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Compliance and Enforcement of Environmental Policies on Natural Resources in Uganda: Perspectives from South Busoga Forest Reserve

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Abstract: De-legitimization of policies on natural resources manifested in non-compliance and ineffective enforcement in developing countries has a bearing on the new competitive political dispensation amongst these countries, Uganda inclusively. The natural resources have been dished out as handouts by politicians or through political influence hence their petering out, hither to government forest reserves inclusively. A study of 344 households engulfing and within South Busoga Central Forest Reserve, Mayuge district and 31 conservationists forming the government regulatory system showed that there was a low correlation between government regulatory system and the local community's compliance with the Uganda Forestry Policy 2001 at 0.471. The SWOT analysis showed that strengths were slightly higher than weakness where insufficient power and corruption usurped the strengths of National Forestry Authority (NFA) in its enforcement. It was also found that local politicians usurped both the powers and authority of NFA in enforcement of UFP 2001 hence, rendering NFA officials incompetent. The local communities were positive towards compliance at Likert scale rate 360 willing to stop, 305 very much willing to comply with the policy while 320 some what willing. Thus to avoid de-legitimization of the UFP 2001, there was a need to have a positive political will.

Key words: De-legitimization, forestry policy, national forestry authority, politics, regulated communities, Uganda

INTRODUCTION

Forestry is as old as the peopling of the current state of Uganda. Though scientific forest management accrues its genesis from colonialism like in any other developing world, the pre-colonial Uganda's forest management was communal and forests were used as open access resource. In utilization privileges were extended, primarily to some forest products (Mugyenyi *et al*., 2005) and www.worldwildlife.org.

To strive for sustainability informal policy existed amongst the chieftaincy or kingdoms where chieftainship had a right of gifting land, forests inclusive, there were a variety of traditional codes and practices also to that effect, besides the forests were assets within a cultural setting (www.worldwildlife.org, Mugyenyi *et al*., 2005; Bikaako, 2002). This traditional system was halted with the advent of colonialisation and consequent independence of Uganda. The National Environment Management Authority (NEMA) records show that by around 1890 forests and woodlands covered about 10,800,000 ha (45%) of Uganda's land area. Currently, it is about 4,900,000 ha (20%) of the total area of the country Ministry of Water Lands and Environment (MWLE, 2003) cited by NEMA 1999. Uganda's forest loss has been estimated at 50,000 ha year^{-1} (Kamugisha-Ruhombe, 2007). The Uganda government estimates in the same year put annual loss to range between 70,000-200,000 ha year^{-1} in percentage viewed as 0.10-3.15% (Kamugisha-Ruhombe, 2007).

This demeans the country's consideration as forest rich amidst this rapid decline. The decline may be attributed to a number of factors which prime among others are politics of the country, population pressure, poverty and break down in law and order during the periods of civil unrest in the country hence de-legitimization of forest policies. The genesis of protection and consequently conservation of natural

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resources scientifically can be attributed to the research of John Muir (1838-1914) and Gifford Pinchot (1865-1946). John Muir convinced the United States of America (USA) government to establish Semite National park in 1890 (McKinney and Schoch, 1998). This therefore, meant protecting and preserving the national park with all its biomes, contrary to the current conservationist approach with utilitarian stance of Gifford Pinchot. They were created in order to conserve the erodible forest areas and allow forests to act as the main regulator of the hydrology of an area (Lind and Morrison, 1974; Vink, 1975).

Some writers claimed that besides conservation forest reserves were to supply fuel wood for the Uganda railway line in Kenya (Omara-Ojungu, 1992; Mwangi, 1998). In Uganda, Hamilton (1984) traced the creation of forestry services in 1898 with the appointment of the first director to the Scientific and Forestry Department of Uganda thus ushering in scientific methods at the expense of the then traditional ones of the silent majority surrounding the forest reserves up to date. In the colonial Uganda, the forests were state controlled and not open access as they were in pre-colonial days. The control was through various agreements between the Protectorate Government under Britain and the native authorities as negotiated at the time for instance, Toro Agreement in 1900, Ankole Agreement in 1909 and later Bunyoro Agreement in 1933 (Olet, 1977; Hamilton, 1984).

Olet (1977) added that in 1900 the forestry regulations giving effect to these provisions was enacted and in 1907, they were replaced by the first forestry ordinance. This laid a firm foundation for creation and development of a permanent forest estate by 1910. Hamilton (1984) and Mupada (1997) claimed that to this effect the first forest reserves in Uganda were gazatted in 1932 facilitated by policies and laws put in place by the colonial government. The boundaries of the forest estates more or less as they are in present Uganda were established in 1940s. The boundaries barred the silent majority from freely accessing the nature's gift and lawfully placed these gifts in the hands of the powerful.

Formal management of Uganda's forest started in 1900 with rules and regulations but without a policy. The Forest Department was very small and much of its efforts put into direct exploitation rather than into long term planning, acquisition and development of national forest estate (Obua *et al*., 1998). The apparent genesis of forest policies in Uganda can be traced from the 1929 Nicholson report which recognized the anthropocentric uses of forests hence, creating the need for delimiting and defining forest boundaries (Mugyenyi *et al*., 2005). Prior to it the colonial government capitalized on exploiting the forests, establishing ornamental trees on a number of plantation and species trial projects (Olet, 1977). The 1929 forest policy, the first of its kind was crafted ostensibly without consultations with the local communities engulfing the forest reserves. Many writers summed up that the policy provided for sustainable management of the forests with an inclination on profitability given the capital invested in the project through afforestation of more land (Forest Department cited by Obua *et al*., 1998; Mugyenyi *et al*., 2005; Olet, 1977).

Olet (1977) continued to assert that through it; the forestry ordinance was reviewed empowering the governor to declare any area a forest reserve. Work plans for forest reserves were drawn up by colonialist. This projected to the independent Uganda where in 1968, the local government forest reserves were amalgamated with the central government forests. This exploitation by the few at the expense of the obstructed majority was merely laying grounds for opportunity of the latter to come. The apparent overriding objective for the creation of forest reserves was to create a sufficiently forested estate that would cater for the country's forest products and service needs as reflected in the 1929 forest policy (Mugyenyi *et al*., 2005).

Permits, fees and licenses were therefore, introduced to allow utilization of the resources apart from firewood and poles for domestic use given that forest boundaries had been identified, evidenced by marks on the ground with numbered posts or some other forms of boundary mark as they are currently. Traditional systems of resource management were to this effect criminalized and a more civilized body of state law was adopted. Worse still armed foresters carefully watched over the reserves (Mugyenyi *et al*., 2005; Hamilton, 1984). This in essence meant that the reserves which were in the communities ancestral land became separate entities from them. But the colonialist could use them at will a bone of contention.

The National Forestry Authority (NFA) charged with the responsibility of management of Central Forest Reserves (CFRs) evolved from the then Forest Department (FD) institutionalized in 1898. The transformation of NFA from F.D started in 1998. It manages CFRs only and performing other forestry functions with the ministry, under the supervision of the minister in charge (MWLE June 2003 and NFTPA 2003 Act No. 52.2b). This seemingly skews its activities towards politics an impediment to both compliance and enforcement. Uganda has 506 CFRs (NFA, 2005). Due to negativity vested on the NFA, contrary to the Legitimacy theory by benefiting local communities, the body has taken the Luganda connotation nfa literary meaning am

dying which is a reflector of a strain relationship. South Busoga Central Forest Reserve was a tip of an ice burg in the forestry docket of Uganda. Its situation displayed the following key variables at interplay; compliance, enforcement and politics. Politics in this study was an extraneous variable that cannot be held constant thus a balancing extraneous variable. The UFP 2001 is handy and a conservation panacea curtailed by political meddling in its compliance and enforcement, a situation that prompted this research. Thus, the researchers were puzzled with the following research questions:

- What is the relationship between government regulatory system and local communities compliance with the forestry policy 2001 in South Busoga Central Forest Reserve?
- What are the impacts of politicians meddling on enforcement of the Uganda Forestry Policy 2001 in South Busoga Central Forest Reserve?
- What is the community living adjacent to South Busoga Central forest reserve's attitude and willingness to comply with the Uganda Forestry Policy 2001?

Description of the study area: The case study forest reserve was gazatted and demarcated in Legal Notice No. 110 of 1938. Under Legal Notice No. 41 of 1948 the title of the forest is South Busoga Central Forest Reserve (Leggat, 1954).

It is currently under NFA with a total area of 16382 ha. It is absolutely situated on the Northern shores of L. Victoria between latitudes O°16'59N and longitudes 33°34'22E (Davenport *et al*., 1996). The area has a bimodal type of rainfall which begins in March or April with peaks in May-June and October-November. From December to March the area experiences dry spell though occasionally irregular rains fall in the former months (Leggat, 1954; Davenport *et al*., 1996).

The natural vegetation conforms to the rainfall intensity thus decreases Eastwards and Southwards from Kityerera (Leggat, 1954). According to Davenport *et al*. (1996) the forest can be broadly classified as medium altitude moist semi-deciduous forest (Albizia-Chlorophora dominated) and moist Combretum savanna this is within an attitudinal range of 1140-1300 m above sea level. The lake shore vegetation in the reserve is of average conservation value especially the papyrus swamp. The main species in the closed area were *Albizia-markhamia* with *Chlorophora canarium*, *Croton macrostachys*, *Sapium*, *Premna*, *Pseudospondias* over an under storey mainly of *Caetacme*, *Teclea* and *Clausena* over a dominantly *Aframomum* and *Cyathula achyranthoides*. Besides these between 1949-1941 Mvule (*Chlorophora excelsa*) and other valuable species were planted in 765 acres (Leggat, 1954). Most of this vegetation has been devegetated due to de-legitimization of the forestry policy through encroachments leaving behind tree stamps of the mentioned species.

MATERIALS AND METHODS

The study was conducted through a cross-sectional survey research design. It was concerned with assessing the efficacy of environmental policies on natural resources in Uganda. It specifically investigated the relationship between non-compliance and enforcement of Uganda Forest Policy 2001 in SBCFR. Such issues are appropriately investigated using a cross-sectional survey research design. The design enabled the researchers to obtain information that described existing phenomena with respect to one or more variables (Mugenda and Mugenda, 2003).

Given its nature as viewed by many researchers including the researchers triangulation was used especially QUAN-Qual Model where quantitative study came before a qualitative study as arranged in the objectives/research questions of the research (Gay *et al*., 2009; Bailey, 2007; Amin, 2005; Morse and Richards, 2002; Nachmias and Nachmias, 1987). A total of 344 respondents participate out of the expected 369 households. This number, especially of the households was chosen in line with Krejcies and Morgan's sampling size for research activities determination table (Amin, 2005). There was also triangulation of sampling techniques thus both probability and non-probability sampling techniques were concurrently used (Bailey, 2007; Amin, 2005). The techniques applied were stratified sampling; snowballing, purposive sampling and convenience sampling techniques.

The researchers used questionnaires, interviews, observation and document analysis as the main tools for collecting data. The researchers were mainly concerned with views, perceptions, opinions, attitudes and behaviors of the respondents. Such information could be best collected using the given tools (Cauvery *et al*., 2007; Oso and Onen, 2005). The percentage distribution techniques was used to show the particular frequencies of respondents preferring a particular alternative to give the face value implications on non-compliance and enforcement problems of the policy on deforestation of SBCFR. Statistical Package for the Social Sciences Version 10 (SPSS) was used given the number of respondents and carrying out cross tabulations which cannot be done either manually or using Excel (Fisher, 2007; Fraenkel and

Wallen, 2008). A correlation analysis was done to establish the relationship between government regulatory system and the local community engulfing the SBCFR's compliance with the forest policy. Thus through cross tabulation using SPSS a correlation coefficient of 0.47 was established which showed low/negative correlation between the two variables (Fraenkel and Wallen, 2008). Chi-square (χ^2) test for goodness-of-fit was used to analyze the frequencies in line with the research questions (Kothari, 2004; Oso and Onen, 2005).

The researchers perceived NFA as an organization and therefore like any other to test its competence a SWOT (Strength, Weakness, Opportunities and Threats) analysis was a better tool (Carto and Peter, 1993; Thompson and Strickland, 2001; Sounders, 1997; Stacy, 2000). This analysis provided a good overview of whether the organization's position was fundamentally healthy or unhealthy. It was thus grounded on the basic principle that strategy making efforts must aim at producing a good fit between an organization's resource capability as reflected by its balance of resource strengths and weakness and its external situation such as opportunities and external threats (Thompson and Strickland, 2001). Likert and rating scales for attitude were used where the respondents were required to self report along a continuum of choices as was expressed in the questionnaire.

Likert scale was mainly used to the local communities and the politicians where positive attitudes were measured by SA = 5; A = 4; U = 3; D = 2; SD = 1. This was to measure attitudes, opinions and behaviors of respondents. Thus, individual score was determined by adding the point values of all statements (Gay *et al*., 2009). The data were collected by both the researchers and research assistants given the wide and scattered area where they were to be sourced within and outside SBCFR.

RESULTS AND DISCUSSION

Demographic and socio-economic characteristics of the respondents: The results presented in this section were responses of 344 of households engulfing and within SBCFR whose demographic and socio-economic characteristics are shown in Table 1.

The respondents from the households engulfing SBCFR parishes were 60% male while 40% female. This could be attributed to the fact that 84.9% of them were from Busoga region dominated by Basoga culture which is patriarchal in nature. Thus, male dominate in management of the households as shown in Table 1. The mean age of the respondents was 38.4 this authenticated the responses for they were above 18 years an age of consent in the Ugandan constitution (The Republic of Uganda, 1995). These were distributed among the following parishes torching the forest reserve as follows Bubinge 20 (5.8%), Bukalenzi 61 (17.7%), Bukatabira 64 (18.6%), Bwondha 50 (14.5%), Kityerera 47 (13.7%); Namadhi 41 (11.9%) and Wandegeya 61 (17.7%). Most of the respondents were within the active working age group hence, their active interaction with the forest reserve at their proximity.

Table 1: Demographic and socio-economic characteristics of households adjacent to South Busoga Central Forest Reserve, Mayuge district (n = 344)

House hold characteristics	n	Percentage
Gender		
Male	207.0	60.0
Female	137.0	40.0
Mean age	38.4	
Education level		
No	30.0	8.7
Elementary	21.0	6.1
Primary	63.0	18.3
O level	99.0	28.7
Post secondary	130.0	41.4
Occupation		
Peasants	88.0	25.5
Casual	14.0	4.1
Idle	21.0	6.1
NGO	14.0	4.1
Politicians	76.0	22.0
Self employed	59.0	17.1
Government employees	72.0	20.9
Income level		
Above poverty line	144.0	41.7
Absolute poverty line	17.0	4.9
Below international poverty line	42.0	12.2
Hard core poverty	113.0	32.8
Within the poverty line	14.0	4.1
Dependants		
0	52.0	16.6
1-5	119.0	37.9
6>	169.0	49.1
District of origin		
Greater Busoga	69.0	20.0
Bugiri district	205.8	
Iganga district	51.0	14.8
Mayuge district	130.0	37.7
Outside Busoga	52.0	15.1

Researcher's field data

Poverty in a Ugandan context focuses on defining food-related needs and only indirectly estimates non-food requirements (Nunah *et al*., 2002). Thus, despite the dependence pressure with more than half of the respondents having >5 dependents over one third of the respondents were above internationally quoted US$ 1 day^{-1} and generally only 12.2% were below international poverty line and above both Ugandan absolute poverty line ($ 0.47 day^{-1}) and hard core poor ($ 0.33 day^{-1}). This directly affected compliance with and enforcement of UFP 2001 given the fact that man is a resource utilizing animal

besides the proximity to SBCFR. The respondents education level showed that >90% acquired basic education that is from elementary to post secondary level. Elementary and primary level which forms less than a quarter of the respondents are basically unskilled and at most semi skilled hence have limited choices of work due to lack of skills. Thus, need a lot of sensitization and enforcement so as to comply with stringent policies. At post primary levels that was O level, A level, certificate course, diploma, degrees and post graduate courses (70.1%) there is more integration of skill training enabling individuals to make sustainable choices depending on their abilities, interests, enforcements and sensitization.

More than a quarter of the respondents were directly engaged in peasantry farming. Slightly more than a fifth were government employees, 6.1% were idle, 4.1% casual labours in various activities including farming while 22% were politicians. All these as per the interview and observation partly and fully participated in farming in the forest reserve. These further included self employed 17.1% and non-governmental organizations 4.1%. With slightly more than a third of the respondents coming from within Mayuge district where the forest reserve is located; the two thirds were immigrants from other districts. Mayuge and Bugiri districts were once sub-districts of Iganga so presumably internal district migrations could have led to emigration to the forest reserve of less than a quarter of the respondents. A fifth could have come in from the greater Busoga region which included, Kamuli, Kaliro, Jinja, Namutumba and Luuka districts. This therefore contradicts the notion that proximity is a major factor of illegality in the forest reserves as found in West Bugwe Forest Reserve in 2003 (Otieno, 2003).

The government regulatory system and enforcement of the Uganda Forestry Policy 2001 at SBCFR, Mayuge district: Government regulatory system here was taken to be all elements a government uses to ensure compliance with environmental policies. Aspects reviewed under this included among others environmental policies on natural resources with specific emphasis on forestry policies. The mechanism through which enforcement was affected especially the lead agencies on environmental conservation such as NEMA, Uganda Wildlife Authority (UWA) and with much emphasis on NFA, a lead agency on forestry in Uganda.

It also included other government agencies such as the police force, the laws and acts governing the management of natural resources with particular emphasis on forest reserves. From Table 2, it was generally clear that in the views of the local community engulfing SBCFR

Table 2: Local communities' compliance with laws and acts governing the conservation of South Busoga Forest Reserve, Mayuge district (n = 344)

Laws/Acts	Response	χ^2 calculated	χ^2 tabulate
The 1995 Constitution	147	112.8	9.21
The National Forestry and Tree Planting Act	185	73.5	9.21
2001 Forestry Policy	167	91.1	9.21
The National Environment Act	161	97.4	9.21
Uganda Wildlife Act	139	122.4	9.21
Local Government Act	140	121.0	9.21
Land Act	158	100.6	9.21
The Traditional Rulers Act	137	124.6	9.21
The Leadership Code	127	136.9	9.21
The Magistrate Act	118	148.5	9.21
The Police Act	126	138.2	9.21

df = 2 at 0.01 = 9.210; Researcher's field data

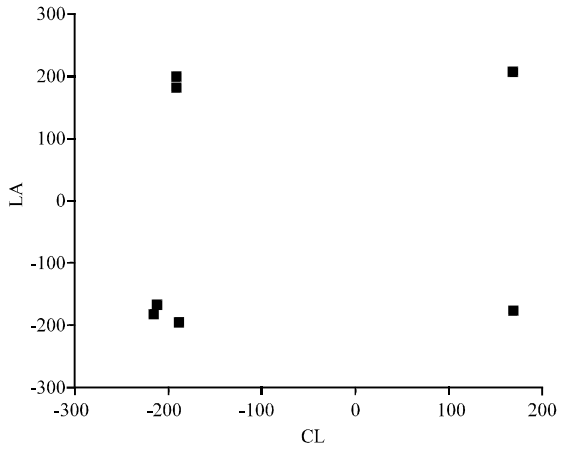

Fig. 1: Scatter diagram of compliance with acts and laws of environment conservation and enforcement agents at South Busoga Central Forest Reserve, Mayuge district; Researchers' tabulation of data from the field

the laws and acts of environment conservation were insignificant statistically. The lawlessness manifested in encroachments and hostile relationship between the locals and NFA officials in the area was nothing but a reflection of these results (Nsangi, 2006). When compliance with the laws and acts governing the environment was correlated with enforcement agencies performance and plotted on a scatter diagram it was found that there was no linearity as further tests have shown in Fig. 1.

The Lead Agencies represented by LA in the Fig. 1 included UWA, NEMA, NFA, Uganda police force, District Forestry Services (DFS), District Local Council, Internal Security Organisation and Uganda Peoples Defense Forces. While the acts and laws whose Compliance (CL) was tested were Uganda Wildlife Act, National Environment Act, UFP 2001, Uganda NFTPA, the

1995 constitution and the Local Government Act. The correlation results showed 0.471 thus low and negative (Fraenkel and Wallen, 2008). While in the scattered plot there was no linearity. Field data that constructed the scattered diagram indicated that NFA yielded 207 (60%) satisfaction by the local community. This could be attributed to the fact that despite disrespect from the local communities torching the forest reserve as a lead agency in forestry they are exposed to the populace compared to the rest. On the contrary the UFP 2001 compliance yielded merely 167 (49%) yet it was what NFA professed. The DFS, 162 (47%) satisfaction.

This had a wide area to control for they manned all forests out side the central forest reserves hence were rare in the proximity of SBCFR despite yielding 185 (54%) of compliance. From interviews with employees of the DFS it came out that the department like most fully dependent on government facilitation was inadequately financed. Thus could not go beyond their jurisdiction when they believed NFA was financially stable comparatively. Thus, low satisfaction compared to NFA from the local communities torching the SBCFR. UWA which was also fairly financed earned 182 (53%) satisfaction from the local communities torching SBCFR. Despite that the authority whose presence in the area if any was minimal, yielded 139 (40%) compliance.

This thus showed that the local community hid their reasons for compliance. Generally with no linearity and a 47% performance there was no correlation between the lead agencies and compliance with environmental policies, laws and acts at SBCFR as shown in Fig. 1. From Table 3 internally it was apparent that the strengths out of the twenty one aspects tested were slightly higher than the weakness. The key issues in the weakness which usurped strengths were insufficient power and corruption. Constitutionally, NFA was an autonomous body and was to run without interference from elsewhere hence, the authority but power rested in politicians who swayed the local communities into non-compliance. In this case power was viewed as the capacity to cause or bring about action or results (Sodaro, 2001).

Thus, political power superseded the authority of NFA for it had the capacity to affect outcomes by controlling or influencing the state where the state referred to government at any level. By the time of this research there was an executive order from the president deterring NFA officials from evictions. Corruption which apparently was inherited from the then FD (Hamilton, 1984) did not go well with the values expected by the organization which were integrity, excellency and transparency (NFA, 2005).

About 47.2% of the households living adjacent SBCFR claimed that NFA officials took bribes from people carrying out illegal activities in the forest reserves and 62% of them confirmed that the body was corrupt. This contradicted articles 70-80 of the NFTPA 2003 (The Republic of Uganda, 2003). Externally, the threats out competed the opportunities. The main threat other than the mentioned was the political stand, especially their meddling in the conservation. This was seemingly due to the fact that politics in most African countries lack ideology but has plenty of handouts. Thus the forest

Table 3: The SWOT matrix for NFA on enforcement of the Uganda Forestry Policy 2001 at South Busoga Central Forest Reserve, Mayuge district

The SWOT matrix	
Strengths	Weakness
Has financial support internationally	Has no alternatives given to victims of evictions
Has a structure from village to national levels	There are active NGOs in the same area
There is a NFPTA	Has inappropriate sensitization
There are sister organizations in the same business such as NEMA, UWA etc.	Has insufficient power to enforce policies
There are numerous other policies related to theirs such as land, water and environment	Corruption eminent amongst some of its personnel
There is a large expanse of area under their jurisdiction	Has few personnel at its disposal
Has authority to enforce policies	Donations are available
Practice strategic management in having a vision, missions, objectives and values	Has a pre-existent infrastructure inherited from Forestry Department
Has trained personnel	Carry out and implement the results of researches carried out
Constitutionally accepted	
Has government leading on from management	
Opportunities	Threats
Hand outs given by some NGOs in conservation	Long standing mistrust of foresters
There are active NGOs in the same area	Politicians flexible stands on enforcement
Donations are available	Ossification of the local communities engulfing the reserves
	Mob justice by the local communities engulfing reserves
	The forests reserves are located in remote areas
	Has insufficient power to enforce policies
	Has insufficient funding

Researchers' field data compilation

reserves due to population pressure outside has land which politicians merely pronounced that they were arbitrary gazatted and positively yield votes.

Political stand determined the character leading to mob justice of the locals hence, de-legitimization of the policy. The politicians nationally approve the funding of NFA but ostensibly come for it in disguise of other painstaking national issues such as inter-ministerial borrowing, hefty allowances incase of meetings involving them and general corruption. Characteristically politics and environment diverge for instance most politicians are interested in current issues while environmentalists other than viewing current postulate posterity.

This view of politics and forestry on public land was in concomitant with a study of politicians and environment in the Philippines which concluded that politics and environment are not bed fellows (Pearl, 1996). Generally, NFA as in Table 3 viewed on either positive or negative spectrum where the positives included both strengths and opportunities while the negatives included both weakness and threats it was clear that the body was weak.

The weaknesses were more than the strengths hence de-legitimization of the policy manifested in encroachment of CFRs in Uganda generally and SBCFR in particular. Despite the institution being new in the country, there was a need for either induction of the officials over haul of the system or political divorce from conservation.

Politicians and the enforcement of the Uganda Forestry Policy 2001 at SBCFR, Mayuge district: The 1995 constitution opened space for a five tier political system with much representation on the Ugandan political landscape. This engineered the diminishing of state managed CFRs in Uganda as a result of exposing the natural resources to political hand outs so as to acquire votes. More than two thirds of the respondents agreed that politicians especially the members of parliament do endeavour to stop evictions during campaigns (Table 4).

The enactment of the Resistance Councils and Committees Statute of 1987 established a five-tiered system of elected Local Councils (L.Cs) (Banana *et al*., 2007). According to them the nested layer structure and mechanisms of local governance was build on and mimic the administrative hierarchy of the then and present Buganda Kingdom. Sanginga *et al*. (2004) explained the system as follows, the L.C1-Butongole (village of about 50-100 households) comprising all adults residing in a particular village who elect nine member village local council executive committee.

Beyond the L.C.1 in ascending geographical size there are parishes headed by elected L.C.II-Muluka chairperson that is composed of 3-10 villages. L.C.II's composition depends on the number of villages elected from the village has at least 4 women. L.C.III-Gombolola, sub-county composes of 2-10 parishes. It has members elected depending on the number of parishes, 1/3 women; 2 youth, 2 persons with disabilities and elected councilors from parishes. The L.C.IV-Saza-County comprise 3-5 sub-counties thus has 5 chairpersons or vice chairpersons from each sub-county. L.C.V Buganda Lukiiko district composed of 3-5 counties and has the following members 36; 12 women councilors, 2 youths, 2 people with disabilities and 19 elected councilors.

The district L.C.V is the highest level of local government and links with central government. Banana *et al*. (2007) added that this layer provide a viable platform for crafting by-laws and enforcing forest rules at the various levels of local governance. Since, the local councilors were forest users they were accountable to other forest user groups through elections. In the process of electioneering environmental issues especially conservation rarely received positive political airing thus promises to change boundaries of either national parks or forest reserves as mentioned by 62.5% of the respondents. Amongst the neighbourhood of SBCFR, land reclamation promise took about 62% of the responses. This was mainly to create a political hegemony by sealing the voters from the opponents, politics being

Table 4: Politicians activities in enforcement of the Uganda Forestry Policy 2001 at South Busoga Central Forest Reserve, Mayuge district (n = 344)

Statement	Agree (%)	Disagree (%)
Make by-laws which protect the forest reserves	202 (58.7)	142 (41.3)
Make enforcement strategies for the forest policy	165 (48.0)	179 (52.0)
Protect the forest reserve individually	159 (46.2)	185 (53.8)
Can convince the locals to comply with the policy	9 (60.8)	135 (39.2)
Side with the locals in non-compliance activities	180 (52.3)	164 (47.7)
Use radio programmes to express dissatisfaction with NFA	195 (56.7)	149 (43.3)
Act as a mouth pieces of the locals on conservation	202 (58.7)	142 (41.3)
Stop evictions during campaigns, especially national	235 (68.3)	109 (31.7)
Exploit voters conflicts with NFA to campaign	198 (57.6)	146 (42.4)
Promise to change boundaries of the forest reserve	215 (62.5)	129 (37.5)
Advocate for land reclamation from the forest estate	212 (61.6)	132 (38.4)
Control evictions during campaigns	221 (64.2)	123 (35.8)

Researcher's field data

competitive. Sometimes other than stopping the activities of NFA, they control them during electioneering period supported by 64.2%. The environment lead agencies viewed these activities to beyond two thirds of their responses with promises taking about 76% and exploitation of voters taking 73%. These were thus extraneous to enforcement of UFP 2001 at SBCFR, Mayuge district. The least significant role politicians did was protection of the forest reserve noted by less than half the respondents and dismally noted by less than a 10th of the lead agencies. Despite this >60% of the locals agreed that politicians have the power to convince the locals to comply and also make by-laws to protect the forest reserve noted by 58.7% of the locals.

This could be attributed to their charismatic power to cajole the local populace who also felt that they were their own. However, the conservationists discredited the by-law making by 63.4% but agreed that they have the powers to make compliance a success by two thirds of their numbers. By-laws making has oscillated between local and central government as per the Local Governments (Resistance Councils) Statute in 1993 and the instrument No. 52 of the 1995 Constitution of Uganda, respectively.

This mainly affected the CFRs in Uganda (Banana *et al*., 2007). Because of insufficient sensitisation the locals were apparently unaware of the changes. Politicians were believed to be mouth pieces of the local communities in conservation by about 60% of the household respondents. Given their charisma and power the locals sided with them and they also did the same noted by half the respondents.

This loyalty to politicians at SBCFR was manifested in local community's perception that professional foresters were anti-development, anti-people and ill advisers (Natusiimira, 2007). The politicians therefore used radio programmes to express their dissatisfaction with NFA consequently resulting in votes noted by more than half the locals responses. Thus politicians meddling in forestry policy enforcement had de-legitimised the policy expressed by the observable lawlessness in SBCFR.

The local communities living adjacent to SBCFR and compliance with the Uganda Forestry Policy 2001: This research capitalized on local communities as households or persons living in villages which shared boundary with SBCFR. These were heterogeneous in nature given the migrations currently in the country hence had no homogeneity in language, history and the like. Though majority share many commonalities especially being from the Basoga community. Data from the local communities are presented, analysed, discussed and shown in Table 5. From Table 5 it was crystal clear that the local communities/forest reserve relationship was purely predatory. In this case local community was killing and eating the forest reserve. This was imbued in the following activities hence, eating charcoal burning (63.4%) and deforestation for timber (50.6%). Killing could be manifested in farming carried out in the forest reserve (72.4%) and community settling in the forest reserve (52.3%). A similar situation was experienced in West Bugwe Forest reserve where charcoal burning superseded all other human activities in the forest reserve at 87.6% of the respondents (Otieno, 2003). Therefore, through these activities it was clear that increasing human activities led to deforestation of SBCFR, Mayuge district.

More than two thirds of the households respondents acknowledged that the evictees had right to life. The lead agencies had an over whelming acceptance of 83.9% on this right. Ironically the same percentage of the lead agencies falsified compensation of the evictees. This right to life has a backing from Article 22 of the Ugandan constitution (The Republic of Uganda, 1995). In this case, the right to life integrates the right to sustenance and livelihood which includes socio-economic rights like right to food and shelter (Mugyenyi *et al*., 2005). From the local community, it was clear that 83.7% of the respondents had been eking livelihood either directly or indirectly (neighbours and relatives) from SBCFR uninterrupted for atleast months to >31 years given the nature of evictions carried out. This therefore calls for amicable handling of evictions by stakeholders at SBCFR. More than half (58.4%) of the households recalled the

Table 5: The local communities/forest relationship at South Busoga Central Forest Reserve, Mayuge district (n = 344)

	Response		
Statement	Agreed	Undecided	Disagree
Local communities have access to the settlement in the forest reserve	180 (52.3)	30 (08.7)	134 (39.0)
Local communities carry out farming in the forest reserve	249 (72.4)	18 (05.2)	77 (22.4)
Local communities carry out charcoal burning in the forest reserve	218 (63.4)	42 (12.2)	84 (24.4)
Local communities deforest the forest reserve	174 (50.6)	52 (15.1)	118 (34.3)
Evictees from the forest reserve have a right to life	228 (66.3)	39 (11.3)	77 (22.4)
The relationship between the local communities and the forest reserve before gazettement was good	201 (58.4)	32 (09.3)	111 (32.3)
The current relationship between the NFA and the local community is bad	193 (56.1)	65 (18.9)	86 (25.0)

Researchers' field data

Table 6: Attitude of the local community living adjacent to South Busoga Central Forest Reserve towards compliance with the Uganda Forestry Policy 2001 (n = 344)

Variables	Response (%)	Attitude index
Are you people living around the forest reserve willing/unwilling to comply with the Forestry Policy 2001 so as to conserve the South Busoga Central Forest Reserve?		
Very much willing	17.7	305
Willing	23.3	320
Neutral	18.6	192
Unwilling	23.0	158
Very much unwilling	17.4	60
Are you people living around the forest reserve willing/unwilling to stop illegal activities in South Busoga Central Forest Reserve?		
Very much willing	15.7	270
Willing	26.2	360
Neutral	18.3	189
Unwilling	19.8	136
Very much unwilling	20.1	69
Are you people living around the forest reserve willing/unwilling to work with national forestry authority officials so as to conserve South Busoga Central Forest Reserve?		
Very much willing	16.3	280
Willing	25.0	344
Neutral	13.7	141
Unwilling	27.0	186
Very much unwilling	13.1	45

Researchers' field data

nostalgic past when the forest reserve was flourishing and they could apparently utilize the forest resources sustainably. This was before gazettement where the current forest estate was community owned. According to 56.1% of the households, their relationship with NFA was bad connoted in their localising the abbreviation NFA to nfa directly translated as am dying in the local dialect. Worse still the local communities were exploiting antagonism that existed between NFA and politicians hence, fighting NFA officials with impunity. This eroded the confidence and integrity of an environmental law enforcing agency, NFA and consequently de-legitimised the Uganda Forestry Policy 2001 in SBCFR.

Using the Likert scale rate of 1-5 (Table 6). The summative attitudes index varied from 360 as willing to stop illegalities in the forest reserve and 270 very much willing thus a positive attitude. On compliance with the UFP 2001 an attitude index of 395 was very much willing with a 320 some what willing while CFM earned a 280 attitude index with a 344 willing. These showed a partial voluntary compliance given the fact that most of them (65.2%) had heard of the policy over the radio and at r = 0.471 there was no linear correlation between the lead agencies (enforcers) and community compliance with acts and laws governing environment in this area. But surprisingly at 344 attitude index the local community was some what willing to work with NFA a lead agency in forestry which was somehow positive.

Negatively at 186 attitude index, the local community was unwilling to work with the NFA. This therefore showed that the local community torching SBCFR were unwilling to comply with the policy at an attitude index of 158 still reflecting the no linear correlation given earlier. This could be attributed to bad relations that existed with the NFA officials at 58.1% according to the lead agencies. A 136 attitude index of those unwilling to stop illegalities could be attributed to the local community perception of the forest resources as the only means of eking livelihood.

CONCLUSION

A SWOT analysis matrix of NFA, the lead agency charged with the management of CFRs showed that the weakness and threats of the organization superseded the strengths and opportunities. This rendered the organization incapable of efficiently and effectively managing CFRs in Uganda. Thus, the following acts could exemplify this at SBCFR insults, fighting and mob justice against them claiming that they were agents of under development.

All these were directly and by proxy backed by politicians. The correlation results showed r = 0.471 thus low while when plotted on a scattered plot there was no linearity. Therefore using government regulatory system as an independent variable and local communities compliance as a dependant variable it was clear that much as the local communities were partially compliant, enforcement of the forestry policy was ineffective at SBCFR, Mayuge district.

Politicians meddling in both enforcement and compliance with UFP 2001 was manifested in their negative pronouncements which counteracted

enforcement activities through direct and indirect activities viewed as illegalities in the forest reserve. The activities here included settlement, farming causing harm to the NFA officials with impunity by the locals, siding with the encroachers on illegalities and the next.

Enforcement of the forestry policy included evictions, imprisonment, notices and any other punitive measure these were barred by political meddling in the activities. It could be attributed to the fact that politicians had both charisma and power compared to NFA or lead agencies which had only authority. It was also ostensibly clear that there was no political will to support both compliance with and enforcement of the UFP 2001. This therefore meant deforestation with impunity at SBCFR, Mayuge district.

RECOMMENDATIONS

This research explicitly showed that there was lawlessness in the management of SBCFR, Mayuge district thus deforestation as a result of disregard to an apparently accommodative UFP in 2001. The literature reviewed, documentary analysis and research carried out in the field puts SBCFR, Mayuge district as a tip of the ice burg in the forestry docket in Uganda. It therefore concluded that non-compliance was prevalent due to ineffective enforcement of the UFP in 2001 which boiled down to ineffective political will manifested in de-legitimisation of the forestry policy by all seemingly stakeholders at SBCFR, Mayuge district. Basing on the major findings, the researchers therefore recommended the following to the stakeholders as summed up in the Fig. 2. The UFP in 2001 should be amended to include a clause specifying the role of politicians in the management of CFRs in the country.

This should include among others mobilization and sensitization on sustainable use of forest resources. It should be done in consultation with NFA as a lead agency in forestry. Otherwise truncation of NFPTA 2003 act; National Forestry Plan 2001 and the Constitution of the Republic of Uganda 1995 would be exploited and jeopardize sustainability of the forestry resources in the country as it has done. Politicians should act as checks and balances to the mismanagement of the forestry sector if any. Thus should use their position to point out mismanagement of government funds for conservation; corruption of NFA officials; the mode of evictions; negligence of NFA officials and next. This would perfect forest resource utilization without confrontation with the legislative arm of the government and civil service for the good of the nation. NEMA should therefore be allowed to vet political party manifestos before official campaigns for presidential and national elections with a bias on environmental conservation.

Incase of CFM other than other aspects participatory monitoring should be prime so as to collect periodic data and record information on the activities of the local community members. This would keep track of the progress of the activities as per set out targets for timely removal of constraints carrying out corrective measures and re-planning of activities to avoid embarrassing situations and to justify the use of resources (Otien, 2003).

Agro forestry on land outside the forest reserve would lead to soil fertility improvement in the exhausted farmlands. Thus, trees such as Tithonia, Calliandra and Leucaena whose litter are of a low Carbon to Nitrogen ratio (C:N) decompose rapidly and is commonly considered to be of high quality especially for short lived crops.

Due to their ease to decompose they are applied directly to the field without composting. This could be done through cut and carry practice referred to as biomass transfer. Besides biological nitrogen fixation can be done by the following species of trees through agro forestry *Acacia albida*, *Acacia senegal*, *Albizia falcataria*, *Calliandra calothyrsas*, *Mimosa scabrella* and *Sesbania grandiflora* (Tenywa and Lufafa, 2007).

This would divert the attention of the local communities on the fertility of the forest reserve as their preconceived claim and a pull to the reserve. Thus, consequently alleviate poverty amongst the local communities engulfing the forest reserve. It is a common knowledge that compensation and resettlement should only be to encroachers who occupied the forest estate before 1992 in Uganda. This was due to government's incapacitation on effective evictions by then.

So, new encroachers should shoulder an equivocal stance by accepting punitive enforcement manifested in imprisonments forceful evictions in case of resistance and fines so as to compensate the citizenry of ecological loss they propagated to them. Encroachers should willingly leave the forest reserve and erase their claim of arbitrary gazettement of the forest reserve. SBCFR was gazatted as early as 1938 under legal Notice No 110 of 1938. The demarcation of the area of forest reserve as it stands today was done under legal Notice No 41 of 1948 (Leggat, 1954). Thus, >70 years of existence is long enough to disregard the arbitrary gazettement as though it could have been.

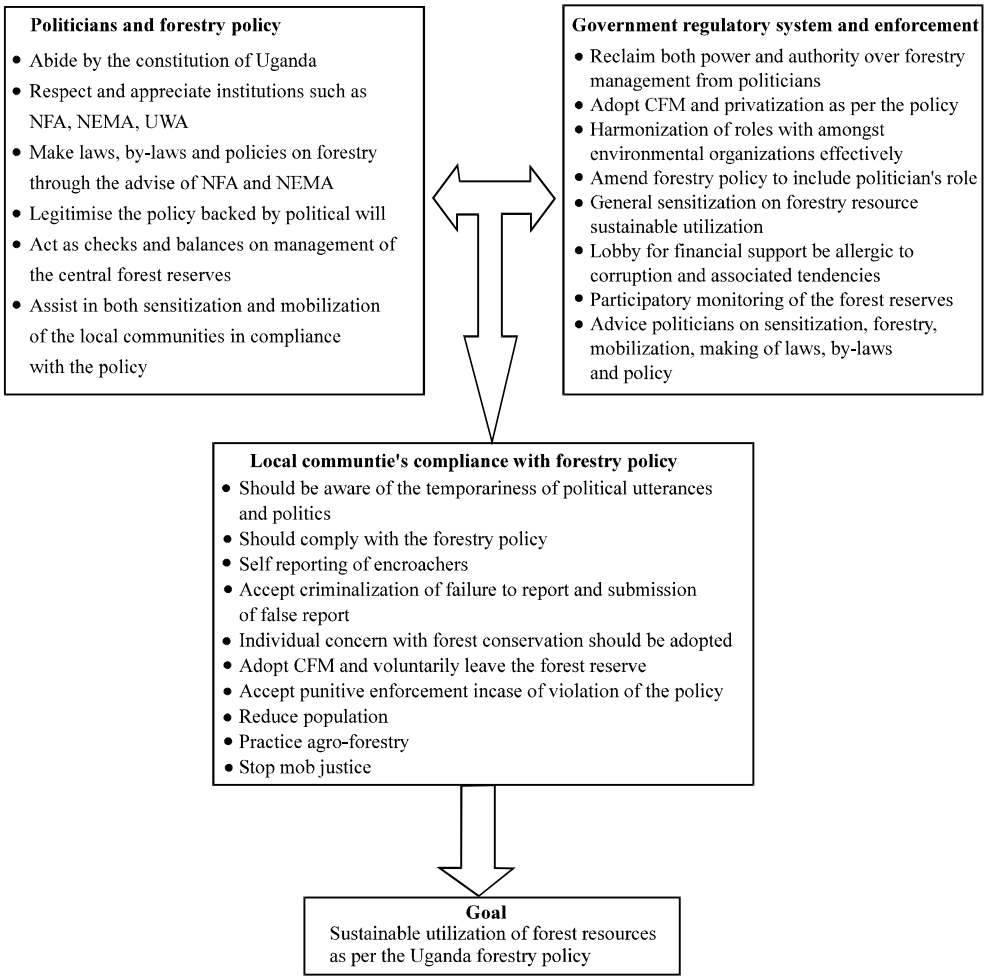

Fig. 2: Recommended conceptual frame work for effective compliance and enforcement of forestry policy researchers' recommendation

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