 1997). This has meant that forests managed by the government have suffered due to the lack of enough funds.

Public lands forests

Practically, the management of forests on public lands is almost non-existent. The Forest Ordinance (CAP 389) of 1957 provides weak legal instrument for the protection of public lands. Public lands are protected under the Forest Ordinance only in as far as nobody is allowed to fell trees for commercial purposes without a license. Illegal felling does however, take place. Felling by local people for home consumption and clearing for agriculture or other purposes is allowed.

About 19 million hectares of the forest estate consist of woodlands on public lands. Due to lack of any management by the government, the forests on public lands can be considered as open access. Open access resources are available to anyone and therefore unlikely to elicit investment in maintenance or protection, and as Bromley (1992) argues: "everybody's access is nobody's property". Thus these forests are subject to conversion to other land uses such as shifting cultivation and also suffer from repeated fires. The forests being open access means that there is no security of tenure or formal user rights and there is no incentive for systematic and sustainable forest management. Frequent wild fires, uncontrolled grazing, collection for fuelwood and harvesting for timber interfere with natural regeneration (URT, 1997).

Conserved forests

About 14.5 million hectares are gazetted as forest reserves and include those within national parks and therefore managed by the government. Due to inadequate resources to implement active and sustainable forest management, deforestation through encroachment and over-utilization has been taking place in the forest reserves which are under the jurisdiction of the central and local government (URT, 1997).

The plantation forests have been facing several management problems like, uncontrolled settlement by squatters, backlog of silvicultural operations, damage by diseases and attack by pests. All these problems are caused by lack of financial resources (URT, 1997).

Private and community forestry

There are various problems affecting production of forestry at the private and community levels such as:

(a) Political and economic environment

Forestry production takes a long time from investment to final harvest. Woodfuel plantations which have relatively short rotations for species such as *Eucalyptus*, take about 10 years and in few cases less compared to timber species such as *Tectona grandis* (L.F.) or *Melicia excelsa* (Benth and Hook) which take about 80 years or more. As such, stability in the political and economic environment is necessary to build confidence on the potential investors in woodfuel plantations. World Bank (1991) cites instability in political and economic policies as well as lack of political will to implement the right energy policies as some of reasons leading to low response by potential investors in Sub-Saharan Africa (SSA). However, this is an issue which is beyond the forest policy to address.

(b) Risks and high interest rates for forestry investors

There are various risks involved in the establishment of forestry plantations in Tanzania. The first category of risks relate to climatic variations, fire, availability of labour (for tending operations at peak season), browsing and or trampling by both domestic and wild animals are high.

The second category of risks relate to financial infrastructure in developing countries and private investors in general. Generally there are stringent conditions to meet before one can get a loan, high unofficial or side payments, and high inflation rates (World Bank, 1991; Due, 1993; Harvey and Jenkins, 1994). These risks must be reduced to promote investment in woodfuel production in SSA.

(c) Land, tree tenure and the "commons"

In many SSA countries much of the land is owned by the "commons" or government. Production of trees require the producer to have a long term ownership of land. At least the investor should be assured that the land will be available till the harvest of the crop. Shortage of land and unclear tree and land tenure particularly for women, have hampared investments in forestry on private and village lands. Solving the land ownership issue is fundamental to promoting private investment in forestry (Foley, 1981; Timberlake, 1985; Anderson, 1986).

REVIEW OF THE NEW FOREST POLICY

The forest policy which has been used in Tanzania till recently was formulated in 1953. This policy, formulated during the colonial era (when Tanganyika was under British Administration), clearly is outdated. Forest policies are dependent upon the political and economic philosophies of nations, and upon a wide range of changing socio-economic conditions (King, 1974 and 1975; Husch, 1987; Ellefson, 1991). Any developments or changes in the overall policy of the country should also affect changes in the forest policy in the same direction.

The forest policy of a country is also influenced by the historical period. With the passage of time, knowledge increases and there is a change in the degree to which such knowledge is available and used by various groups of people e.g. policy makers, members of a particular class or profession. As such the forest policy of a country cannot be expected to be static, but dynamic over time (Johnston, *et al.* 1967; Westoby, 1985).

Major political changes in Tanzania since the last forest policy was formulated in 1953 are:

1. Political independence in 1961.
2. The Arusha Declaration of 1967, which set the country on a socialist oriented development.
3. The decentralization of government administration in 1972.
4. The villagization program of 1967 to 1976.
5. The economic recovery program (ERP) of 1986.

The forestry policy of Tanzania changed with the changing general macro policies in the country, i.e. there has been forest policy formation. By policy formation is meant that the practise of forestry changed to conform with the macro policies of the country, while the forest policy document remained the same. Weaknesses of implementation of the policies at the macro level had its bearing on the forest sector as well.

The new formulated forest policy is based on the current thinking on joint management of resources between communities and the government and the macro policy of market economics. Further, in the Tanzanian case this is occasioned by the declining capacity of the government to carry out its duties towards managing forests. Salient features of the new forest policy geared towards solving the current management problems in the forestry sector are as follows:

1. To ensure the efficiency in forest management and conservation, the central government forest reserves will be managed by specialised executive agencies or by the private sector.
2. Forest reserves under local governments will remain under their management or under executive agencies or private sector.
3. To enable participation of all stakeholders in forest management and conservation, joint management agreements with appropriate user rights will be established. The agreement will be between the central government, specialised executive agencies, private sector and organised local communities or other organizations of people living adjacent to the forest.
4. To enable sustainable management of forests on public lands, clear ownership for all forests and trees on those lands will be defined. The allocation of forests and their management responsibility to villages, individuals or to the governments will be promoted. Central, local and village governments may demarcate and establish new forest reserves.

5. Village forest reserves will be managed by village governments or other entities designated by village governments for this purpose.
6. Private and community forestry activities will be supported through harmonised extension service and financial incentives. The extension package and incentives will be designed in a gender sensitive manner.
7. To enable sustainable management of industrial plantations, one or several specialised executive agencies or the private sector will manage these plantations on a fully commercial basis through appropriate lease, concession or joint management agreements.

Other problems as pointed out above are addressed in the new policy thus:

8. The role of the forest administration will focus on policy development, regulation, monitoring and facilitation. Decentralization of forest resource management responsibilities will be promoted.
9. The capacity of the local government to administer and manage forest resources will be strengthened and a coordination mechanism between the local and central governments established.
10. An enabling environment and regulatory framework for the private sector involvement in forestry will be created. Incentives and credit facilities for investments will be promoted and joint ventures will be encouraged.

IMPROVING FOREST MANAGEMENT THROUGH JOINT MANAGEMENT WITH COMMUNITIES

According to Bromley (1992), many independent states have shown little interest in revitalizing local level systems of authority, which were purposely destroyed by past colonial regimes. The new independent governments, just like past colonial regimes do not like very much the idea of local political forces challenging its legitimacy (see for example Mutahaba, 1989; Smoke, 1993). Thus, many forests became the property of the state, as in the case of Tanzania. This responsibility was assumed by the Tanzanian state despite other pressing problems like: governance, economic development, self reliance and political stability. As such meager resources were mostly directed towards these causes and managing forests was not accorded priority and they were left to deteriorate.

Much attention to reform management of natural resource like forests has focused on either increasing powers and responsibilities on the government or privatization. Rarely has attention focused on management of resources by communities or managing them as common property, been considered (Ostrom, 1990). Ascher (1995) argues that communities can achieve this aim with the help - rather than control from the government. This is the idea being proposed in the new forest policy: making communities responsible for managing forest resources as common property, in Tanzania whenever possible.

Forests in a common property regime

Widespread people's participation in forest management, owning the forests as common property, is the current thinking towards forest management. Common property refer to a particular property rights arrangement in which a group of resources users share rights and duties toward a resource. This term therefore refer to social institutions, and not to any inherent natural or physical quality of the resource (Bromley, 1992; McKean, 1996).

In this arrangement, a particular group of individuals share rights to a resource, e.g a forest. User rights are common to a specified group of individuals, not to all. Thus, common property is not access open to all but access limited to a specified group of users who hold their rights in common. When the group of individuals and property rights they share are well defined, common property should be classified as a form of shared private property. The property rights in a common-property regime can be very clearly specified, they are by definition exclusive to the co-owners (members of the user group), they are secure if they receive appropriate legal support from the government.

It can be noted that while the Tanzanian government and international agencies have overestimated their own capabilities for forest management, they have underestimated the value of local governance over those resources (Kajembe, 1994, see also Bromley, 1992 above). Local communities who depend on forests for many commodities and services not just timber, are more sensitive to their protective functions and the wide variety of goods available from them in sustainable harvest. But when the governments overrule traditional use rights to forests, local communities and individual households are unable, and

less willing to prevent destructive encroachment or overexploitation. In effect, these *de jure* state forests are turned into *de facto* open access. Environmental degradation can occur where there is a growing synchrony between the community and its natural environment, and the implied solution is to restore harmony to environment-society relations (Leach *et al.*, 1997).

Restoring or awarding such rights to local groups would induce them to attend to the possibilities of sustainable long term production from the forests. Ostrom (1990); Thomson (1992); Arnold (1993) and Ascher (1995) emphasize the need, and provide approaches for analysing human institutions at the local level in order to understand and possibly reduce the negative environmental and societal costs of deforestation. They contend that sustainability of forests depends on local rules, use patterns, and incentives created by international, regional, national and local institutions. Indeed, if ecological conditions are the same, major structural and biological differences between local patches of forests may be almost completely the consequence of human rules and use patterns.

Statements of intent on global environmental problems issued in 1992 Earth Summit, including Agenda 21 and the Desertification Convention, strongly advocate as solutions a combination of government decentralization, devolution to local communities of responsibility of natural resources held as commons, and community participation (Holmberg *et al.*, 1993).

Advantages of forests under common property regime

According to the new forest policy (URT, 1997), to abolish open access in public lands, covering more than 19 million hectares in Tanzania, clear ownership for all forests and trees on those lands need be defined. The allocation of forests and their management responsibility to villages, private individuals or to government will be promoted. Central, local and village governments may demarcate and establish new forest reserves.

Ascher (*op cit.*) argues that, communities are best suited to manage and regulate resource use because of four main reasons, which are:

1. Empowering a community to manage and regulate the use of a resource will reduce the pressure on the resource because by the mere fact that it is owned by a certain community it will not be an open access. Potentially, there are many users of a resource e.g. a forest and if one group retain exclusive use of a resource there is high possibility that more sustainable practices are likely to be implemented.
2. A community living near a resource and depending on it for livelihood, and knows that it will enjoy the benefits of the resource for a long time, is more likely to refrain from misusing it. People rooted in one locality which they call home, will use a resource more careful because if they deplete it they have nowhere else to go. They are different from a commercial corporation which is always on the move, and depletion of a resource in one place means moving to another place and continue with the same trend.
3. The limited resources of governments in terms of manpower and finance to police resources means that this task is better placed in the hands of local people which will do it for their own benefit with no burden of payment on the part of the government.
4. Traditional users of a biotic resource like a forest are more likely to have developed techniques which will enable them to use the resource sustainably. Other groups or companies with less knowledge of the resource are more likely to exploit the resource to extinction with the aim of short term gains.

CONCLUSIONS

The level of management of forests in Tanzania is low. Those forests designated as forest reserves, which are under the central government suffer from poor management due mainly to scarcity of resources. The vast area of forested areas fall under public lands which are *de facto* open access and its management is also under the central government. Exploitation of resources in this nature lead to depletion of the same. New thinking advocate joint management of resources between the government and communities and other local bodies and other decentralized concerns which in most cases have a stake in the resource. This is what is suggested in the new forest policy to ensure sustainable management of forests. The new forest policy also captures this new thinking and communities and other local bodies and private individuals will be allowed to manage natural forests and get the financial incentives to establish private forests.

References

- Anderson, D. 1986. Declining tree stocks in African countries. *World Development*, Vol. 14 No 7: 853-863.
- Arnold, J.E.M. 1993. Management of forest resources as a common property. *Commonwealth Forestry Review*, 72. pp. 157-61.
- Ascher, W. 1995. *Communities and sustainable forestry in developing countries*. Institute for contemporary studies San Francisco, USA.
- Bagachwa, M.S.D. 1992. Background, Evolution, Essence and prospects of current economic reforms in Tanzania, In Bagachwa, M.S.D., Mbelle A.V.Y. and Van Arkadie B. (Eds), *Market reforms and parastatal restructuring in Tanzania*. Economics Department and Economic Research Bureau University of Dar es Salaam. 19-43.
- Bromley, D.W. 1992. Property rights as authority systems: The role of rules in resource management. *Journal of Business Administration* Vol. 20 No. 1-2: 453-470.
- Chacha, N. 1976. *Ujamaa villages as a collective development strategy in Tanzania economic development*. Unpublished Ph.D dissertation. The George Washington University, Washington D.C.
- Due, J.M. 1993. Liberalization and privatization in Tanzania and Zambia. *World Development*, 21(12): 1981-1993.
- Ellefson V.P. 1991. *Forest policy process, programs and participants*. New York, USA: McGraw-Hill Book Company.
- FAO, 1993. *Forest resources assessment 1990. Tropical countries*. FAO, Rome Italy.
- Foley, G. 1981. The future of renewable energy in Developing countries. *Ambio*, Vol. No. 5: 200-2005.
- Government of Tanzania, 1972. *Decentralization of Government Administration (Interim Provisions) Act*. (Act No. 27 of 1972). Government printer, Dar es Salaam. pp. 367-377.
- Harvey, C. and Jenkins, C. 1994. Interest Rate Policy, Taxation and Risk. *World Development*, 22 (12): 1869-1879.
- Husch, B. 1987. *Guidelines for forest policy formulation*. FAO: Rome Italy.
- Johnston D.R., Grayson J.A. and Bradley R.T. 1967. *Forest planning*. London, UK: Faber and Faber Ltd.
- 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 Paper Series no. 6*. Wageningen Agricultural University, The Netherlands.
- Kihiyo, V.B.M.S. 1992. Farm forestry for the market: the declining status of black wattle (*Acacia mearnsii* De Wild) as a cash crop in West Usambara, Tanzania. *Beitage zur tropischen Landwirtschaft und Veterinarmedizin*, 30, 3: 315-322.
- King K.F.S. 1974. Formulation of national forest policies *Paper prepared for the Tenth Commonwealth Forestry Conference* Forestry Department, Food and Agriculture Organization of the United Nations, Rome, Italy: FAO.
- King K.F.S. 1975. Forest policies and national development *Unasyuva* winter 1974/75: 9-13.
- Kowero, G.S. 1990. Management and utilization of forest estates in Tanzania: some policy issues. *Journal of World Forest Resource Management* 8, 1: 15-27.
- Lancaster, C. 1993. Governance and development agenda: The views from Washington. *IDS Bulletin*. Vol. 24 No 1: 7-15.
- Leach, M., Mearns, R. and Scoones, I. 1997. Environmental entitlements: A framework for understanding the institutional dynamics of environmental change. *IDS Discussion Paper* No 359. Institute of Development Studies, Sussex, Brighton, England.

Maliyamkono, T.L. and Bagachwa, M.S.D. 1990. *The Second Economy in Tanzania*. Ohio: Ohio University Press.

McKean, M.A. 1996. Common property: What is it, what is it good for, and what makes it work? Forests, Trees and People Programme. Phase II Working Papers. *International Forestry Resources and Institutions Research Program*, Indiana University, Bloomington, Indiana, USA.

Mgeni, A.S.M. 1992. Farm and Community forestry (Village afforestation) program in Tanzania: Can it go beyond lip service? *Ambio* Vol. 21, 6: 426-430.

Ministry of Natural Resources and Tourism (MNRT)1989. *Tanzania Forestry Action Plan 1990/1991-2007/08*. Dar es Salaam.

Mutahaba, G. 1989. *Reforming public administration for*

development. Experience from Eastern Africa. Kumarian Press Inc., Connecticut pp 183.

Nyerere, J.K. 1968. *Freedom and socialism*. Oxford University Press, Oxford.

Ostrom, E. 1990. *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press, Cambridge, England, UK.

Smoke, P. 1993. Local governments fiscal reform in developing countries: lessons from Kenya *World Development*, Vol. 21, 6: 901-923.

Thomson, J.T. 1992. *A framework for analysing institutional incentives in community forestry*. FAO, Rome, Italy.

URT, 1997. Tanzania forest policy, final draft. Forest and Beekeeping Division, Dar es Salaam, Tanzania.

Westoby, J.C. 1985. Foresters and politics *The Commonwealth Forestry Review* **64** No. 2: 105-116.

World Bank, 1991. *Tanzania economic report towards sustainable development in the 1990s (Volumes I&II)*. Report No. 9352-TA. Washington: Country operations division Southern Africa Department.