International Journal of Innovation and Scientific Research
ISSN 2351-8014 Vol. 32 No. 2 Sep. 2017, pp. 181-190

http://www.ijisr.issr-journals.org/

CONFLICTING INTERESTS OF STAKEHOLDERS IN GOVERNING AND UTILIZATION OF FOREST RESOURCES: A CASE STUDY OF CHENENE FOREST RESERVE, BAHI, TANZANIA

J.B. Nkonoki, S.M. Msuya, and F.H. Mgumia

Environmental Planning Department,
Institute of Rural Development Planning,
Dodoma, Tanzania

ABSTRACT: This study explores the management of forest resources from perspective of rural communities and other stakeholders who use those resources in different ways for a wide variety of reasons. The purpose of this study was to identify and understanding key issues related conflicting interests of different stakeholders in governing and utilization of forest resources. The relationships between forest resources and people are mediated through institutions. Institutional arrangements shape resource access and control, and are fundamental to understanding patterns of stakeholders' interests. This study grouped stakeholders into three groups, which were regulators, facilitators and users with different interests with regard to conservation and use of forest resources. Combining a focus on securing livelihoods with rural community negotiating and decision making processes enables this study to discuss and analyze among different stakeholders which is a key to achievement of more equitable forest resource management and distribution of benefits. This study analyzed and understands conflicting interests of different stakeholders that take place within community as a result of governing, and utilization of forest resources.

KEYWORDS: Stakeholders, conflicting interests, governing, utilization of forest resources.

1 INTRODUCTION

Forest resource management is characterized by actors with multiple interests. Policies to conserve forest resources may further increase the competition, if the total amount of rural resources that can be extracted legally, declines. When resources are contested and/or restricted it is essential to establish collective management plans that consider different interests and mitigate conflicts among resource users (Gibson, 2005). Today, the involvement of the local people in forest resource conservation programs is to an increasing extent recognized as crucial in order to make collective forest resource management arrangements work (Kerr, 2002). Improved forest resource management does, however, not necessarily result in poverty eradication or vice-versa. The recent literature emphasize that while poverty eradication and environmental sustainability goals can be reconciled and trade-offs minimized, there is no simple relationship that brings benefits on both fronts (Barret *et al.,*. 2005). Therefore, a core feature to engage the rural community in forest resource management and conservation is to draw special attention to the interests of the local community and how these differ from those of other stakeholders.

Community involvement in forest resource management embraces a wide set of terms which have been interpreted in many and diverse ways. The term "stakeholder" refers to a person or group with an interest in, in this case forest resources. In this study a more focused definition of "stakeholder" and/or responsibilities for forest resources, that formal forest institutions, rural communities and others may have concerning in a given forest or woodland forest. This approach recognizes both inter and intra community issues, and that within a community different stakeholder groups may have different interests in particular resources. The strength of that interest is determined by their power to negotiate. A discussion on stakeholder groups alone in forest resource management is relatively meaningless unless housed within the

Corresponding Author: S.M. Msuya

wider context of social relations, and obligations that such groups have to others. This study divided the range of stakeholders by following groupings.

The state has strong role in forest resource management all over the country, permitting, or not, various forms of use to different groups, at different times, and sometimes without due consideration of the impact on other groups. Many individuals and community rights in Tanzania were extinguished or reduced to permit based systems during colonial and post-independence periods. There has been a historical focus on formal business- type, interests, which have tended to dominate those of rural individuals and community interests, since such interests accrue direct revenue to national economies. Structural adjustment and privatization are changing these, states are no longer able to properly manage forest resources, but need to enlist the support from both community and private sector (Bagachwa et al. 1995).

Some stakeholder groups are close to the resource, but may have little power or control over who uses or can use such forest resources. Other more distant stakeholders, such as urban dwellers and government policy making institutions, may have little direct interests in the resource, except as a source of, for instance, charcoal in the market, but they have economic power and administrative control over the resources out of all proportions to their proximity.

2 MATERIAL AND METHOD

2.1 DESCRIPTION OF THE STUDY AREA

Chenene Forest Reserve (CFR) is located in Bahi District, Dodoma Region at latitude 4^{o} to 8^{o}S and longitude 35^{o} to 37^{o}E. Bahi District is one of the six districts of Dodoma Region. Other districts are Kondoa, Chamwino, Dodoma Municipality, Mpwapwa and Kongwa. The headquarters of the district is located in Bahi ward which is 50 km away from Dodoma Mucipality along the highway linking Singida and Dodoma regions. On the east, the district shares its boarder with Chamwino District and Dodoma Municipal; Kondoa district on the north, Iringa egion on the Southwest, and Manyoni District on the West. CFR is surrounded by four villages namely Babayu, Chenene, Mkondai and Mayamaya. Populations and households are shown in Table 1**.** The location of CFR is indicated in (Figure 1).

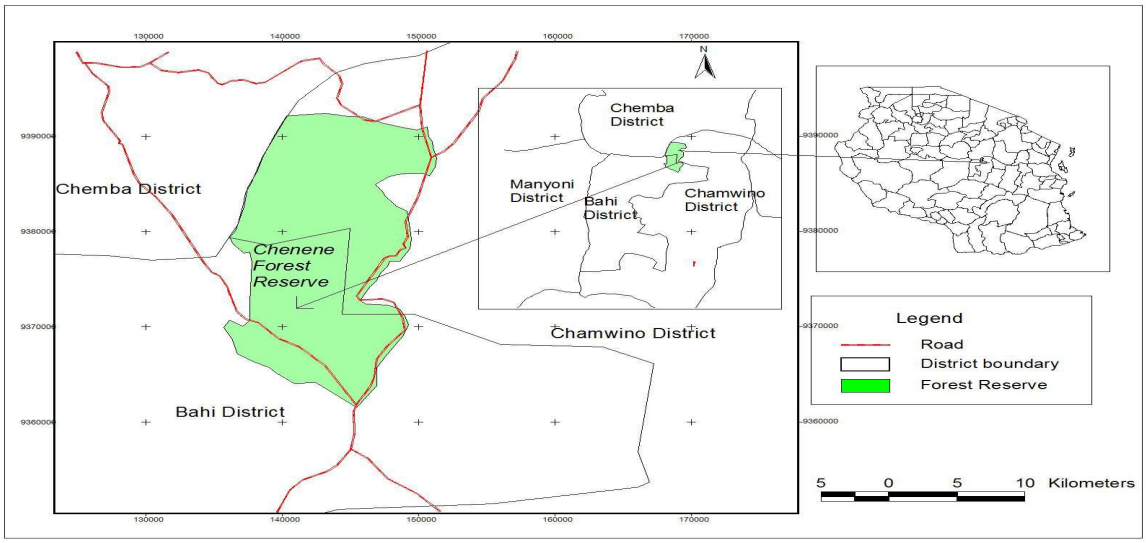

Figure 1: Location of Chenene Forest Reserve

2.2 DATA COLLECTION

Random sampling design procedure was used for selecting households to be included in the sample and village register was used as sampling frame. Two villages (Babayu and Mayamaya) were selected purposefully from four villages adjacent to CFR. The reason for selecting these villages is their closeness to CFR. The sample size was determined according to Boyd (1981) where the intensity of 5% was used to determine the sample households in each village. This sample is supported by

Bailey (1994) cited by Mbeyale (2009) and Akitanda (1994) who indicated that a sample of at least 30 units is sufficient irrespective of the population size. In total, the households from two villages were 16 862 and only 137 were selected for questionnaire interview . In addition, Participatory Rural Appraisal (PRA) was conducted for resources mapping and pairwise ranking and scoring was used to identify and priotize stockholder's conflicting interests and power relations aiming at understanding behaviour of different stakeholders on forest resource management. Discussion with Village Environmental Committees (VECs) and key informants from different stakeholders were carried out. This involved District Council Director, District Natural Resosources Officer (DNRO), and District Bee-keeping Officer (DBO). District Forest Officer (DFO), Ward Executive Officers (WEOs) and Village Executive Officers (VEOs). Other experts from Non Governmental Organizations and Traditional leaders dealing with conservation and development in Bahi District were also consulted.

2.3 DATA ANALYSIS

Content analysis technique was employed to analyze components of verbal discussion with key informants and information from Participatory Rural Apraisal (PRA)(Kajembe *et al.,* 2004). Both descriptive and inferential statistical analyses were carried out for quantitative data. Significant differences between categories and villages were judged based on Chi-square (χ^2) values at 5% level of significance. A statistical Package for Social Sciences (SPSS) computer software version 16 was used in analyzing the quantitative data.

3 RESULTS AND DISCUSSION

3.1 TYPES OF STAKEHOLDERS INVOLVED IN GOVERNING AND UTILIZATION OF CFR, BAHI, TANZANIA

The study identified various types of stakeholders who were involved either directly or indirectly in governing and utilization of CFR. By combining interests and powers using a matrix diagram, stakeholders involved in the use and management of CFR were grouped into three categories namely regulators, facilitators and users (Table 1).

Table 1: Categories of stakeholders, their interests and power relations in CFR

Stakeholder	Category	Interests and power of stakeholder
The Forestry and Beekeeping Division (FBD)	Regulator	Executive power, issuing permit to increase revenues (royalties),
The regional secretariat	Regulator	Advocacy on sustainable use of forest resources
Bahi District Council	Regulator	Management and administrative role, tax collection from forest products
Village Environmental Committees (VECs)	Regulator	Law enforcement
Village governments (VG)	Regulator	Law enforcement
Tanzania Forestry Research Institute (TAFORI)	Facilitator	Research (Permanent Trial plots)
DONET	Facilitator	Provide environmental education
MIGESADO	Facilitator	Provide environmental education
CARE Tanzania	Facilitator	Funding of development activities
Prisons (Msalato and Isanga)	Users	Subsistence use
J.KT (Makutupora)	Users	Subsistence use
Community	Users	Subsistence use
Individuals (Business men)	Users	Subsistence and commercial use

Generally, it was noted that regulators were interested and powerful on issues such as executive, issuing permits and administrative. Facilitators on the other hand were responsible in facilitating advocacy, research, awareness raising and financial support. Commercial users were mainly important on trade of timbers, building poles and charcoal from the forest reserve while subsistence users harvested forest resources for domestic consumption.

3.2 AREAS OF CONFLICTING INTERESTS OF KEY STAKEHOLDERS

A list of key stakeholders falling into three categories of regulators, facilitators and users and their corresponding interests in forest resources in the study area is shown in (Table 2). Six areas of stakeholders conflicting interests over forest resources were identified and are given in (Table 3). In this study, most areas of conflicting interests of key stakeholders were defined in relation to forest resource management.

Table 3 shows the most important conflicting interests among stakeholders. These results compare well with the findings by Luoga *et al.* (2000) and Sjaastad *et al.* (2003) who found in their studies that the use of forest resources in Tanzania have resulted in conflicting interests among stakeholders. According to Barrow *et al.* (2002) understanding area of conflicting interests of stakeholders is important in developing strategies for sustainable management of forest resources. This is particular important when forest resources have commercial values.

Table 2: Areas of conflicting interests of key stakeholders at CFR, Bahi, Tanzania

Areas of conflicting interests	Key stakeholders conflicting interests
a. Competition in harvesting forest resources	Pole harvesters, timber harvesters, charcoal burners and traditional healers
b. Bee-keeping versus demand for commercial harvesting of forest products	Bee-keepers, pole harvesters, charcoal burners, timber harvesters, bee-keeping groups (BKGs)
c. Environmental conservation versus commercial needs of users	Poles harvesters, Forestry and Beekeeping Division (FBD), Village Environmental Committees (VECs)
d. Inequitable benefit sharing	Central government, Bahi District Council and VECs
f. Competition in proposing village by-laws	VECs, VG and Bahi District Council
g. Competition in revenue collection	Central government, Bahi District Council and VECs
h. Need to grazing versus water and forest degradation	Pastoralists, beekeepers, traditional healers and district council

3.2.1 COMPETITION IN HARVESTING FOREST RESOURCES

Table 3 and 4 show that forest activities of charcoal burning, poles cutting and timber harvesting were mostly done by male as opposed to female because they were considered as labour intensive and they were mostly performed for commercial reasons. Firewood collection was considered a female task and most firewood collectors were women. These results could be explained that forest activities in the study area were divided according to gender roles in the household's activities, a view that is also shared by Kessy (1998).

Competition in harvesting forest resources was a central area of conflicting interests between pole harvesters, timber harvesters, charcoal burners, firewood collectors and traditional healers (Table 2). A logical explanation for this was that tree species preferred for poles and timber were also preferred for charcoal burning, firewood and medicines. Traditional healers mentioned that *Zanha Africana* was harvested to cure diabetes. These results compare well with the findings by Mander and Breton (2006) emphasized that moimbo trees are widely used for medication. Some tree species including *Combretum molle, Grewia bicour, Xeroderris stulmanii, Vitex* spp; *Pterocarpus angolensis, Dalbegia melanoxylon* were harvested from miombo woodland forests for medicinal purposes, they were also valuable for timber, poles and charcoal burning. These results support the findings by Luoga *et al.* (2000) who observed that more than 80% of species that are used for charcoal production have other competitive uses. Kajembe *et al.* (2000) reported that harvesters of firewood, pole, timber and charcoal burners are always competing for same tree species for economic reasons.

Table 3: Forest activities by sex based on information from FGDs at CFR, Tanzania

Villages	Forest activities	Sex involved
Babayu	Timber harvesting	Male
	Poles harvesting	Male
	Charcoal burning	Male
	Firewood collection	Female; very few male
Mayamaya	Timber harvesting	Male
	Poles harvesting	Male
	Charcoal burning	Male
	Firewood collection	Female; very few male

Table 4: Forest activities by sex based on information from household survey at CFR, Tanzania

Resource	Babayu N = 79		Mayamaya N = 58		Overall N =137	χ^2	P
	Male	Femele	Male	Femele			
Poles	13 (16.5)	11 (13.9)	12 (20.7)	0 (0)	45 (32.8)	31.556	0.000*
Timber	6 (7.6)	5 (6.3)	10 (17.2)	3 (5.2)	24 (17.5)	14.423	0.013*
Charcoal	8 (10.1)	4 (5.1)	7 (12.1)	0 (0)	19 (32.8)	24.302	0.000*
Firewood	13 (16.5)	14 (17.2	11 (18.9)	12 (20.7)	52 (38.0)	42.079	0.000*

Figures in brackets indicate percentages and those outside denote actual number of respondents
** Significantly difference at p<0.05*

3.2.2 UNSUSTAINABLE REMOVAL OF FOREST RESOURCES VERSUS FOREST MANAGEMENT

Unsustainable harvesting of forest resources was a central area of conflicting interests between regulators and facilitators versus users (Table 2). Regulators including Bahi District Council, Forestry and Bee-keeping Division (FBD) and Village Environmental Committees (VECs) were involved in conservation of CFR. It was further observed that Ddoma Environmental Network (DONET) and Miradi ya Gesi ya Samadi Dodoma (MIGESADO) had facilitated the Bahi District Staff and villages around CFR to form VECs and management plans for CFR. This shows that conservation of forest resources could not be exclusively dealt with regulators and users without support from facilitators.

3.2.3 BEEKEEPING VERSUS DEMAND FOR COMMERCIAL HARVESTING OF FOREST PRODUCTS

Deforestation of forest resources was a central area of conflicting interests between beekeepers versus pole harvesters, timber harvesters and charcoal burners (Table 2). The distribution of beekeepers and annual harvest of honey is given in (Table 5) indicates that households involved in beekeeping were not significant different across the study villages with (χ^2 = 2.083; p = 0.837). Beekeeping was mostly undertaken by male as opposed to female due to hard tasks associate with the activity.

Table 5: Distribution of beekeepers and annual harvest of honey at CFR, Tanzania

Village name	Involved in beekeeping		Amount of honey harvested (litre) per household per year
	Yes	No	
Babayu (n= 79)	17 (21.5)	62 (78.5)	27
Mayamaya (n= 58)	9 (15.5)	49 (84.5)	9
Total (N = 137)	26 (18.9)	111(81.0)	36
Statistical test	χ^2 = 2.083; p = 0.837 NS		
Average litre/hh/year			18

Figures in brackets indicate percentages and those outside denote actual number of respondents
NS = not significant (p > 0.05)

Beekeepers 18.9% were interested with CFR because the ecosystem provides bee forage, hives and places for hanging hives. Beekeepers were complaining that unsustainable poles harvesting, timber harvesting and charcoal burning were associated with deforestation of forest resources in CFR. This situation was mentioned as major factor that had contributed in reducing bee forage, shade and places for hanging hives. Estimates indicate that 18 litres of honey per household were harvested during 2010/2011. This amount was observed to be little when compared to about 25 litres of honey per household that were harvested in 10 years ago indicated in URT (2009) that forest resource deforestation negatively affects a wide range of socio-economic and environmental processes. The study established that beekeeping using traditional technologies had caused deforestation around the villages, thereby triggered conflicting interests between beekeepers versus pole harvesters, timber harvesters and charcoal burners (Table 3). The construction of bark and log beehives were mainly dependent on the tree barks removal and logs harvesting. Around 56 modern beehives and 438 traditional hives were reported in CFR (URT, 2009). This show that in the study area most of beehives were made of logs or tree barks, suggesting that a lot of trees preferred for poles, timber and charcoal were felled or debarked to make beehives. Removal of tree barks in the long run results into dying up of the whole tree, an observation that is reported by Liwenga and Masao (2009).

The study revealed that District Council Forest Officers, DONET, MIGESADO and Afri-Care Tanzania were interested in raising awareness to beekeepers to adopt modern methods for biodiversity conservation and livelihood improvements. However, haphazard honey collection was still ongoing in the study area. Honey collection by felling down trees using smokers to chase away bees was common phenomena. Honey found in tree holes was free for any one and was harvested during the day. They used axe for cutting and chopping the trees with honey in holes and smoker for chasing away bees during harvesting. This situation was complained by forest officers, DONET, MIGESADO and Afri-Care Tanzania as it increased rate of deforestation and incidences of fires. Two types of forest fires caused by traditional honey harvesting were reported in Babayu village. Discussion with beekeeping groups revealed that lack of effective beekeeping extension services was a major reason, which had contributed in many of beekeepers to continue using traditional methods.

3.2.4 ENVIRONMENTAL CONSERVATION VERSUS NEEDS FOR COMMERCIAL HARVESTING OF FOREST PRODUCTS

The distribution of pole harvesters from different sources (Table 6) indicates that households involved in pole harvesting were not significant difference across the study villages with (χ^2 = 5.921; p = 0.015). Pole harvesting mainly undertaken by male as opposed to female due to hard task associated with the activity. Majority of respondents 61.1% reported that the main source of poles harvested was CFR.

Discussion held with village Environmental committees (VECs) revealed that for a long time communities residing adjacent to CFR including Babayu and Mayamaya had been relying on commercial harvesting of poles (milunda) for their survival. This was due to the fact the area is semi- arid and hence no enough rainfall for farming. Similar results have been reported by URT (2009) that most parts of Bahi districts experience low rainfall and hence unsuitable for agriculture.

Table 6: Variables expressing interests for commercial harvesting of poles of at CFR, Bahi, Tanzania

Location for poles	Villages		Ovarall	Mean score
	Babayu n = 79	Mayamaya (n=58)	N = 137	
Farms	0 (0.00)	0 (0.00)	0 (0.00)	3.84
Woodlands	23 (37.93)	35 (64.30)	58 (42.34)	4.08
Forest Reserve	35 (60.34)	44 (55.70)	79 (61.1)	2.62
Statistical test	χ^2 = 5.921;	p = 0.015		3.49

Figures in brackets indicate percentages and those outside denote actual number of respondents
NS = not significant (p > 0.05)

A ban for harvesting poles (milunda) was issued by the government of Tanznia since 2004 after realization that unsustainable commercial harvesting of poles has threatened CFR. Surrounding communities were permitted to harvest poles for subsistence purposes only. This situation coincided with the needs for conservation of forest reserve with the commercial needs of users. These present conflicting interests between Bahi Distric Council, DONET, MIGESADO and VECs against commercial users of poles regarding strict conservation interests that aimed to protect nature by prohibiting human utilization of the ecosystem (Table 2). According to Kajembe *et al.* (2004) conflicting interests between stakeholders that rise in this form demonstrates a force for positive social change; whereby a society is adapting to a new political, economic and physical environment.

3.2.5 INEQUITABLE BENEFIT SHARING

The results in (Table 2) indicated areas of conflicting interests among Village Environmental Committees (VECs), Bahi District Council and Central government on inequitable benefit sharing. The VECs in Babayu and Mayamaya villages were complaining for poor transparency on benefit sharing from conservation of CFR although they had access to forest resources for subsistence use. This situation had caused VECs to be demoralized to organize patrols in CFR.

3.2.6 ILLEGAL ACTIVITIES VERSUS LAW ENFORCEMENT

The study revealed that illegal harvesting of forest products from CFR were major areas of conflicting interests' between Bahi District Council Forest Officers, VECs against pole harvesters, charcoal burners and timber harvesters (Table 2). This was

due to the fact that illegal harvesting of forest products were associated with either confiscation of working gears and forest products, fining or both, arguments are also indicated in the URT (2002 and URT (2003).

3.2.7 COMPETITION IN PROPOSING VILLAGE BY-LAWS AND MANAGEMENT PLANS

The study revealed that at village level, VECs were subordinates to Village Governments (VGs) and they were among the VGs committees on matters related to natural resource management as well as management of CFR respectively. It was found that in the study villages where there both forest workers and VECs, there were conflictive relations about the power of the VECs in revenue collection and proposing by-laws (Table 2). A plausible explanation reason for this was that both of them claimed to have the rights in revenue collection from forest resources and proposing by-laws. This shows that overlapping mandate regarding resource management had caused conflicting interests between District Council, VECs and Central Government. These finding are similar to Kajemebe *et al.* (2004), Brokaw (2006).

3.2.8 COMPETITION IN REVENUE COLLECTION

The relationship between Central Government, District Council and VECs from forest resources was conflictive (Table 2) The Central Government was highly interested in revenue collection from its natural resources including CFR. The revenue was important to run development activities in the country. It was found that Bahi District Council lacked direct control over CFR and it was owned by Central Government. Also, the management of CFR was under Bahi District Council.

According to key informants' interview, district council workers were complaining that they lacked direct control over commercial users and they were controlled directly by the FBD. This situation was considered by District Council as a measure to deny district revenue and the same time causing conflicts with VECs which are responsible with patrols against illegal activities.

3.2.9 NEED FOR GRAZING LIVESTOCK VERSUS WATER AND FOREST DEGRADATION

Table 7 shows that pastoralists had conflicting interests with traditional healers, beekeepers and District Council Forest Officers due to grazing livestock in the forest reserve.

Table 7: Percentage households grazing livestock in CFR, Bahi, Tanzania

Villages	Households grazing in CFR	Satistical test χ^2	p- value
Babayu (n = 79)	43 (54)		
Mayamaya (n = 58)	28 (48)	117.630	<0.0001*
Overall (N=137)	71 (52)		

Figures in brackets indicate percentages and those outside denote actual number of respondents
** Statistically significant (p<0.05)*

The distribution of pastoralists interested to grazing their livestock in CFR is given in (Table 7) indicates that households involved in livestock keeping were significantly different across the villages with (χ^2 = 117.630; p < 0.0001). Majority of the respondents 52% claimed that they graze their livestock in CFR. Gazing of livestock in CFR was blamed by other users for causing degradation of water bodies and forest resources. Furthermore, livestock grazing was a central area for conflicting interests between traditional healers, District Council Forest Officers and VECs (Table 1). Tradition healers were complaining that over grazing in forest reserve had resulted in disappearance of some herbal species, while district council and VECs complained on degradation of water bodies and forest resources in the reserve. These results are in line with FAO (2007) argued that continued grazing in forests reduces the ability of those forests to regenerate.

3.3 POWER RELATIONS AMONG STAKEHOLDERS ON MANAGEMENT OF CFR

The study identified three types of power relations which associated with socio-economic situation and institutional settings. These power relations embedded in stakeholders include strategic, institutional and structural power or domination. Similar findings were reported by Mbeyale (2009).

The existence of multiple force fields explains that power relations are diversified and that, for example, the relations between users and regulators can not be reduced to a general vertical model. Also at the local level, the socio-economic

divisions and power dynamics that are important differ according to the resources at stake. The different force fields and the modes of social political ordering have the consequences for the resulting forms of governance, power relations and space for action for the different parties involved. In some force fields people have much room for maneuver and are in powerful position vis-à-vis others in relation to certain resources, while others have little individual influence (Maganga, 2002; Nuijten, 2005).

The concept of force fields help us to analyze the weighting of different kinds of social political networks, the influence of law and procedures, the role of formal organizational structures, the role of discourses and different positions of power. In any force field, particular forms of dominance, contentions, and resistance develop, together with certain regularities and forms of ordering. In this view, the pertaining of organizing practices is accompanied by the distinction of different social stakeholders with specific roles, different access to resources and with different rights. This is closely related to forms of inclusion and exclusion of social political categories. This also explains that organizing practices are related to the development of "structures of feelings" (Nuijten, 2005). The reflective talk, self-reflection and dialogues reflect power relations and continuous active engagement of social stakeholders with the world around them (Tsing, 1991).

3.3.1 POWER RELATIONS ASSOCIATED WITH SOCIO-ECONOMIC SITUATION

The study revealed that community members sought and sustained their livelihoods by relaying on the forest resources from the reserve. This necessity forms a plausible basis about inherent strivings for strategic power for their own sake. Factors such as wealth status and division of labor were identified to influence the relative imbalances of community strategic and structural powers to access and control of forest resources from CFR.

Forest resources are pivotal to livelihood strategies, resource users try and secure certain rights. As a result a range of rights exist in many societies, as well as reserved grazing in many pastoralist societies. It is clear, therefore, the decline in availability of and access to natural resources is likely to affect segment of a population in a different ways, and those using the resources for subsistence are likely to be most affected (Arnold,1992).

WEALTH STATUS

The study indicated that users had the right to use and harvest forest resources. The majority of respondents in Mayamaya (42.3%) and Babayu (57.7%) villages reported that wealthier people had conducted illegal harvesting of forest resources for sale. The argument given was that wealthier people used money as strategic power to have more access to forest resources illegally. These results imply that wealth status increases power imbalance in accessing forest resources. Similar findings had been reported by Mbeyale (2009). This reflects that less powerful individuals are more likely to adhere to the rules and regulations regarding access to resources and sustainable management.

DIVISION OF LABOR IN THE HOUSEHOLD

About 80% of respondents reported that at the household level women were responsible for firewood collection for domestic use while men were involved in income generating activities such as charcoal making, pole trading and pit sawing activities. The decision making on what to do was dominated by the head of the household in which case most of them are men. This indicates that in the study area household labor was structured by household power relations which based on hierarchical family relations.

3.3.2 POWER RELATIONS ASSOCIATED WITH INSTITUTIONAL SETTING AND PRACTICES OF STAKEHOLDERS

The results on relations between stakeholders in the use and management of CFR show that stakeholder' relations took the form of strong relation, weak relation, relation cut off and open conflicts. The results show that the District Council staff had strong relationship with councilors, WEOs and VEOs. This result can be interpreted that their relationships are associated with administrative hierarchy and powers. Also these stakeholders have domination power or asymmetrical relationship where the local level officials are subordinate to district leaders. These local leaders were vested with some institutional powers in supervising various activities at local level and service delivery activities that have impact on the management of forest resources. On the other hand councilors represent the communities to the District Council (Fig. 2). The village government leaders have institutional powers over natural resources that are found in their areas.

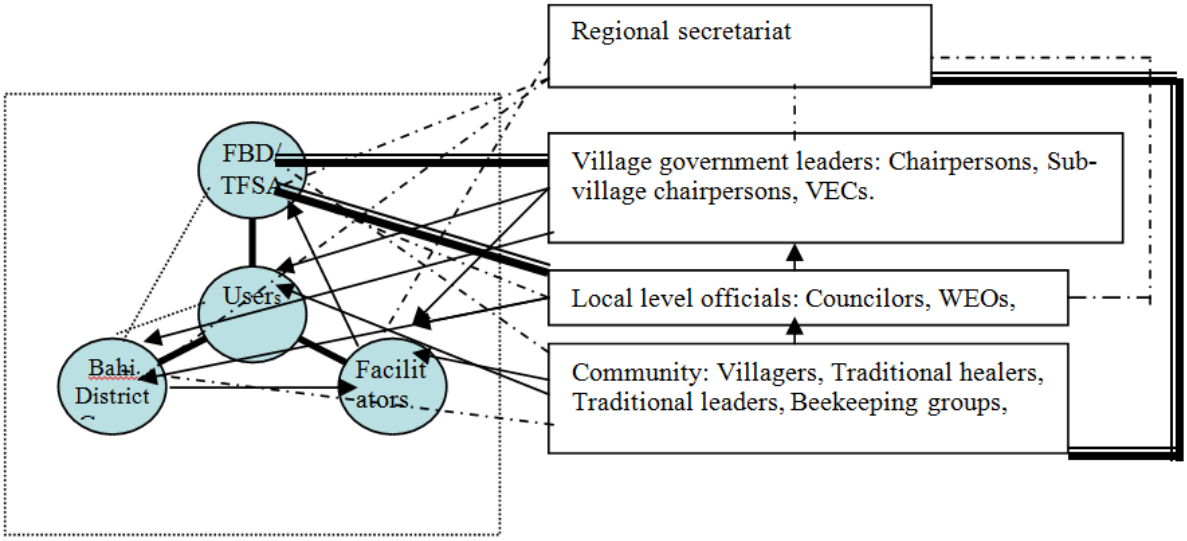

Figure 2: Power relations among stakeholders of CFR, Bahi, Tanzania

Key:

- Strong relationship
- Weak relationship
- Relation cut off
- Conflicts

The results show that relationships between facilitators with the communities were strong. DONET, MIGESADO and CARE Tanzania facilitated the villagers to form VECs, beekeeping groups and training for sustainable conservation and management of CFR. The study shows that VECs were given institutional power in supervising forest resources and patrolling illegal activities. The relationships between District Council and Forest and Beekeeping Division (FBD) with regard to revenues were conflictive because the central government collected all revenues while the management of the forest was under the District Council. The study also reveals that commercial users had conflictive relations with District Forest Officers (DFO). Commercial harvesting of forest products requires obtaining a license and a permit for transportation. Forest officers at check points were responsible in controlling and monitoring forest products trade. The results also indicated that there was a weak relation between Regional Secretariats with District Council staff; this was contributed by the administrative hierarchy whereby the District Council staff was responsible to the District Executive Director (DED) in performing their duties and responsibilities. This implies that the DED has the institutional power to coordinate development activities of the district.

4 CONCLUSIONS AND RECOMMENDATIONS

The study established that various stakeholders were operating in CFR management. Stakeholders used forest resources for number of uses including harvesting of forest products, beekeeping, conservation and research. These multiple uses were sometime not mutually compatible and had resulted in conflicting interests between and among stakeholders. Stakeholders' conflicting interests were routed in institutional and economic standpoints which were among causes of loss and changes of forest vegetation cover in CFR. The changes involved selective cutting of trees, grazing livestock in forest reserve leading conversion of water bodies to grassland due to siltation and sedimentation of river channel. The study concluded that the conflicting interests in resource use were a major constraint to ensure sustainable management of CFR. From the preceded conclusion, the study recommended that most of the conflicting interests existed in the study area are regarding the use and management of forest resources resulted from sectoral management approach, therefore, a need for organizing a multi-sectoral consultative forum at least once every two years to ensure suitable management of forest resources in CFR is important for harmonizing existing conflicting interests and avoiding new ones that resulting from poor involvement of stakeholders at all levels to set out strategic objectives as well as developing integrated programmes and policies to implement those objectives. The forum will be an arena for facilitating active participation for stakeholders for creating high levels of awareness and understanding of various issues which face ecosystem in CFR.

REFERENCES

[1] Akitanda, P.C. (1994). Local people participation in management and utilization of Catchment Forest Reserve. A case study of Kilimanjaro Catchment Forest Reserve, Tanzania. Dissertation for Award of Msc. Degree at Agricultural University of Norway, 56pp.

[2] Bagachwa, M. S. D., Shechambo, F. C., Sosovele, H, Kulindwa, K. A., Naho, A. A. and Cromwel, E. (Eds.) (1995). Structural Adjustment and Sustainable Development in Tanzania. WWF and Economic Research Bureau, University of Dar-es – salaam. 210pp.

[3] Barret, C.B., D.R., Lee and J.G. McPark (2005). Institutional Arrangements for Rural Poverty Reduction and Resource Conservation. World Development 33(2): 193–197.

[4] Barrow, E., Clarke, J., Grundy, I., Kamugisha-Ruhombe, J. and Yeserach, T. (2002). Analysis of stakeholders' power and responsibility in community involvement in forest management in eastern and south Africa. Forestry and Social Perspectives In Conservation No. 9, IUCN Eastern Africa Programme. 117pp.

[5] Brokaw, J. (2006). Issues in poverty reduction and natural resource management. Prepared by the Natural Resources Information Clearinghouse, an operation of chemonics international for the U.S. Agency for International Development's (USAID) Natural Resources Management and Poverty Reduction Offices, Washington DC. 60pp

[6] Gibson, C.C., J.T. Williams and E. Ostrom (2005). Local Enforcenet and Better Forests. World Developmemnt 33(2): 273-284.

[7] Kajemebe, G.C. and Mbwambo, J.S. (2000). The role of local institutions in biodiversity conservation: A case study of Udzungwa Mountains Tanzania. In: Proceedings of the workshop on 'Operationalization of forest policy' Opportunities and Challenges'. (Edited by Shemwetta, D.T.K. and Ngaga, Y.M). Sokoine University of Agriculture, Tanzania. pp. 36 – 56.

[8] Kajembe, G.C., Shemwetta, D. T. K., Luoga, E. J. and Nduwamungu, J. (2004). Incentives for sustainable forest management: In: A perspective. Proceedings of the IFRI East African Region Conference (Edited by Shemwetta, D. T. K., Luoga, E. J., G. C. Kajembe and S. S. Madoffe), 12th January, 2004, Moshi, Tanzania. pp 80 – 91.

[9] Kerr, J. (2002). Watershed Development, Environmental Services and Poverty Alleviation in India. World Development 30(8): 1387 – 1400.

[10] Kessy, J.F. (1998). Conservation and Utilization of Natural Resources in East Usambara Forest Reserve. Conventional Views and Local Perspectives. Thesis for Award of PhD degree at Wageningen Agricultural University, The Netherlands. 168 pp.

[11] Liwenga, E.T. and Masao, C.A. (2009). The role of beekeeping on poverty alleviation and sustainable management of miombo woodlands of Tabora, Tanazania. In: Proceedings of the first Participatory Forest Management (PFM) Research Workshop.(Editted by Nshubemuki, L., Chamshama,, S.A.O., Mbwambo, L., and Balama, C.), 15 December 2008, Morogoro, Tanzania.

[12] Luoga, E. J., Witkowiski, E .T. F. and Ballkwill, K. (2005).Land Cover and Use Changes in Relation to the Institutional Framework and Tenure of Land and Resources in Eastern Tanzania Miombo Woodlands. Journal of Environment, Development and Sustainability 7: 71 – 93.

[13] Mbeyale, G.E. (2009). The impact of institutional changes on the management of common pool resources in Pangani River Basin. A case study of Eastern Same Kilimanjaro, Tanzania. Thesis for Award of PhD Degree at University of Dar es Salaam, Tanzania. 307 pp.

[14] Sjaastad, E., Chamshama, S.A.O., Magnussen, K., Monela, G.C., Ngaga, Y.M. and Vedeld, P. (2003). Securing Tanzania's Catchment Forest Reserves. Ministry of Natural Resources and Tourism, Dar es Salaam. 4pp.

[15] URT (2002). The Forest Act No. 8 of 7th June 2002. Forestry and Beekeeping Division, Ministry of Natural Resource and Tourism, Dar es salaam, Tanzania. 174 pp.

[16] URT (2007). Community-Based Forest Management Guidelines. Forestry and Beekeeping Division, Ministry of Natural Resources and Tourism, Dar es Salaam, Tanzania. 57 pp.

[17] URT (2009). Bahi District Economic Profile. IRDP/ Bahi District Council. 255pp.