

Community Participation in forest management: A case of Joint Forest Management and livelihoods in Tegetero Village in Tanzania.

A Research Paper presented by:

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This document represents part of the author's study programme while at the Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

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# List of Acronyms

	CBFM	Community Based Forest Management
	CFUGC	Community Forest User Group
	EDC	Eco Development Committee
	FDB	Forest and Beekeeping Division
	FPC	Forest Protection Committee
	GoT	Government of Tanzania
	JMF	Joint Forest Management
	MNRT	Ministry of Natural Resource and Tourism
	NRMP	Natural Resource Management Program
	PFM	Participatory Forest Management
	TFCG	Tanzania Forest Conservation Group
	TFS	Tanzania Forest Service
Co	UMEMCP Inservation Pro	Uluguru Mountains Environmental Management and oject
		TT '4 1 D 11' C'T' . '

URT	United Republic of Tanzania
VFC	Village Forest Committee
VNRC	Village Natural Resource Committee

### Abstract

Recent Tanzania government has adopted Joint Forest Management as a participatory program which emphasizes the active participation of communities in forest management by cooperating with the state to achieve both improvements of forest and community livelihoods. However the program has introduced restrictions in reserve forest which it has resulted in profound effects on community livelihoods. This Paper seeks to assess the effects of restrictions access on the community livelihoods and responses towards these reactions. The methods used for collecting data were structured interview, Focus Group discussion and observation. The research uses political ecology of forest as a theoretical framework to critically analyze how the politics of forest around the management of forest plays role in influencing community access to forest resource. The paper argues that the introduction access restrictions have affected social, economic aspect of community life around the forest.

### **Relevance to Development Studies**

Joint Forest Management as among of development policy intervention has been promoted in national forest reserve to increase community participation in protecting forest resources while improving the livelihoods of surrounding community so as to achieve sustainable forest. However the introduction of restrictions in reserve forests to achieve conservation objectives have impacted the livelihoods of the community who lives around the forest. The management has severe restrict local to use beyond a few non –wood forest products. It has therefore caused social-political, economic marginalization of local rights to benefit from forest product.

This research calls for the need of policy maker and other practitioners to reform the policy agenda and restore the original objectives of JFM that was initially intended at bringing the balance between environment and social economic needs of the surrounding community. Forest product is still playing an important role in the Local community livelihoods that lives adjacent to the forest reserve.

**Keywords:** Restriction, Access to forest, Joint Forest Management, Livelihoods, Adjacent community.

# **Chapter 1 Introduction**

Over the last two decades participatory forest management (PFM) strategy has been implemented and applied as a principle for improving forest resources and community livelihoods in most of developing countries (Inoue 2000:299). It has been broadly accepted by many developing countries and included in the policy agenda as a means of achieving sustainable forest management. This mark the shift in the management approach from centralized to more decentralize where the community is empowered to integrate their knowledge and engage in management of natural resources.

This kind of approach was formed due to the increased deforestation and loss of forestlands (Chingonikaya and Francis 2013). According to (Rebugilo et al 2010:335) these contemporary problems are due to the failure of the centralized management system in most of the developing nations to ensure equal distribution of usage rights and equity communities near forest reserves.

It has been known by various names throughout the regions such as community forestry, community-based natural resource management (CBRM), joint forest management (JFM), collaborative management, adaptive co-management and participatory forest (Kassa et al. 2009 :1004). Although differing in some extent but All of these denote the relationship between the state and community living adjacent to managing forests. The management based on agreement with the particular adjacent community to protect forest through engaging in activities like patrol, fire control, controlling illegal harvesting in the exchange of non timber products and revenue from the sale of timber products (Fisher 1995:3)

Many countries followed this strategy as a way to achieve sustainable management of forest resources. In India Joint forest was evolved since 1970S as a strategy toward protecting forest and improving community livelihoods (Bhattacharya et al 2010:470). In Nepal, it is implemented through forest User groups whereby the Government handled the national forest to community for management activities (Agawa and Ostrom 2001:499). The approach has been considered to have some positive results (such as improvement in water discharge, increasing in natural regeneration, increasing in game and wildlife) in terms of conserving forests, however, it has considerably attributed to some negative effects (loss of fire woods, herbs and fruits) on socioeconomic welfare due to imposition of restrictive regulations (Blomley and Ramadhan 2004:5). These restrictions emphasize on protecting forest instead of protecting both forest and enhancing livelihoods of the adjacent communities. As Glasmeier and Farrigan (2005: 56) points that participatory forest management has been more focused on conserving the environment and taking less attention to the livelihoods of local communities that further restrain the local distribution of wealth and economic opportunity.

Tanzania adopted a community participatory approach through Joint Forest Management (JFM) since 1990's as a means to enhance forest restoration and improve livelihoods of the local communities adjacent to the forest reserve. The main idea for increasing JFM was to encourage protection of the surrounding forest and foster community needs, creating awareness among local people in management and enhance equitable distribution of resources while reducing cost of management (Logan et al 2006:1). In Tanzania Joint forest management is mainly implemented in reserve areas, in which forest is managed through restrictions, this is because of high biodiversity value and important ecosystem services that the forest preserves to serve national interests. Restriction is applied based on managing the plan through which the state departments have developed for controlling the activities undertaken in the forest while improving the condition of the forest as well as adjacent local community.

Joint Forest Management was initially implemented in some parts of the countries, including Gologolo and Kipubwi forest reserve in Tanga region and Uduzugwa forest reserve in Iringa region, and later was extended on to the other catchment forest in Arusha, Mtwara, Tanga, Morogoro and Kilimanjaro under the management of Natural Resource Management Program (NRMP) (Blomley and Id 2009:9).

The main focus of the Joint Forest Management as a major form of Participatory Forest Management in Tanzania is to increase participation of both local and government in protecting and improving the livelihoods of the local people nearby the particular forest. However, the management plan of JMF has stressed more emphasis on protection through the restriction with a mainly objective of increasing the forest regeneration than balancing the two (Blomley and IDD 2009:37). This cause the community to be excluded from accessing forest product which was initially depends for the livelihood.

### 1.1 Objective of the Research

The main objective of this study is to assess the implications of restrictions imposed on Joint forest management on the livelihoods of community in Tegetero village.

# **1.2 Specific Objective**

The Research paper will specifically explore the effects of access restrictions to forest resources on the livelihoods of local communities in Tegetero village. It seeks to explain to what extent the restrictions have affected community life. The aim is to give insight on the ways Joint Forest Access restrictions implemented and how it affects community life's socially, politically and economically. This will enable the government and other development actors to understand the challenges faced by communities living adjacent to forest reserves and their responses to these challenges.

## 1.3 Main Question

How does forest access restrictions in Joint Forest Management affects the livelihoods of communities adjacent to forest reserves?

#### Sub –Questions

What are the access restrictions in Joint forest management affects communities' livelihood communities adjacent to forest reserves?

How does the Access restriction implemented?

What are the effects of forest access restrictions to the livelihoods of the adjacent communities under joint forest management?

How does the local community respond to the restrictions?

### 1.4 Study Area

Togetero village is located in the Morogoro rural district, North East of Morogoro region, around the Uluguru mountain forest reserve (TFS 2015). Tegetero is one of the villages under JFM in the Eastern Arc Mountains Forest in Tanzania. Conservation interventions play a vital role specifically in supporting the life of biodiversity and communities adjacent to reserved areas. This village was chosen due to the fact that it was among of the first village in the Morogoro rural district, which JFM was introduced as a pilot study in Tanzania by central government since 1990's. Thus, the area seems to provide more understanding of experience, practices, and access restrictions.

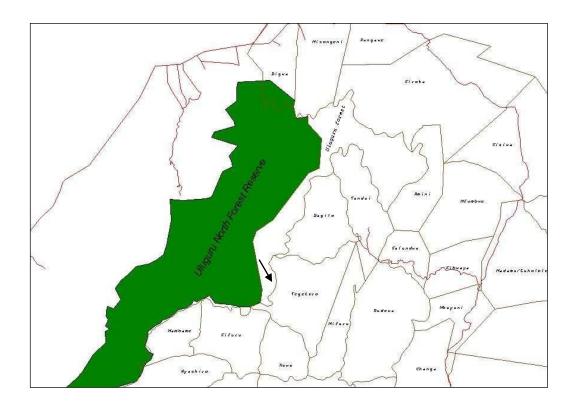
This has high rural population who depend on forest resources for the supply of fuel wood, building and construction materials like poles and dry tree barks. As indicated (EAMCEF 2014) not less than 50 villages surrounding the Uluguru forest reserve and 151,000 people are found within the area depend on forest resources for their livelihoods. This shows that the surrounded community has strong ties with the forest reserve due to highly dependent on the forest resource to meet local needs.

The area is characterized with very good climate with high rainfall of about1200-3100 mm/year on the western slopes, 2900-4000 mm/year on the eastern slopes (The Centre of ecology Law and policy 2007:51). It is also a source of water for both animals and the surrounding community. It also plays as an important water catchment function to national level. As most of the rivers found in this area provide water national wide. The Ruvu river catchment as one of the of example, supplies water to Dar es Salaam, Morogoro town and other villages on the mountain slope (ibd: 52). The biggest portion is covered with a mosaic type of forest that consist of submontane mountain and high mountain forest. Sub Montane occurs in the Eastern slopes between 800 to

1500m above sea level and mountain occurs between 1500 to 1900 m altitude, upper Montane occurs above 1900m on wetter slopes and ridges in the cloud belt. (Ibd: 53).

Although the large part of the area is being surrounded by the forest, the surrounding local community implements to farm activities along the edge of the forest. The main crops that are grown including maize, beans, yams, bananas and cocoa trees. They practiced mixed farming, so as to increase fertility in the soil as well as to ensure the nutrients in their food. This kind of farming is in small scale for subsistence use; however, there are some farmers who grow for commercial purpose. There are also few farmers who engage in both livestock keeping and farming activities. The animals that are kept including goats, pigs, cow and chicken and there are mainly kept for the different ceremonial during special events.

Map 1: Tegetero village surrounding the Uluguru mountain forest Reserve



Source:(Mosh et al 2000)

### **1.5 Research Methodology**

#### 1.5.1 Secondary Data

These findings are the results of field work that conducted in the Tegetero village Morogoro region between July and August 2015.Out of three week two weeks were used for field work. In order to achieve the objective of this study, the researcher used secondary data so as to identify the gap that exist in similar studies and fulfils it through using different theory and approaches. In addition the researcher used it so as to broaden understanding of the topic. As (O'Leary 2014:85) pointed that the researcher needs to rely on existing knowledge so as to be able to produce new knowledge. Therefore, it is impossible for the researcher to start doing research without considering the previous understanding of issues at stake and acknowledge others work.

The researcher reviewed online journals related to biodiversity conservation, in particular on joint forest management and livelihoods of the adjacent communities. The literature review has been relevant on the overview, guidance and I have managed to identify the knowledge gap for this research. The researcher also used the online Journal from different sources from these countries that engage in Joint Forest management. Online Books on natural resource management were also used during literature review.

#### 1.5.2 Primary Data

The research used primary data so as to compliment secondary data collected from literature review as well as to lead into the precise direction of a research objective. The main primary data were obtained through structured interviews that held within households. It was used so as to capture depth understanding of the research goal since it is one of the methods that is guided with a formal, structured style that enable the researcher to remain focused (O'Leary 2014:218). The total number of respondents interviewed were 32 people, who include local officials at both district and village level. The majority of respondents were farmers, including their village leaders. Most of them are holding primary level education with the exception of a few who have secondary level education. The interview was held by the village executive officer, village chairperson who are the main actors at local level responsible for overseeing every activity undertaken in the village, the interview with members and chairperson of Village Natural resource Committee (Formerly called, and also referred to as, the Forest Committee) was also conducted through one to one interview whereby both genders were highly considered. The interview was held with the members of VNRC because this is a responsible body which is assigned to perform duties that are undertaken in village land forest reserve.

The interview was based on their respective homes, but because it was the harvesting period, most of them were not available in their house, Therefore they were interviewed during the evening when they have returned home from the fieldwork. The interview was recorded by using recording devices with permission and willingness from respondents. This enables me, to reduce misinterpretation as it gives a clear explanation of the stated question when analysis of data. The choice was made to interview as many male and female as needed as to be able to have different perspective from both sides' concerns the livelihoods aspect.

The interview was controlled with guided questions that lie along the research objectives. This is to help the researcher to be confident and stay focused. As (O'leary 2014:218) argues that structured interview provides a sense of security to the interviewer with little knowledge about the interview since it is based on pre-established question which guide the researcher when interview. The selection of respondents based on purposive sampling, whereby key informants were identified with the help of local government officials, including village officer, district forest officers, forest officer from Tanzania Forestry Research Institutes (TAFORI). This is the institution that undergoes forest activities to ensure sustainability of forest management and enhancement of socioeconomic and environmental benefits to the present and future generation

Observation was also used during data collection, it was applied in order to confirm with the issue that had raised in the interview, It was useful because through observation the researcher identified issues like the absence of the community development projects which were claimed to be developed from the money received from tourism after managing of the forest through Village Natural Resource Committee (VNRC). Observation as the technique helps the researcher to see things by herself and make use out of it when analyzing the data (O'Leary 2014:231).

Moreover the researcher conducted one Focus Group Discussion (FGD) to capture the information that was not expressed in the interview. This was useful because it helps the researcher to understand issues relating to the study in details since it gives more room for respondents to have some kind of informal dialogue.

### 1.6 Scope and Limitation

This study does not evaluate the impacts of Joint forest restriction on community livelihoods, but attempt to provide insight on the effects of restricting access to the forest on the community livelihoods around the reserve. The study stresses emphasize to the poor community who heavily depend on forest resource for consumption and economic to satisfy their local needs.

In relation to the limitation, the researcher was challenged with unavailability of respondents in their respective home due to the fact it was time for harvesting. Therefore, most of farmers were found in farms engaged with harvesting activities and returning home late. This was resolved by rescheduling meeting time.

### 1.7 Structure of the Paper

Chapter two presents the theoretical framework of the political ecology of forest, which discusses the politics that surrounding natural forest management in forest conservation, chapter three the overview of the joint forest management, Chapter 4 Joint forest Management in Tanzania, chapter 5 present empirical findings of the case of Tegetero village and chapter five the Conclusion

# Chapter 2 Theories/Concepts and Literature

### 2.1 Introduction

This chapter discusses a theoretical framework around which the research is based, the chapter first discusses how forest management under state produces the loose win situations along the process of conserving forests, then the theory of the political ecology of forest from the Political forest point of view and lastly Historical overview of political forest in Tanzania

### 2.2 Forest Resource management

The management of forests in most developing countries has undergone significant changes overtime to satisfy the demand of each specific period. As (Nasi and Frost 2009) argues that throughout the time the principle underlie forest management keep changing from achieving sustained production mainly for timber to demand for sustainable forest management. Initially forest was managed under traditional rule system where the forest was considered to be open access, tenure (Zahabu et al 2009). Traditional norms, belief and custom were used to govern the forest by ensuring both conservation and livelihoods are achieved. During the colonial period, the management changed from traditional rule to colonial rule (Nelson et al 2007: 234). The traditional rule was no longer considered as a useful approach of conserving forests the main management system that was dominated during this period was conservation with restriction to access forest product where the community were expelled from such protected area because of being considered as they're responsible for forest destruction (Kowero et al 2003). It is until 1970's onward where community started to be engaged in management. As pointed by (Kudel 2000:619) that the institutions that was created to manage the forest kept on changing from exclusionary conservation to inclusionary. The changes were made to respond the needs of particular existing political economic system.

Despite the changes in forest management, forest continues to be under the state's control where the laws and regulations that govern the access are formulated by forest departments to control the management system. As pointed by (Tsuka and Place 2001:9) that most developing countries has been historically shaped by government rules such as nationalization, restrictions and land consolidation in the managing of their forest resources. Through management process the state have been employing government official to manage the forest on behalf of the state. However, along the process of managing the forest, state officials and other state agents use these laws as a tool to maintain their interest and power over forest land in the name of conservation and later produce social and economic effects to the community who are depending on the forest product to meet their needs.

Recently, many developing countries have adopted devolution policy reform as a strategy of achieving sustainable forest management through transferring of power from the central to the local authority. However it produces more effects to community livelihoods, as well as social and economic inequality. On the contrary (Shckeleton et al 2002:1) points that devolution of forest management has lacking, it's meaning content in many ways, where state continue to retain power over resource, local elite tend to manipulate the model to fulfil own interests and the benefits acquired from forest differs among groups in the community. This indicates that in most cases the management of forest by state is characterized by winner and loose along the process of the management. This means the conservation has ended benefiting officials from government entities rather than achieving the interests of both local communities and the state.

# 2.3 Political ecology of forest from Political Forest Perspective

Political ecology is a tool that has increasingly become dominant in environmental literatures. Many scholars have used this concept as a tool to analyze environmental problems. However, each one used it from different perspectives (Watts and Peets 2004, Robbins 2012, Bryant 1992). It has gained reputation in contemporary world; this is because the environment has become a critical issue in national and international political debate. Political ecology addresses the issues of power struggle, contestation, confrontation and conflict over resource and politics around complex natural resource management (Bryant 1992). It tries to explain how social actors interact and negotiate over environmental resources to achieve both explicit and implicit objectives. It takes heed on the connection between environmental disputes regarding to access and political issue (Bryant 1998:79). It provides insight that environmental, economic and political are simultaneously connected together. As Harvey (1993) argues that for the better understanding of environmental question, it is important to take social-political aspect into account. Therefore, there is no any environmental problem that is neither political nor economic free.

It also analyses the interaction between nature and society. This is in line with (Watts and Peets 2004:3) who sees political ecology as an attempt to determine the relationship between nature and society by close looking to their access and control of resource toward attaining sustainable livelihoods. In this regards nature cannot be separated from the society. A growing body of literature has used political ecology to analyze conflict around natural resource management. However, this study uses political ecology from the political forest point of view to understand how the forest has been politically produced throughout times to maintain the state power over forest land.

Political forest comes as results of political ecology relation, convergence of material, ideological, discursive, institutional relation, claims of state and other governing bodies. (Vandergeest and Nancy 2015:162). This helps in understanding on how the forest has been politically produced over time in order to maintain the state interest. It also addresses issues of state power through state agents in managing the forest resource. The state has a big role to play in conserving the forest, As (Vandergeest and Nancy (2006:35) point that the state plays a great role in the political forest, including increasing territorial control of forests, the struggle over budget allocations, control over the extraction of lucrative forest products and control of labor needed for more intensive forest-ry operation.

Along with the role playing by state in forest managing, political forest show us that state does not work independently but uses institutions, agents which work on behalf of the government by formulation of laws which are imposed to govern forest management, as indicated in the literature by Vandergeest and Nancy (2015) the state establishes professional, managerial institutions to work in the range of activities in the forest such as mapping, planning for planting, production, harvesting and maintaining access within forestry boundaries. These institutions use a scientific approach in managing the forest resource which excludes community around the forest reserve from accessing forest product (Vandergeest and Nancy 2015:163) pointed that, in political forest the user that is not authorized by forestry personnel is excluded from resource use by the laws and regulation that accompanied management of the forest. These laws which are used by the state make various justifications like through the protection of forest, biological species, soil and water will be preserved, as well as the financial will be generated from the production of timber which will enhance the state income (Vandergeest and Nancy 2015; Vendergeest and Nancy 2006). Despite the intention of protecting the environment, the management has mainly focused on attaining environmental objective rather than social economics necessary for local communities' livelihoods.

Political forest also helps us to understand the importance of history in understanding the present and the main argument is that contemporary forest management has been continually shaped by politics of forest of the past (Peluso and Vandergeest 2001:762). These politics are being implemented during legal framework formulations and put into practice. For example, in Tanzania laws were formed in the pre- colonial by local leaders were extended in colonial and continue shaping the management of contemporary forest. Before the coming of colonial power, the traditional leaders had an own way of protecting forest which gave the chief mandatory over resource use, despite the diversity of kinship within the society. Scarred trees which have traditional value and meaning to society were protected through traditional rules. As pointed by (Ylhaisi 2006:1) that societies in the pre - colonial period had different kinds of laws that were used to protect the forest.

These rules were also adopted and continue to be used in the colonial period, during the British colonial era; many laws were formulated by the state in order to maintain state power over the forest. One of them is the ordinance, act of 1923 which provides mandate the state to control land for the national interest. As pointed by (Chachage 1998: 255) that the establishment of the Germany ordinance, act of 1923 provided authority the governor to take all the land as 'crown land' and establish as a reserve for the interest of national. Soon after Independence, in 1960's Tanzania government adopted the National policy of 1953 which continue to put emphasize on reservation of forest. This policy aims at protecting the forest resource in order to meet the national interest (United Republic of Tanzania-National Forest Policy 1998). However, this policy proved failure after being unable to balance the society and environmental needs, as well as by emphasizing the power of managing and controlling the resource to be vested in state without involving community which resulted into forest degradation and deforestation through illegal activities and human pressure over land (Hamza and Kimwer 2007:24).

After proving failure Tanzania adopted the National Forest Policy of 1998 which continue to put emphasize on preservation of forest with the emphasize

community. As explained in (The REDD Desk 1998) that 1998 Tanzania government formulated a National forest policy which the aims to enhance the contributions of the sector to sustainable development through encouraging the effective management of forest and conservation of biodiversity by considering the needs of local communities around these reserves. This policy was followed by the Forest act of 2002 which provides legal rights for the community to participate in management within four different categories which are National forest, which consist of production forest reserve and protection forest reserve, these forests, are being preserved for the purpose of protecting biodiversity and important ecosystem for national interest, as well for sustainable productions of timbers. Second, the Local authority forest which consists of reserve and public land under local authorities such as city, municipal and towns. The third type is the village forest land where land is considered as open access to the community and the last is private forest. (URT- Forest Act of 2002). In fact, these reserves have been managed with the strong protection regime in which state has been the main player in controlling the resource.

In India the enactment of forest policy of 1927 by colonial state, continue shaping the management of the forest in India. This law empowered the state to appropriate all land that is covered by tree to include in reserved areas, forest was preserved for the commercial purpose and the land was legally owned by the state (Validya 2011). This was during the British colonial era where the main key issue in forest policy was protection of the timber rich forest and creation of government forest reserve. After independence forest governance enacted forest act of 1952 which continues to use the same protection principles of managing the forest from colonial era. It focuses on protecting timber for the national interest. As (Saxena 1997:5) explained that the 1952 forest policy was enacted by the state in order to preserve production teak and eucalyptus forest specie for industrial function and other national interest.

# 2.4 Legal and Historical Perspective of Political Forest Management in Tanzania

Political forest is not a new emerging concept in management of the forest but it has long history and it has existed in different forms throughout periods. According to (Vandergeest and Nancy 2015) pointed four forms of political forest that has been created throughout the history namely, Forest for reserving forest territory, Forest for development, forest that shaped by wars and forest for conservation as charismatic forest which sometimes use terms like 'community' to justify their conservation. Most of political forest in Tanzania has been demonstrated into three forms that are forest for reserving territory, forest for development and forest for community .This can be categorized into three historical periods' namely colonial period and post independence and recent times. Each period has distinctive features that influence political economic system of the existing period.

#### 2.4.1 Colonial period

This was the period that political forest appeared in the form of forest for reserving territory. It is the period when colonial power use forest reservation as the mechanism of expanding their territory over the forest land. This can be depicted into two periods, Germany rule (1891-1919) and British rule(1919-1960's).

#### Germany Colonial Period

Germany colonial period started in 1890's, this is period mark the beginning of colonial rule governing over traditional forest. In this period, the main method which was used to strengthen political forest was conservations method. A lot of land were taken by Germany colonial ruler to establish reserve area, laws were enacted to create wildlife and forest reserve for the interest of colonial ruler, the reason of protection and reservation was to achieve dual objective which is production and ecological (Lundgren and Lundgren 1983:46).For example In 1895 Germany government started to protect Usambara mountains forest which was seriously damaged by European farmers, the aim of preserving was to serve climatic and meteorological purpose (Wanitzek and sippel 1998: 115). The main species which were preserve were mainly montane and mangrove tree. It is from these period scientific ideas of controlling the forest started to play role in shaping the management of environment.

Forest started to be managed by command and rule system whereby community were excluded from residing and accessing the forest resources found in the reserve. Instead of incorporating local community in managing the forest, the colonial government appropriated most potential lands owned by community were taken away and included in the reserve forest (Ylhaisi 2003:281). Most of local Community lose their rights to access forest resource for their livelihoods, colonial government consider community as threat to environment. In this way the colonial government imposed some restrictions to forest reserve so as to prevent local from accessing forest resource in forest (Schabe 1990:131).

In 1896 there were rapidly increase of protection of private land and forest, this is because several laws that concern lands were enacted to facilitate the role of state in managing the forest, establishment of crown land in 1897, which granted colonial state with special right to own the land while leaving local community landless (Wanitzek and sippel 1998 :114 ), the section of this ordinance also authorized the state to protect the forest for hunting activities as well as for protection of endangers animals for future scientific research. This was the period where all montane type of forest which are reserved today were put under protection method by the Germany authority (Ylhaisi 2003). The creation of reserves area in Germany period did not only serves the purpose of protection for production but also serves the development purpose. As (Sunseri 2005:102) claims that reserve area was tool for chasing community from their forest to an open space where they can supply seasonal labour to colonial plantations.

British Colonial Period

British Colonial period started soon after the end of Germany rule in 1920's, British government did not abolish all the laws that were established by Germamy but it tries to maintain them for it's own interest. The key policy used to strengthen political forest were nationalization of timber rich land and creation of reserve forest. After First World War of (1914-1920) British obtained Tanganyika and started to recover most of trees that were encroached by community and included them in reserve area(Vihemaki 2005:6). Miombo types of forest were continuing preserved through restriction in order to be used in the construction of railway connections (Ylhaisi 2003). They also expanded plantations in the forest where they could grow tea for commercial purpose (Vihemaki 2005). British interest of making Tanganyika a big producer of groundnut in the world, also made most of trees in southern and central part Tanzania to be cleared off for establishment of these plantations(Ylahais 2003:281).

Generally during the colonial period, creation of reserve forest was the key to consolidate political forest over forest lands. This later caused communities who live around these reserve forest to lose rights to enter and use forest product in the reserve for their livelihoods due to the fact that interaction of community in forest management was considered as thereat to ecological preservation. As pointed by(Zahabu et al 2009:9) that colonial government fail to recognize the role of traditional rule in managing forest resource as well as the close ties which community had with the environment hence cause many destruction including forest which was initially preserved by customary rule. Moreover (Ylasini 2003) argues that the new system imposed by colonial in governing the forest resource over tradition rule, did not only destruct the local institutions, they also interferes the social values that were constructed within environment management. For the local, protection of forest means excluding from exercising their right to access to grazing, food, timber harvesting and fuel wood.

#### 2.4.2 Post Independence period

This period was focus on forest conservation which was the key to political forest through the policies formulation. New Independent state use policies and development program to strengthen their political power over the forest land.

First, policies which based on restrictions were continuing used to conserve forest for serving national interest. As (Pfliegner 2010:77) argues that soon after independence most of forest continued to be controlled by state under protection system which date back to colonial period. Different policies were adopted by state such as Forest Ordinance of 1959 (Zahabu et al 2009:9),the local Authority Ordinance which provides native authority (Mniwasa and Shaurin 2001). These policies were adopted for the aim of preserving forest for production of wood, securing ecological and hydrological services. For instance Uluguru Mountains forest was one of forest resource which remained under protection since colonial period due to it's hydrological value of providing water to river Ruvu, Nyerengere and Mgeta (Temple 1972:110).

This management excluded community from accessing forest resource that local communities were depending for their livelihoods. Due to colonial ligancy, the community around reserve area continued restricted from conducting any activities in the forest for the fear of destructing the resource (Lundgren and Lundgren 1983:47). It is in this period that mark the total destruction of customary laws of protection forest which was initially responsible for preservation of forest for both social and political needs (Pfliegner 2010:78). Forest

that had not been reserved and not customary managed by chiefs were put under public land to be utilized as an open access for public use. This was the only land which community had remained with to accessing forest resource for their needs.

Also, In mid of 1960's, the Late Julius Kambarage Nyerere, the former President of Tanzania introduces villagization as a policy of increasing development through communal ownership. The policy was developed to achieve three fold aim, first delivering services, the creation of a more productive modern agriculture and the encouragement of communal, socialist forms of cooperation (Kwaakoo 2011).Nyerere idea of villagization focus on the role of working together in communal farms which will gradually raise individual living standard and generate surplus income to finance social infrastructure. Most of forest lands were confiscated by state through nationalization policy which emphasizes community to resettle to the new villages which have been developed by state for economic development (Kwaako 2011:5).

After phrasing out of villagilazation, the state begin to encourage different International Programs which focus on forest conservation to support conservation which provide financial support to state in order to continue extending territory on the forest land. Uluguru Mountains Environmental Management and Conservation Project (UMEMCP) is one of the examples that evident political forest along the line of conservation. This was the project designed by CARE International in collaboration with the government of Tanzania to overcome the socio-economic and technical challenges that hindered success of the past conservation initiatives in the Uluguru Mountains (United Republic Tanzania-(UMEMCP 2010). The program undertook different activities including active patrol in the reserve forest, clear demarcation by tree planting to ensure forest boundaries, conducting research and monitoring (Frank et al 2005). However all of these activities resulted into excluding communities from accessing forest resources which were initially used to satisfy their needs. Apart from exclusion the program attributed to social inequality among the communities. As noted in the (United Republic Tanzania- UMEMCP 2010:49) that despite, the ability of (UMEMCP) to increase income of community members through different economic intervention such as VS and L scheme, it has failed to enhance the income of the poor community. This is because intervention project have been favoured the rich and middle class who have initial capital to join the scheme.

#### 2.4 3 Recent period

Today political forest is seen through engaging local population in forest management by using the terms like local community to achieve multiple goals. As pointed by (VendegeesR and Nancy 2015:171) the goal of political forest has now changed from achieving the economic goal to achieving social and environment goal. Apparently community participation in forest management has been rapidly encouraged by the state in most forest that nationally holds high biodervesity and important ecosystem through the process of devolution. As pointed by (Pfliegner 2010:2) Soon after the reform of forest in 1990's Tanzania government introduced participatory Forest Management as policy of managing the forest for sustainable development. According to National forest policy of 1998 Participatory Forest Management (PFM) is meant to achieve three main objective)improved forest quality and sustainable management practices; ii) improved livelihoods through increased forest revenues and secure supply of subsistence forest products; and iii) improved forest governance at village and district levels through effective and accountable natural resource management institutions.

This policy has been implemented by employing two forms which are Community Based Forest Management where community is regarded as the owner and manager of the forest and Joint Forest Management where community and state or other agents enter into agreement to share the cost and benefits of forest management (Bromley and Idd 2009:9 ).Despite the policy focusing on conserving the forest and encouraging community to participate in managing the forest,the mode has continuining using restriction methods to allow the regeneration of trees in order to achieve national interest which in turn affects the livelihoods of community who depend on forest for their livelihoods needs. As (Lokina 2011) argues Although Particicpatory forest management has been introduced in Tanzania to protect forest resources and to improve rural communities' livelihoods, it has not succeeded in improving the livelihoods of community around the forest reserve because of high restrictive that government has imposed in the government forest reserve to protect biodiversity which has important value to the nation.

# Chapter 3 Overview of Joint Forest Management

### **3.1 Introduction**

Joint Forest Management is an approach which has been adopted by many countries as a mode of achieving sustainable forest management by the collaboration of local community and the government (Nayak and Berkes 2008:707). It has been the mode which many Asia, Africa countries use to protect forests and improving the livelihoods of community who live around the forest, it lays on the assumption that when community are involved in managing forest the successful outcome will be achieved. Although it has been ministered nationally by countries, the decision on implementation detail has been left to the state. JMF has emerged as a response toward curbing deforestation and failure of the government to effectively protect the forest. As(Willy 2002:31) pointed that changing of approach of forest governance from central to community participation by developing countries has been driven by unlimited capacity of government agents in managing forest resources. However, many scholars (Kolavalli 2005; Meshack et al 2006) argue that the evolution of Joint forest management, particularly in changing position to the local community was not driven by the desire to bring forest under protection but to transfer the managing cost from central to the local community adjacent to the specific Forest.

## 3.2 Implementation of Joint forest Management

JMF is implemented under arranged agreement between the government and surrounding community with the objective of regenerating deforested forest. It involves communities through Village Natural Resource Committee (VNRC) who are engaged in various activities like patrol, fire control, illegal harvesting controlling and general clearance of surrounding forest, in the exchange for non timber product and revenue.

It has been conducted with support from government by formulating national policy which provide legal right to community to perform their activities, For instance in Tanzania, it is supported by National forest policy of 1998 which provide clear mandate and direction of participating in the management (URT-National Forest Policy 1998) together with Forest act of 2002 which provide National framework and guideline for the implementation (URT-Forest Act 2002).In India the management is supported by the national policy of 1988, which focus on stopping overexploitation of forest for industrial use and creating space for the local community to engage in decision making with collaboration of the national resolution of 1990 (Saxena N.C 1997:viii). JFM does not only get supported by legal policies but also works with forest departments in ensuring forest sustainability, for the case of Tanzania JFM work through Forest and Beekeeping Division (FBD) under the supervision of Ministry of

Natural Resources and Tourism (MNRT) while in India is working through particular forest state department under the supervision of Ministry of Environment Forest(MoEF)(JICA-Ministry of Environment Forest 1990).

The management works through involving members of village including; natural resource committee. These members are being selected by community through government assembly to act on behalf of the community as whole in making decisions concern management activities like forest patrol, controlling illegal harvesting and the imposition of charges. As explained by(URT-Joint Forest Management guidelines 2007: 15) that villages under JFM select the committee that have the responsibility of managing the activities as well as authority to ensure rules concerned the management are effectively followed and obeyed by members for sustainable forest management. These committee varies and known by different names across the regions, for instance in refers to Local Community Forest User Group Committees Nepal (CFUGCs), which give forester user, all legal right to use the forest resource as per stipulated guideline in management plan(Mehta and Kellert 1998:321) while in India ,it is known by various names basing to particular state like Madhya Pradesh one of leading state in implementing JFM has adopted three types of committee, Forest Protection Committees (FPC) for protection of well-stocked forests, Village Forest Committees (VFC) for rehabilitating the degraded forest areas and Eco-development Committees (EDC) in and around Protected Areas (Bhattacharya et al 2010:470). These committee are given power and authority from local government to act on behalf of the community in dealing with any issue relating to the forest management, they act as manager of the forest resource.

Selection of members in this committee is based on gender basis, where women are greatly encouraged to participate in managing the forest. For instance in India, the total of women needed to work in the committee must range from two members and above to each committee. (Jeffery et al 1998:1). In Tanzania number of women has to be one third or more of the total members selected in the committee(URT-Joint Forest Management guidelines 2013). This is an indication that women are encourage to take position in implementing duties relating to the committee.

Activities implemented by committee members are guided by the management planning organized by forester with the help of the community, where conditions for utilizing the resource are indicated, showing ways forest would be used by the community to achieve management goal. As Fisher (1995) explains that the implementation of Joint Forest Management is based on arranged agreement between the forester and the user upon which rights and responsibility are observed to fulfil the management goal. This guide how the resource would be used by the user in order to ensure sustainability of resource utilization, and it must be done through consultation with the member of the forest group who surrounding the forest reserve.

Formulation of Management is important because in Joint Forest Management, Forest falls into different categories, there are forest that are designed for production of timber, collection of non-timber production and others for protection of ecosystem which are carrying important ecosystem services and have highly biodiversity value hence it became necessary for management planning to state the mechanisms for managing forest and utilization of forest product. This is also ensuring the enhancing community understanding toward reaching management goal. Moreover most of forests under Joint forest Management whether designed for protection or production mainly implemented on the land owned by state. For instance in Tanzania JMF is mainly implemented in reserve areas which are either protection forest reserve or nature forest reserve land that has been demarcated by state under authority of either local or national government (URT-Joint Forest Management guidelines 2013:1), Similarly to India, where it mainly taken place on government land where the forest is managed and owned by state (Kumar 2002:765).Contrast with Mexico where 80% of forest are in the hand of communal ownership of community (Bray 2002:672). Joint Forest Management can be implemented in every area but commonly implemented on the land that is owned by state since most of forest in the various regions were under colonial rule, where land was in the hand of colonial state. Therefore the management of forest today tend to follow the same principle of state ownership of land.

### 3.3 Sharing of Benefits and Responsibility

The benefits and responsibilities which are made in the JFM agreement differ depending to the nature of the forest and Committee. For example in Tanzania, there are two kinds of forest that managed under JFM, namely protection forest that hold important ecosystem and production forest, (United Republic of Tanzania- Joint Forest Management Guidinglines2013) These two have different ways of managing it's revenue, For example the revenue generated from production forest , community share 19% of timber royalty and the remaining is paid to the owner(state) and protection forest, community share 24% of income from ecotourism and the rest goes to the owner (ibd:18-19).Contrast with India where the benefits are shared according to the committee for example VFC,70% of the net benefits goes to the government,15% to committee fund,10% to individual member and 5% to the for development activities and FPC, the percentages are as follows 90%, 50%, 3% and 2% respectively(Mishra2003). Therefore the benefits and responsibility of JFM varies greatly, this is due to the fact that every region has different way of agreement concern ways to manage forest sustainably.

Despite the established mechanisms of managing forest resources and the strategies for creating sustainable management; the benefits are not equal applied in all the forest due to some different conditions. As Sunder (2000:273) highlights different scenarios like i) a time where villager is allowed to collect resource but not timber ii) time where forest is letting to be matured hence limited access to collect forest products iii) time of total closer to allow forest to regenerate hence no collection.

The main objective of JMF is to improve the livelihoods of community surrounding the forest as well as improving condition of degraded forest through encouraging community to participate in protection. Bhattacharya (2009:469) argues that underline faith of joint forest management lies on ensuring livelihoods of community adjacent to forest is improved through protecting degraded forest. This is because most of community around the forest depend on forest to sustain the living through accessing forest product, like collecting firewood, fruits, medicine and hunting, in case the community is restricted from accessing these resource, their livelihood would be threaten as result they will tend to destruct the resource due to the fact that of not being connected to it. Hence no longer care of its implications. In order to ensure sustainability of forest resource the community should be benefited from it. However the results indicated that there is much evidence that it has succeeded in improving forest rather than improving the livelihoods of surrounding community (Blomley and Ramadhan 2004:5).

### 3.4 Participation of Community in JFM

Although the goal of managing forest resource may be the same across the countries, the degree of involving community in management varies to some extent, for instance in Nepal the user groups are greatly involved in the design operation plan and as well as owning the forest benefits India community are involved as partner and benefits are shared with government and in Philippians the community user are provided services from government as incentive of protecting the forest (Fisher 1995:6). Therefore the involvement of community in the implementation of activities is not applied equally across countries.

Involvement of community has been through devolution of ownership and responsibility to local level which has led to empowering of surrounded local community in ownership and controlling resource around the forest As (Behera 2009:177) argues in recent year many of decentralization program has been used co-management in order to recognize the importance of local 'people's involvement in protection of the forest as well as using the resource to improve their livelihoods. However Ribot et al (2010:35) argues that the efforts made by developing country in devolution of power to local authority has remained a discourse and does not play its representative role. In most cases local authority leaders does not neither represent local community nor being responsible for their actions?

## 3.5 Criticism over JFM

In many countries Joint Forest Management has paved the way in restoring the degraded forest. (Blomley and Iddi 2009,Kumar 2002).It is said to have contributed to sustainable development, income generation, decentralization and rural empowerment on one hand, On the other hands it has come under criticism for the failure to bridge the gap between rhetoric and the real situation (Lele 2002),inadequate devolution Fitcher (1999) Unequal distribution of resource (Adhikhali 2014).

In Nepal equal sharing of benefit has not been realized because the poorer(landless community)faced some restrictions access to forest resource than less poor, this is because resource management decision committee does not engage poor as energy seller hence loose traditional access to forest resource (Adhikhali et al 2014:246). Rich people especially that holding higher position like member of village natural resource committee are the one who capture the benefits while undermining the poorer. This is evidence in the study conducted in Tanzania by (Vyamana et al 2008:6) revealed that income generative activities have developed as alternative to reduce pressure on forest due to restriction imposed in JMF, has only benefiting more elite village member rather than poorer. According to Berkes (2009:1692) co-management and decentralization has often lead into strengthening of local elite power and state control over resource than putting its efforts in considering the equity of benefits sharing to local poor dependent forest user. As it is widely known that the community is not homogeneous hence the variation of benefits returns from forest need to be considered. Sarin (1995) argues that long term sustainability and viability of joint forest management depends on the considering complexity and diversity of local dependency forest.

However study conducted in Tanzania on understanding causal pathways for livelihoods by Persha (2005:10) pointed that poor households under JFM may as well acquire more benefits than wealthy though not similar to the well off members, through being provided with spaces of engaging in various activities like engaging in making decision, reduced inequitable targeting of fines and punishment of forest law breaker, extension of livelihood option to all community member disregarding of the social differences

Contribution of forest returns to the livelihoods of different social classes is also criticized in Joint forest management. While JFM has been successful in achieving on ecological side, the side of livelihoods is still not delivered an expected result. Kumar (2002:764) sees Joint Forest management has succeeded in protecting the forest from deforestation while part of livelihoods is yet to be achieved as expected. This is attributed by restriction imposed in IFM, which prohibit community from accessing forest wood products by considered communities to be the source of destruction. This is further explained in (URT-Ministry of Natural Resource and Tourism 2006) that benefits that flows to JMF is limited because banning of logging harvesting in reserve forest area, for example in the area where production is allowed, limited fund is largely caused by unequal distribution of forest royalties comes from timber harvesting). This is due to unclear establishment of system of distribution of timber harvest in management as well as strictly rule enforcement that reduces fines levied from law breaker as well as from accessing other forest product like timber.

Cost incurred in managing forest activities is among the criticism faces Joint Forest Management, it is argued that the cost that poor bear in managing forest is higher than benefits attained, this is in line with evidence drawn by Meschack (2006) who pointed out that transaction cost pertaining to the time spending in implementation of Joint forest management activities is higher to the poorer than to the rich, this is due to the value the poor attach to forest. Forest tends to have value to poor because of high dependent on utilization of forest products in satisfying their needs contrary to the rich who can have other alternative source to meet their needs. This is also evidence by study conducted in India Kilagala and Seekari village by (Sunder 2000:269) revealed that the cost bears poor in abstaining from accessing timber harvesting is higher than poor, this is due to the fact that poor spend more time in protection of forest with expectation of receiving benefits from the efforts made in protection rather than well off who doesn't spend time because of having other source that they can substitute with forest products. Devolution of power from central to local community in Joint forest management has been also criticized by scholars on JMF literature. Participation of local community in Joint forest management involves devolution process whereby power and responsibility in managing the forest activities is transferred to the local level ( Lele 2000). However the pattern of devolution has only involved minimal power transfer to forest local authority. As (Fisher1999) pointed out that devolution has been dominant and used as policy in most of the forest resource management around the world but the connection of the policy and implementation has not fully implemented, the power over the forest resource is still retained by the state. For example in India communities is being given the responsibility to protect a forest but the ability to access to the resource is not given.(Fisher 1995).

According to (Fischer 1999) pointed that devolution vary greatly, this depend on the direction power is devolved. It can be from central to region/local offices, local political structure Local community/natural user. He further argued that the contemporary dominant practice of devolution in most regions implementing participatory approach relies on the tendency of transferring responsibility to local community while denying the right to access.

This is also collaborated by (Berkes 2009:1963) who argues that resource in most of developing countries forest are often under the power of central or state government. This involves arrangement of sharing of power and responsibility with the resource user which may be used as indicator of evaluating the success of co-management but in most cases power sharing remain more problematic. People who are most affected by this power dynamic are disadvantage group who excluded from participating in decision making. Therefore, the transfer of responsibility to the local level seems to be so problematic, the most challenging task understands of the political dynamics of the institution within forest management. According to (Nygren.2005:650) argued that in order to access the capability of devolution to deliver good outcome, attention must be not paid to the actors only, but also to the institution through which these actors interact in shaping their responsibility. Despite Joint Forest Management has been used by many countries as the main principle of achieving sustainable forest resources management, it has fallen far short of disappointment and failure to attainits intended goal.

# Chapter 4 Joint Forest Management in Tanzania

# 4:1 Overview of JFM

Joint forest management in Tanzania covered about 5,392,095 hectors and it is mainly implemented in protected area where land is owned by either central or local government for preservation of forest which carries biodiversity value and ecosystem service for international and nationally interest (URT-Ministry of Natural Resource and Tourism 2012). This management has been promoted and supported by different stakeholders ranging from national to international level. As pointed by ( ibd:5) that Joint Forest Mangement has been currently encouraged and supported by ministry of Natural Resource through Tanzania Forest Services as well as National and international Ngo's such as TFCG,WCST AND WWF for the sustainability of forest in reserve area.

Area of forest covered by JFM management arrangements	5,392,095 hectares
Percentage of total area reserved by National or Local Government under some form of Joint Management Agreement	41%
Primary forest types where JFM has been promoted	Montane and Man- grove
Number of National Forest Reserves with JFM	181
Number of Local Authority Forest Reserves with JFM	101
Primary Regions where JFM implemented	Morogoro, Iringa, Pwani, Tanga, Kilimanjaro
Number of villages with JFM has been established or in process	1052
Number of villages that have signed JMAs	171
Number of districts where JFM is implemented	65

#### Table 1: Showing overview of Joint Forest Management in Tanzania

### 4.2 Implementation of JFM

The community under joint forest management enter into agreement with the state to share the responsibility and benefits which generated from activities undertaken to manage the forest. Under this agreement each village defines the area in which it will enter in the joint agreement with the state. This area is known as village forest Reserve (VLFR). As pointed in the National Forest policy of 1998 that "(I) A village land forest reserve shall be either-(a) a declared village land forest reserve; or(b) a gazetted village land forest reserve.2) All village forest reserves in existence at the commencement of this Act are hereby declared by virtue of this Act to be declared village land forest reserves" (URT-Forest Act 2002:51). This can be signed by all villages surrounding the forest as many or by single village covering the particular VLFR. Duties conducted in the VLFR are implemented by Village environment committee under the guidance of management plan which community and forester have engaged in formulating it so as to be used as tool to govern the access of forest product in the forest. As indicated in the Joint Forest management guideline 2013 that the forester who responsible in managing the VLFR must formulate managing plan which clearly define the way the management will be implemented and this must done seeking consultation from communities that live adjacent that particular forest(URT-JFM Guidelines 2013). This is so because within the Joint Forest Management, forest falls under two categories, protection forest and production forest, each have different uses hence the way there are managed differ to one another.

Community in the Joint Forest management does not have only rights to use the resource but also have power to make decision of all matters concern the management. This is verified in (URT-Joint Forest Guide lines 2013:1-2) pointed that community in JFM is considered to be both user as well as manager. To be user means the government gives community legal rights to access forest resource and sharing benefits accrued from forest so as to secure the cooperation, and manager means power to own the resource is being granted to community achieve conservation (Willy 2001:5).

The following table below is showing Process of implementation of JFM in village Land Forest Reserve area(VLFR) or sometime known as Village Forest Management Area

#### Table 2:Broad process steps for JFM implementation

#### PART III The JFM Process Overview of the six basic stages in planning for JFM

#### Stage One: Getting Started

This takes place at the district or forest level, with the selection of forest area and the surrounding villages, together with briefing of district staff and the formation of a team of staff with different skills to do the work. At the village level, you meet with Village Council and Assembly and facilitate the establishment and orientation of the Village Natural Resource Management Committee.

#### Stage Two: Assessment and Management Planning

This is where together with members of the VNRC you confirm, agree and mark the boundaries of the forest as well as the internal Village Forest Management Areas, (if the forest is to be managed on a village-by-village basis). The forest is then "assessed", and if it is to be utilised for timber or other forms of harvesting, the trees measured to calculate sustainable harvesting levels. Based on this, a management plan is developed for the VFMA.

#### Stage Three: Formalising and legalizing

This is where you provide communities with the legal basis for management. A Joint Management Agreement is prepared that defines how management costs, benefits and responsibilities are to be shared. The JMA is negotiated based on the broad management objectives set out in the forest management plan for the VFMA and where it exists, the Forest Reserve itself. The draft JMA is discussed by the Village Assembly and forwarded to FBD (or the District Council) for comments. Based on comments received, the JMA is finalised and signed by FBD/District Council and the Village Council. Bylaws are developed to support the enforcement of the JMA. Once the JMA has been signed, the villagers can now start implementing their management plan.

#### Stage Four: Implementing

This is where you help the community put the systems needed to manage the forest in place:appoint and train the Patrol team, start records, make sure the rules are known, and so on. You need to visit frequently, keep an eye on progress and help out with problem-solving. After a few years of implementation it may be necessary to make some changes in the plan or the bylaws

#### Stage Five: Revising

After three years, or so, the management plan can be reviewed to see if any changes need to be made, such as harvesting levels, rules, fines and so on.

### Stage Six: Expanding to new areas

It is likely that other villages will start requesting JFM in their villages. It is during this stage you plan and budget for expanding into new areas.

These six steps are presented on a flow chart on the following two pages and in more detail in the following section

Source (URT - Joint Forest Guidelines 2013)

# Chapter 5 Empirical Study: Joint Forest Management A case of Tegetero Village

In order to pursue the objective of the research, this section is going to analysis and discusses the findings as regards to the implications of access restrictions to forest on community livelihoods and the community respond towards access restrictions. First the discussion of implementation of Joint Forest Management at village level, Second the effects of the restrictions to community livelihoods and thirdly responses of community toward restrictions.

# 5.1 Implementation of Joint Forest Management under VNRC

The performances of day to day duties of JFM in Tegetero are implemented by Village Natural Resource Committee (VNRC) through formulation of JFM management planning. These members are selected by village assembly not appointed by village council. According to (Humphries 2012:119) VNRC is the most important and unique institution because it is only sub-committee of village council that does not consist of village council members in managing its every day duties. This is because the member of VNRC must hold membership in national assembly in order to qualify as a committee member. Its members are selected by basing on criteria as indicated in the following table

#### Table 3 General information on formation and election of VNRCs

- "They should know about the forest and how to use its resources.
- As many as possible should be literate
- They must be people who are active and ready to work for the community
- They must be honest and trusted to manage money on behalf of the community
- Different parts of the community are represented; at least one third of the VNRC
- Members must be women, and if possible more.
- People from different vitongoji (sub villages) should be represented, especially those who are immediately neighbouring the forest reserve itself"

#### SOURCE: URT-Joint Forest Guidelines 2013

Moreover duties which members of VNRC perform in management differs with that of the district council and Village council.District council act as facilitator, among its duties are to assist in giving advice and guidance to the community members on how to achieve asuccessful management outcome for sustainable development. Village council play a role of overseeing the management activities conducted by VNRC. VNRC continue to be the main actors in the management, their duties are implemented in accordance to members' position in the committee, The chairperson is responsible for distributing all report concern VNRC activities to the district, village council and assembly, the secretary has a role of keeping records of meetings of committee, activities undertaken by patrol team, records each offence, the offender, the fine payable, The patrol team has the role of patrolling in the forest to identify the area that have destroyed, encroached and filling in the patrol book which shows the activities undertaken and the action taken for any authorized activities. The treasure has the role of keeping records of money received and spent by using simple income and expenditure book as well as reporting to village assembly quarterly (Humphries 2012:120).

Institution	Principal Responsibilities
District Council	Facilitate and approve the land use plan for the VLFR Declaration of a VLFR alongside the Village Council Monitor the VNRC bank account To prepare the management plan for the forest land as part of the gazettement process
Village Council	Control revenue collection and spending of the VNRC To decide with the VNRC on ex- penses for the committee Authority to apprehend anyone incontravention of the management plan
Village Natural	Implement forest management
Resources	plan for the VLFR
Committee	To hold monthly meetings and prepare monthly reports on revenue, patrols and resource monitoring Carry out monthly perception in- terviews in the community To prepare quarterly accounts and reports to be read aloud at village as- sembly meetings Enforce rules of use and village bye-laws Resource monitoring Conflict resolution Enforcement of sanctions for ille- gal activities Collection of revenue from the VLFR

Table 4: Roles of different institution at Village Level

Source (Humphries 2012)

However the study revealed that there is a gap between what it is in the policy and what is real implemented on the ground. In relation to criteria of selecting members of VNRC, the study confirmed that the committee does not follow the procedures that policy establishes through JMF guidelines in selecting the committee members. Interview with (member of VNRC) (F) concern the reasons of establishment of JFM in the village had this to say " I real don't know exactly why central government come to establish JFM in this forest, for what I think may be it because of destruction done by community in the forest". In this regards, it justifies that the committee leaders do not considered principle for selecting members in the committee. As mention in table 3. One of criteria of should have is the knowledge about the forest. Leaders seem to decide who to include and not include in the committee without considering whether the person has qualification or not. This is collaborating with the study conducted in Morogoro Tanzania by (Nielsen and Treue 2011:1235) on the Benefits of Joint Forest Management in the Eastern Afro-Montane Biodiversity Hotspot revealed that selection procedures of VNRC in JFM does not always relate with characteristics of good governance, as a matter of fact leaders of village council normally has an influence on deciding who to select for VNRC. In order to have democratic elections in selecting the VNRC, selection procedures should followed by members in the committee. According to (Ribbot et al 2010:35) pointed that for effective outcome of forest decentralization in community based natural management, democratization should be carefully examined.

Moreover Gender issue is also one of significant factor in selection of VNRC as it provide every village member an equal chance of being selected to participating in decision making concern the management. According to(URT-National Forest Act 2002:52) stated that "Where a village land, forest management committee is established, it shall be formed with due regard to gender balance". The number of women and men who are required to be selected by committee must be equal, but the study found that the number of men is greater than the number of women. Interview with member of village committee (F) confirmed that the total of all members of the committee is twelve people, whereby women are three and the rest are men. This is an indication that although women are included in the committee as a representative, but still the number of men exceeded the number of women. With this regard power of controlling the forest tends to be directed only to men than women hence women being excluded from the benefiting of rights the committee body.

Based to my observation, not only the committee have more number of men than women but it also revealed that women are not encourage as men does to participate in making decision, This is supported by study conducted in Morogoro region on the Impacts of Joint Forest Management on Forest Condition, Livelihoods and Governance which confirmed that the committee tend to consider more men in taking chance in the committee rather than women hence the number of men often tend to be higher than women(Pfliegner 2010:201).Sarker and Das (2002:4410) pointed that although women may get chance to engage in the functioning of village committee, they are normally restricted to participate in decision making by their leaders. This does not only affect women by not presenting their concern in management plan, but it also affects successfully outcome of JFM management system.

The study also revealed that VNRC is not transparent enough on managing its revenue collected from protection activities such as tourism and researching. Interview with member of household (M) said that "money that is paid as a fee from tourist after visiting is not seen and not known how it has been spend for as for this moment, no kind of community project that has been developed from the money collected from tourist, we have been forced to take money from our pocket to contribute for community development project. For me, Joint forest management is designed to create those in higher position to be well off and poor to be poorer as it is benefiting only those who hold the highest position. He further noted that the difference between the poor and richer will never end because the richer always dominates the poor to get their desire" (Interviewee 21/7/15). This is collaborated by study conducted in Tanzania by (Brockington 2007 :843 ) pointed that forest reserve and their management committee do not democratically present their community they serves, but rather presenting their own interest, he further explained that it like pouring old groups, division and politics in new wineskins. Although committee which is formed is new but the system still remains the same.

Reflecting to above findings the interview with the FGD confirmed that despite the fact that members of VNRC engage in the protection activities forest like clearing ways for tourist to pass in the forest , patrolling and guiding researcher when conducting research, money collected from these activities is not contribute to any development in the village. Also in their meeting concern the management of forest, they do not give out report on the amount received by protecting forest throughout the year and the way it has been used. They further argued that this is where community tends to lose trust and create enmity to the members of committee by not seen that the members are the one who benefiting more than the community. This shows that member of VNRC use the system as their source of funds to satisfy their needs and not community at large, although they implements duties required by management, they also use it to preserve their interest by not being transparency and accountable to their village members.

According National Forest Act of (2002:59) states that "A joint village forest management committee shall through the members elected from each village council, report on a regular basis to and take account of the views of the village assembly of each participating village". So with this regards it is committee duties to give report to the village assembly on all matters concern the management.

Interview with member environmental village committee (F) concern the how the money is used after collected from protection activities she said that "money that we received from tourist is distributed to member of village committee as part of allowance and to the village council for development of community projects like schools, hospital and village office but based on my observation, this was not true because during my visit, I couldn't see any community based projects that was claimed to be developed from the money received from tourist. The development projects which, I saw was one school and hospital which was funded by Roman Catholic mission centre. Moreover even the village office was not there, because when I met with village officer, the meeting was conducted in one of the house of member of village committee. This indicates money that are generated from committee through protection does not contribute to any development in the village but support only few member of committee, which later on create conflict between the community members. Nielsen and Treue (2011:1236) in their study shows that transparency in managing fund generated in Community Based Forest Management (CBFM) is very essential for increasing trust to the community members and it can be advance through reporting quarterly to the village assembly. It is also supported by JFM guidelines of (2013) showing that providing information and keeping records of every activity implemented in the management makes the system to be transparency as well as reduces conflict among members.

In respect with the findings there are also some comments on the governance issue relating to district authority, Interview with the councillor of Tegetero village(M), He commented that "money that tourist pay as entrance fees, it directly paid in town to the district officer. When tourists come here to visit forest, they do not pay anything, the only thing I see is tips which members of committee receive as part of sitting allowance. When we ask them where did they pay the money, they show us receipt which showed that the money had already being paid to the district office. One day, I attended the meeting and tried to ask question relating to the revenue that is collected from this forest, nobody was able to answer me ...the problems of transparency and accountability begins from upper authority, where district officer take the whole amount for their own interest and left us with nothing"

In furtherance to the above findings interview with member of household (M) said that "For me forest has no benefits at all, it is impossible to have forest in Tegetero and benefits people who are not living in this area, I am saying this because the most affecting people with restrictions is us and not local officials from district, he add by saying for example if I and my family engaging in farm activities, the produce or benefits acquired from the farm must be retained home so as to encourage family members to continue farming ,but if I misuse them for instance, i directed to 'michepuko' Swahili word which means other affairs, my family will no longer accept doing farm works because there will be no motivation for them to continue farming. Same applied to forest ,money that is collected from tourist is not directed to the community whom affected by forest but rather enrich local government officials at district level. Now I want to know whether this forest has been sold or not. Tegetero has been given praises for proper management of forest but in reality this is not connected because it has not deliver tangible benefits to the community, The money from forest cannot even contribute to build village office and teachers house" (Interview 21/7/2015). This justifies that the power of controlling the distribution of the review collected is still vested on the hands of local district leaders and not community.

According to the (URT-Joint forest Guidelines 2013:19) state that 26% of the revenue generated from protective forest reserve designed for ecotourism services must be directed to the community and the remaining balance should goal to the owner of the forest. This is to ensure of reliable means of income to facilitate community commitment in protection of forest reserve. In this case 74% must go direct to Tanzania Forest Service (TFS) which act as owner

of the forest at the district level in Tegetero village and 26% has to remain to the village.

### 5.2 Access restrictions to forest

The study found management of JFM in Tegetero are guided with various access restrictions to forest which are used to manage the forest through village environment committee. Interview with Chairperson (F) of Village Natural Resource Committee pointed that the community are restricted to collect firewood with exception to the specific days that were agreed upon with the committee, He adds by saying even if the community entered in the forest they are not allowed to carry any instrument like "panga" and axes, as well they are not allowed to cut any fresh tree in the forest, the only thing that is allowed is to collect dry tree that has fallen by itself. In this regard community are only eligible to fuel wood collection within the indicated days that are allocated by the village Natural committee.

Reflecting to above statement the interview with the member of household(F) claimed that even two days which were proposed by member of committee to collect firewood were not there during the early stage of implementation until the community made complain to the authority. This is when they were granted these days for collection. This indicates that although forest under joint forest management designed for conserving forest and improving the livelihoods of the community lives around the forest, the management does not consider the needs to community but rather concentrating in achieving the conservation objective.

Restriction from harvesting timber was observed to be common restrictions implemented in this area. Interview with the village chairperson(M) confirmed that the management is totally restrict community to cut any tree for the purpose of producing timber, because it may results into endanger of species that dwell in the forest. Most of forests under Joint Forest are found in reserve area which carries highly biodiversity values and protected as catchment reserves therefore production and harvesting of any wood based product is considered to be destructive (Pfliegner 2010). According to (TFCG 2007:4) pointed that most joint forest management are mainly taken place in montane forest where forest are preserve for protection rather than production activities. This justifies that the mainly aim of the Joint Forest Management is considered to be the main causative of environment destruction because it encompass with destructive activities during harvesting.

This is contrast to the forest that is not in reserve area, where accessibility to timber harvesting is an option, and the access to forest is considered as open access. It is also claimed that whether natural or plantation forest under JFM are rarely designed for production because of difficulties of sharing of forest revenue between the two part parts (MNRT 2006).Even if it is permitted to legally harvest and share the benefits accrued from timber production, it will not be the same prior to introduction of JMF, and for this case of sharing of the benefits would be not successful because up to date the arrangement of benefits sharing is still unclear (Blomley and Iddi 2009:18).

Restriction Type	Decription
Restriction access to fuel wood with exception of two days	No cutting any fresh tree, no en- tering the forest with any instrument.
Restriction to Timber Harvesting	No cutting any kind of tree for the purpose of harvesting timber ex- cept when needed for the community development and this is done by pro- vision of permitted receipt from vil- lage committee

Table 5:Types of restrictions access to forest product in Tegetero Village

Source: Author's field interview July 2015

The table above shows types of restrictions access to forest product which is used to manage the forest under the JFM. This restriction requires every member to abide so as to achieve the management goal.

# 5.3 Formulation of access restrictions to forest products

The finding revealed several answers as regarding to "who is responsible for formulating access restrictions to forest". Interview with member of Village Natural Resource Committee (VNRC) claimed that villagers were responsible for the formulating access restrictions through village assembly. While members of focus group discussion claimed to be member of VNRC since most of activities concern the forest as well as legal permission comes from them. This however indicates there are no clear is responsible for restriction formulation that manages the access of resource. According to the (United Republic of Tanzania -JFM Guidelines 2007:10)states that for proper management of forest in reserve area, the villager must formulate restriction access and it should be approved by district council.

## 5.4 Effects of access restrictions to forest on livelihood.

While Joint Forest Management has been successful in conserving forest due to strictly restrictions imposed by Local government authority through village committee to reduce forest disturbance hence protection of forest, the question about community livelihoods remain questionable. As (Bloomley and Iddi 2009:34) pointed that JMFrestrictions management rule in protection forest and unclear sharing of benefits in production forest has resulted into limited tangible benefits to the community adjacent to forest especially poor family. From this study, the finding has showed that access restrictions to forest altered community livelihoods in one way or another, Interview with member of household(F) said that " Most of us ,we use forest product for cooking energy, building house as well as burning for mud bricks though there are two days proposed for collection of firewood and other local products but these are not enough because of multiple use of forest wood ,for me central government has put more restrictions that hinders performance of different activities which requires wood production".

with member of household(M) said that "The re-In addition interview strictions can not despise us because there are protecting the forest from more destruction, and in the matter of fact there is no way we can resist it because it is a command from the President of Tanzania, So we tend to respect the law despite of its effects... for example our collection depends on pieces of the woods that are left in the farms, in this sense, we are used of it". From this statement is clear from the respondent that although of challenging in find fuelwood, community have no option but forced to follow the law that it has been established to manage the forest because it is an order that require everyone to abide no matter what effects may cause to community life. Above arguments justifies the imposition of restriction has led to limited access to forest produce, for this case it has resulted into limited access of firewood collection for energy uses. Based to my observation most of community of tegetero their main source of energy depend on the fuelwood, for cooking this is because of the low level of income which fail to afford other alternative source of energy like electricity stoves and gas stove.

This is collaborated with the study on contribution of non-timber production on poverty alleviation in Tanzania conducted by (Gibila et al. 2010:74) revealed that 90% of dry firewood are used as energy. This signifies most of rural community source of energy relay on firewood rather than any source.

According to (Blomley and Iddi 2009 :7) argues that the mainly source of energy in rural area depend on firewood which make 90% of total energy consumption in the country. therefore sustainability of the joint forest management must ensure there is availability of other source of energy to local community to use as alternative to energy consumption, without so doing community will not be able to sustain hence exploitation of forest for firewood will be inevitable This is also supported by study conducted by (Kajembe and Robson 2009:16) on changing access to forest in Tanzania pointed that the resource such as fuel wood will continue be exploited in nearby forest due to it's highly inelastic demand and few substitutes compare with other forest resource like vegetable and fruits with low demand. This justifies the fuel wood have great demand than any other resource in the forest.

Damaging of crops by wild animals that comes from regenerated forest looking for food in the farmsnear the forest has reported to be among the effects that are caused by restrictions. Interview with the member of household who is a farmer(F) said that " most of us here in the village are farmers, we grow bananas, beans, sugarcane and potatoes, our farmers as you can see are too close to the reserve forest, where forest has been so intact due to restricting people from doing any activities in forest now during the time of harvesting where crops are nearly ready to be harvested, different animals like monkey and gorillas come out from the forest to eat our crops, they cause great damage to our crops and if in case you're not keen enough to take precautions like keeping dogs to guard the crops, you can end up with nothing. Sometime these animals come and destroy the seeds that are inside the ground. These animals are like humans; they know every growth stage of crops, for example if you accidentally found a monkey has destroyed the sugarcane farm is like human has eaten the sugarcane, so these give as big challenge to the future."

This is collaborated with the study conducted in Uduzugwa forest in Morogoro Tanzania by Harrison(2006:36) which revealed that while the village members who lives adjacent to reserve area being incapable of generating benefits from protected forest, they also incurs cost of protecting their crops from destruction of wild animals which come out from forest for food searching. Community around this reserve are not allowed to kill any of animals expect chasing them away from their farms. This is because local community has no mandate to control wildlife population except the wildlife organization.

It also supported with the words of one of the farmer (M) whose farm is allocated near the reserve forest comments that "Animals that come from forest are real disturbing us, because at the time of harvesting you will find every farmer attending their farms to protect their farms from wild animals, this to avoid destructions done by wild animals which come from forest to look for food. For example if animals invade your farm, now hereto report because even when you report, they don't come on time and found these animals had already gone back to the forest".

Furthermore a reduction of income comes from economic activities like timber has confirmed to be drastically dropped due to the imposition of more restriction of the forest access. Interview with member of group discussion noted that during the early days the forest harvesting was permitted and it was as a source of income generating activity eventually it was burnt down for the claims of destructing the forest reserve. This has resulted into dropping of income that was initially used as a source of income to supplement other household needs like paying for school fees .As pointed by (TFCG 2007:17)that while JFM claimed to regenerate forest due to banning of timber harvesting, community often suffering a fall of income generated from forest harvesting. This is also supported by the study conducted by TFCG at several sites on the Eastern Arc mountain in Tanzania which revealed that severe restrictions of forest harvesting in the Joint forest, has led community to lose interest of participation in the management because of the limited benefits that comes from reserve forest.(TFCG 2007:6).

This is also supported by a study conducted in Tanzania Kalama village by (vyamana2008: 12) that showed drastically falls of average household income earn from JMF decreased from Tsh 9,200 before to TShs 0 after JFM restriction from TShs 15,310 toTshs 2,653 (83% decrease) for rich and poor households, respectively. This is due to strictly restrictive access that are imposed in JMF where production activities are limited.

However interview with a household member (M) comment that timber activities were not allowed because it was done secretly without the concern of village authority and it was only permitted by district level, but with the complaints from villagers to the responsible authority, it was banned and strictly prohibited. This justifies the reasons of putting restrictions to JFM is not to preserve the environment from disturbance activities that might caused by production activities in reserve area, but the selfinishness of few people who wants to take advantage of others ,who bear the cost of managing the forest. In this regards the district level are the ones who take advantage of taking the opportunity to pursue their goal through management.

### 5.5 Responses toward access restrictions to forest product

Responses of local community toward the imposition of access restrictions to forest vary depending to different situation. Interview with the member of household(F) said that "After the introduction of restriction, some of us decided to plant individual trees as an alternative access to forest resources. Howevever we still encountered challenge of waiting for tree to grow so as to be used for fuelwood or timber[...]trees like myawezi and mkangazi which are common species in this area for fuelwood requires maximum 6 to7 years to be matured in order to be used for either firewood or timber, this period of waiting is becoming challenging for most of us hence looking to unsustainable means of getting access to forest resource like collecting firewood from home left over's which are not sufficient to meet our needs" Others turned to the neighbouring forest that is also not reliable for our home base activities Interviewee 21/7/15). As pointed by an old man who has lived Tegetero since his childhood said that "restriction forced some people to switch to the missionary forest that is located near by the village for utilizing to meet their needs. However this is not very reliable means of collecting the forest product all the time because of imposition of laws which missionary use to protect the forest from over exploitation by the villagers.(Interviwee 21/7/15). This is collaborated by the study conducted by(Vyamana 2008) confirmed that community that lives near reserve area tend switch to unprotected neighbouring forest in order to have access to forest resource from protected forest hence cause more destruction, he refers this destruction " as Displacement effects"

Another challenge is risk of being caught by the committee by violating the laws. The study confirmed that community still continue going to the forest despite restrictions. This is because of insufficient days for accessing forest resource imposed after the introduction of restrictions in JFM. This has resulted some rule breaker to continue being caught or made to pay fine or sending jail. Interview with the household member(M) said that "community are still entering to forest through 'utemi' is Swahili word means by force, while looking the directions in which committee members had gone so as to avoid being caught by the members for breaking the laws, but if accidentally caught therefore the law take it's decision ". This is supported by the study conducted by( TFCG 2007:17) in Tanzania revealed that community scarify to enter the reserve forest, in spite of restrictions that guide the protection forest because of lucking an options to satisfy local needs as result there being caught for breaking the laws. These causes most of community to suffer in jail due to lucking money to pay for the fines that are imposed on them for breaking the law that is

managing the forest and this is contributed by poor condition which most of rural community live in.

#### **Chapter 6 Conclusion**

The research sought to assess how access restrictions in Joint Forest Management affects the livelihoods of community adjacent the reserve area.

Dealing with this research problem not only required looking at the effects but also need to understand the reason that caused the state to introduce the restrictions in the forest reserve areas. In this regards the research argue that the contemporary efforts of state of conserving the forest has been shaped with the management system of the past which used restriction regime to exclude the community from protected area so as to serve the national interest. Despite the modification of embarking on integrating community in the management of the resource, it has continued use restrictions mode of controlling the access in the reserve area to serve the national interest. This has led more effects to the livelihoods of surrounding forest reserve area.

States have continue excluding community from resource use through different approach which promote national interest by application of different institution arrangement, that later cause profound effects to livelihoods of community who live adjacent the reserve. Through investigating the finding of the case of Tegetero village the study has found that the restriction has profoundly affected the livelihood of poor community in different ways

First, the accessibility to fuel wood which is highly demanded and use as a source of energy for cooking by many poor community around the reserve area has been reduced to the extent that community use unreliable means like stealing and collecting from farms leftovers. Access to timber and other local products which were used to supplement local income to meet other needs has been drastically dropped down. Tree regeneration resulted from restriction has led to increase number of wild animals in the forest in such a way they damage the crops that are grown in the farms that bordered the reserve.

Second, looking to the implementation of the restriction access to forest, the management has produced inequality among members, this is due to the fact that money which is collected from tax levied to tourists by district local government authority is not distributed equally to the community, the revenue have been used to serve the interest of few people who have authority in managing the resource while leaving those who are most in need to be more poor. By lucking other source of alternative to livelihoods.

Third, Members of Village natural resource committee which are responsible body in managing the activities of the forest in reserve are not reporting on exactly amount collected from the forest activities to the village assembly. The committee takes this as opportunity to earn money to serve their own self needs and not the need of community as whole which later cause lose of trust and interest of managing the resource.

Although women have been involved in the committee but the number of men tends to exceed women hence the power to make decision on the activities relating to the management tend to base more on one side. In addition the procedures of selecting members of VNRC are not very transparency since some members which are involved in the committee seems to be selected with the influence with their leaders.

From this analysis the study can conclude that there is need for the state to recognize both objectives of joint forest management in managing the forest resource s to achieve sustainable management. And to understand the management of forest in cotemporary world, there need to consider the politics of forest that around the management.

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#### APPENDIXIES

#### **Appendix 1 Questionnaire**

1. Personal Information

Name of Head of the household .....

Education of the household head .....

Marital Status.....

Sex

Occupation of the household .....

2. What are the reasons of implementing joint forest management in this area?

3. What are the activities implemented for managing the forest?

4. Do you have management planning mechanism for implementing Forest activities?

If yes who is participating in preparation of the activities in the forest?

5. How does it work?

6. What are benefits do you receive from the forest?

7. How do these benefits sustain your livelihoods?

8. Which kind of restrictions does the forest use in managing the forest? Mention

9. Who is responsible of making these restrictions?

10. How does a restriction works

11. Does the restrictions follow the procedures of village managing planning?

If No. why Explain

12. How does the restriction affect your everyday life?

Explain

13. Did you find any alternative to sustain your needs after the imposition of restrictions?

If. Yes. What alternative mention

If No. what ways have do you find as an alternative to sustaining your everyday needs?