RESOURCE, RECOURSE AND DECISIONS: INCENTIVE STRUCTURES IN FOREST DECENTRALIZATION AND GOVERNANCE IN EAST AFRICA

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Introduction

According to the World Resources Institute about 60 developing countries are in various statges of decentralizing some aspects of their natural resources management (Ribot, 2002). Decentralization refers to 'any act by which a central government cedes rights of decision making over resources to actors and institutions at lower levels in a politico-administrative and territorial hierarchy.' It takes different forms: deconcentration, delegation, devolution, privatization (Blaser et al, 2005; Meinzen-Dick and Knox, 2001). A large number of reasons have been given for shifting the locus of decision making and resource management away from central states to local governments or communities. State control was found largely unsuccessful, costly and fincanically unsustainable (Meinzen-Dick-Knox, 2001; Shackleton, 1999). Local communities, on the other hand have been shown to be effective managers of local resources (Arnold, 1990; Ostrom, 1990; Bromley, 1992; Berkes, 1989). Not only do they have greater knowledge of local resources, but are better able to monitor resource use and rule compliance (Meinzen-Dick and Knox, 2001; Gibson, 2001; Peters, 1994; McKean, 1992). Because they are often directly dependent on the resource, they are assumed to have greatest incentives to maintain the resource base over time. The policy move towards greater local control is reflected in a wide range of community-based arrangements in the natural resources sector over the past decade (Barrow and Murphree, 2001; Barrow et al, 2000; Hulme and Murphree, 2001; Shackleton, 1999).

These changes in approaches to natural resources management have not occurred in isolation; they continue to be part of wider processes of democratization and decentralization within polities. Arguments for these wider processes are similar to those advocated by NRM scholars and practitioners. Making lower-level officials responsible for the provision of a wide variety of goods and services should result in more efficient, flexible, equitable, accountable, and participatory government because the costs and benefits of local service provision will be better linked (Oates 1972, World Bank 1988, Rivlin 1992, Chubb 1985, Feldstein 1975, Maro 1990, De Tocqueville [1835] 1945, Dahl 1981, Bish and Ostrom 1973, Rondinelli, McCullough, and Johnson 1989, Inman and Rubinfeld 1996, Ferejohn and Weingast 1992, Crook and Manor 1998, Blair 2000). Unlike national-level agencies, local politicians and officials will design more appropriate policies because they are more familiar with their environments and user's needs, and they will be more easily held accountable by local constituents (Agrawal and Ribot, 1999; Ostrom, Schroeder and Wynne, 1993). By 'bringing the state closer to the people' decentralization is also expected to increase local participation. In addition, poverty alleviation is often cited as a related and expected overarching outcome of such reforms.

But what is it that gets decentralized in the forestry and natural resources sector? And is decentralization effective in meeting the goals of equity, sustainability and poverty reduction? Agrawal and Ostrom (2001) suggest that to better understand the resource management outcomes of decentralization programs it is worthwhile to examine the rights and capacities that are transferred to actors at lower levels. These will impact on the benefits that lower level actors may have to sustain the resources, and subsequently their incentives for sustainable management. In Uganda, the first attempt to decentralize the forestry sector was in 1939-1947 with legislation establishing Local Forest Reserves under the districts administration. Recent governance reforms in the forest sector in Uganda were initiated in 1993 as part of the general devolution policy of the government- under the structural adjustment policy of IMF. Decentralization in the forestry sector comes to Kenya rather late in the game, with enabling legislation only having been approved in 2005. This article analyzes the character and content of interactions between actors in the forestry sector in Kenya and Uganda, in both pre and post reform settings. In particular it explores the range and nature of decisions that laws and policies allow the different actors to take and those decisions that these actors actually take in practice. It also assesses to whether pre and post reform structures and processes provide positive incentives, especially to forest resource users. The paper draws examples of management structures and governance from two forests, Mabira forest (Uganda) and Kakamega forest (Kenya) to explore these questions.

Mabira and Kakamega forests are tropical moist forests, rich in biodiversity and surrounded by densely populated areas, most of whom are dependent on the forest for their livelihoods and cultural rituals. Both forests represent a diversity of governance regimes, including longstanding collaborative forest management programs with forest adjacent communities. The main management authorities are government actors. In Kenya, the Forest Department (now Kenya Forest Service) and the Kenya Wildlife Service have been the key authorities mandated with management, while the National Forest Authority is the main authority mandated with management in Uganda. Both countries shared similar forest management structures and histories at one point in their administrative histories.

Despite the similarities in ecology, in the salience of both forests in local and national economies, including for the conservation of biological diversity, there are some sharp differences in the institutional regimes for their management. Uganda has for at least a decade been implementing governance reforms that seek to decentralize forest sector management and authority to lower levels of governance. Kenya's history of a highly centralized forest governance regime has only recently in 2005 seen a shift in policy and law authorizing decentralization in the sector. However, Kakamega forest has been the focus of community collaborative management since the mid-1990s, in itself a form of decentralized management that seeks to directly involve communities and other local level actors in decision making. This paper compares the structure of decision making in Kakamega and Mabira forests. It seeks to find out how these governance regimes i.e. decentralization in Mabira and some minimal decentralization in Kakamega actually impact on local actors' capabilities to influence forest management and to make decisions that will benefit them. It seeks to assess the incentives of local actors under these divergent institutional arrangements. Kenya is at a very early stage in the process of decentralization while Uganda is relatively more advanced and it is hoped that this comparison can serve as a basis for shared lessons across both countries.

The paper is organized as follows: the second section outlines the methods used in the study, while the third section provides some background on Mabira and Kakamega forests. The fourth section—institutional arrangements

Methods

This study is part of a global, multi-disciplinary team, the International Forest Resources and Institutions research program (www.indiana.edu/~ifri). The IFRI research protocol was used to collect data from the forest site, from settlements around each forest and from among user groups and local organizations involved in forest management. Focus group discussions and key informant interviews were used to glean information on forest product use, actors and interactions in forest management etc. Resource and recourse diagrams were additional tools developed under the SANREM CRSP (a global collaborative research program that is currently supporting IFRI collaborative research centers in their research on the implications of forest sector decentralization on livelihoods and sustainability), which funds this phase of the study. The resource and recourse diagrams were designed to illustrate the flow of information and decisions across and between actors. For each of the forest sites, researchers, user groups and others worked to diagram the flow of decisions, information, authority, responsibility, and financial and human resources before and after the decentralization reform. The purpose is to help identify process weaknesses and to evaluate impacts on user group incentives. In general, data collection was conducted with research teams together with individuals drawn from communities living in the forest sites. Both Uganda and Kenya teams also undertook awareness raising meetings in order to create awareness among communities of the elements and benefits of the forest legislation and policy.

Mabira and Kakamega Forests: Background Information

Mabira Forest

The Mabira Forest is a 300-km^2 remnant of tropical lowland forest , located about 50 km from Uganda's capital, Kampala and 26 km from Jinja town. The climate of the zone in which Mabira is located is typical equatorial, with highest monthly maximum temperatures of 27^0 C (January-March) and the lowest minimum of 22^0 C (July-August) coincide with the main dry and wet seasons of the area. Rainfall (mainly in April-May and October-December) ranges between 1375-1524 mm. Mabira forest is part of the 506 central forest reserves in Uganda managed by the National Forestry Authority, and were gazetted at different times between 1932 and 1968. The forest is a major source of livelihood for more than one million people who depend on it for water, firewood, honey, mushrooms and as a source of raw materials for making baskets and mats. Pressure on the forest is intense, with many competing land uses such as plantation agriculture (predominantly sugar and tea), small-holder subsistence agriculture, and ecotourism. The intensity of land use conflict is exemplified by recent threats to degazette the forest for the conversion to sugarcane plantations by private developers to meet the global demand for alternative fuel production. The forest also provides crucial habitat for a range of endangered bird species and endemic forest trees, and performs crucial ecosystem functions. Forest managers here face a daunting challenge of balancing these often contradictory needs. This not a new phenomenon as Mabira forest has had a long history of forest use, and was subjected to severe agricultural encroachment during the 1970s and early 1980s when more than 7421 ha were degraded (Baranga, 2007). In addition, the forest reserve has 27 official village enclaves. Mabira forest has about 312 trees and shrub species and more than 287 birds (Baranga, 2007). The forest is divided into zones: nature reserve, recreation/buffer zone, production (low impact) and production (encroachment area).

Kakamega Forest

Kakamega forest is located in western Kenya and is 17838ha in size. Like Mabira forest, Kakamega forest area has a high population of approximately 500 persons per square kilometer (Luvanda, 2005). Family farms range from 1 to 2 ha, and are owned by individual farmers. The major cash crops grown include tea, sugar cane and coffee, largely at small scale. Subsistence agriculture is practiced and involves growing maize, beans, pulses, bananas, sweet potatoes, millet, cassava and other root crops. Livestock are kept in very small quantities. The main source of income for most members of the community revolves round formal employment and remittances (37.17%), agricultural and livestock production (34.58%), forest based activities (18.84%) and some small scale business enterprises (Mogaka, 2000). Fuelwood, grazing, poles and thatch grasses are prioritized over other uses such as medicinal plants, charcoal, ropes and honey were found to be the important products for the communities. Forest products are mainly sold in nearby urban towns of Kakamega and Kisumu. However, communities are uncertain about future access since national policies on forest use have proven unreliable (Mogaka, 2000, SANREM/IFRI report 2006). IFRI studies rate the forest as a high value one, owing to its high incidence of commercial species, but also show that regeneration of these species is poor. Recent studies indicate a high level of human impact throughout the forest with illegal logging being most widespread, and significantly lower at sites managed by the Kenya Wildlife Service than in the Forest Department sites (Bleher et al, 2006). Over 50% of the forest has been lost in the last 25 years and government corruption has been exposed (see Nation newspaper, April 20, 1999). The Kakamega forest has about 380 species of plants, and over 350 species of bird.

Under control of the Forestry Department (FD), several management programs exist. These included the 'shamba system' in which farmers were permitted to cultivate on clear cut land in return for tending saplings planted by the department. This system was dropped in the 1980's due to widespread abuses of the program by local farmers, and instead tea belts were planted at the edges of some parts of the forest to buffer against further deforestation. In later years management focus expanded from law enforcement, licensing of permitted extraction of forest produce, control of problem animals, maintenance of infrastructure such as trails, roads and buildings, and education and tourism development, to attempting some community inclusion under a pilot program between 1990 and 1992 supported by the Kenya Indigenous Forest Conservation Project of the UK Overseas Development Administration (ODA). Under this plan, Kakamega Forest was divided into four sub zones: protected zone, rehabilitation zone, subsistence zone and plantation zone. There are several grass roots conservation organizations which are involved in Environmental Education, in tree nursery development and in the protection of biodiversity.

Thus the profiles of both forests are very similar. Both are high value, high biodiversity forests, located in areas of high population densities and in close proximity to major urban areas. In addition, local communities practice subsistence agriculture and are highly dependent on forest for various products as sources of income and also to meet their subsistence and energy needs. Forest management in both forest areas faces the challenge of balancing multiple uses and needs and management has adopted a zoning procedure.

Forest Management before Decentralization in Kenya and Uganda

Kenya

Prior to decentralization forest conservation and management in Kenya was guided by the forest policy of 1957, which was revised in 1968, and then again in 1994. This later draft formed the basis for policy and legislative reform a decade later. The main legislation is the Forest Act Cap 385 of 1962 that has been twice revised in 1982 and 1992. It was drafted in support of the 1957 policy and covers a broad range of activities from the gazettement/degazettement of forests and Nature Reserves, licensing of use, prohibitions of certain activities and imposition of penalties etc. Subsidiary regulations cover the rights of forest adjacent communities to utilize specified resources in specific ways. This Act had several crucial shortcomings. It covered only gazetted forest reserves, did not provide sufficient safeguards against forest excisions, provided only use rights to a narrow set of resources for communities, and did not recognize the importance of forests for environmental conservation.

Forest management in Kenya cannot however be entirely separated from broader administrative efforts. When Kenya attained self rule from the British colonial government in 1963, customary authorities were the main tools of administrative management (Mamdani, 1996) but these structures were taken over by the central government. In 1983, the government attempted to decentralize its activities through the creation of the District Focus for Rural Development (Ngethe, 1998). The decentralization of administrative functions of government from headquarters in the capital of Nairobi to the districts also necessitated the then Forest Department to decentralize its functions from the headquarters, provinces and divisions to the districts. During this process, the forest department created district forest offices across the country, including in Nairobi. The Forest Department also posted officers at Divisional level, which is one administrative level below the district level. In general the Forest Department had representation at district and divisional level in 72 districts and 180 administrative divisions. The core functions of the FD included management of natural forest and water catchment areas, development and management of industrial forest plantations, promotion of farm forestry, forest protection, conservation and management of dry-land forests.

Figure 1 below shows the structure of the Forest Department prior to decentralization. The downward arrows represent the flow of authoritative decisions, while the upward arrows represent the flow of revenues and reporting. The number in parenthesis represents the number of officials at each level.

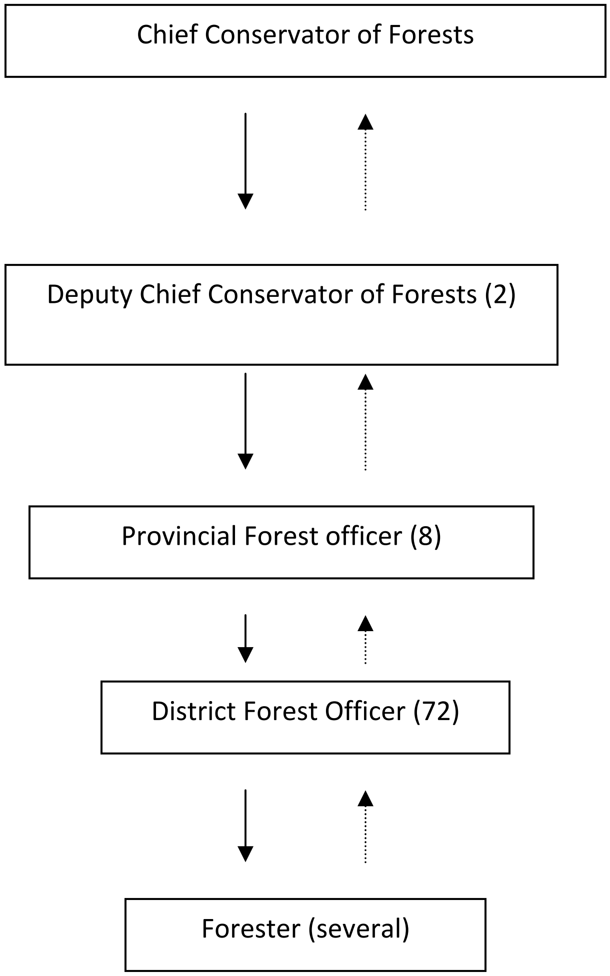

Figure 1: Structure of Kenya's Forest Department before Decentralization Reforms

Decision-making power in the Forest Department was heavy at the top. There was little feedback along the hierarchy save for the writing of monthly, quarterly or annual reports. Fiscal responsibility was also unidirectional and the revenue collected by the FD was handed to the central government and rarely ploughed back to improve the forests. The establishment of the lower level offices also did not include the transfer of financial resources from the Forest Department headquarter to the district levels. Forest officers were under resourced and lacked the basic capacities to enforce rules in forests within their jurisdiction. Because of this, there was lack of accountability in the lower level offices. By failing to lay ground for the establishment of competent local level institutions the Forest Department created a vacuum which was used by the provincial administration to thwart the proposed good management of the forest sector. Forest Department were restricted to the active management of plantations, law enforcement to control illegal extraction, licensing of forest product extraction such as firewood and fire protection, plus control of problem animals by KWS. Forest management objectives were preservationist, excluding local resource users from decision making and forest management, with minimal and stringent provisions for subsistence extraction and use of forest products. In general, the Forest Department has wielded tremendous power and authority over forest resources, with no accountability to local communities living adjacent to forest areas.

In spite of the strict protectionist strategy adopted by forest managers, the destruction and degradation of Kenya's forest resources have formed a persistent theme in the evaluation of the natural resources sector. These have been captured in broad literatures, from newspapers (Matiru, 1999) through to technical reports by local and international agencies (Wass, 1995; KFMP, 1996, IUCN, etc…). Authorized and unauthorized excisions are the prime source of forest loss. Between 1995 - 1999, a total of 44,502.77 ha. were officially de-gazetted and excised (Matiru, 1999). Between 1972-1980 the forests shrank at an annual average rate of 2% (Ochanda et al, 1981), and later at an average of 3700-5000 ha per year (Wass, 1995). The industrial plantations have faced a similar plight. While the loss of forest cover through excisions for settlement and agriculture as well as uncontrolled exploitation of forest products is thought largely to be the result of a rapid increase in population, it must be noted that the Forest Department has had little capacity to implement its extensive mandate. FD has been severely understaffed, just as the institutional framework at the time severely limited opportunities for management innovations.

Uganda

Forest management in Uganda is guided by a long history of legislation. The Forests Ordinance of 1913 was amended in 1938 in order to institute a new class of forest reserves i.e. native forest reserves, recognizing and legalizing native government forests. The amendment also renamed and placed local forest reserves under local administration. This early amendment provided for forest management by an African Local Government that comprised a District Council constituted by councillors and chiefs. While the District Council had powers to make byelaws, the chiefs had the powers to arrest offenders, issue licenses, collect revenues, regulate the cutting of timber and prevent wasteful exploitation of natural resources on public and private lands. The amendment also expanded the definition of forest produce to include litter, soils, stones, gravel and sand. However, the power of licensing forest produce was vested centrally in the Chief Conservator of Forests. Forest rules of 1947 were amended in 1964(Forests Act of 1964) & became the principal legislative instruments for Uganda's forestry sector up to 2003.
The local forest reserves were later abolished in 1967 and converted into central forest reserves to improve efficiency in forest management. Local administrators were thus stripped of their powers, which were taken up by the Forest Department, the official authority for forest management. However, the Wildlife Authority manages some of the forest estate.

The decentralization of the forest sector in Uganda is a consequence of broader governance reforms that began in the late 1980s. The enactment of the Resistance Councils and Committees Statute of 1987 established a five-tiered, nested system of elected Local Councils (LCs) modeled after administrative hierarchy of the Buganda Kingdom (Banana et al, 2007). The implementation of the Local Governments (Resistance councils) Statute in 1993, resulted in the government relinquishing ownership, withdrawal, management, exclusion, and alienation rights of the central forest reserves to local government. However, under Instrument No. 52 of 1995, central forest reserves were again recentralized due to perceived lack of capacity of district councils to manage forestry resources (Nsita, 2005). In 1997 however the Local Government Act transferred management functions over forest reserves back to the districts and sub-counties, but the 1998 Forest Reserves Order qualified these functions (Bazaara, 2006; Ribot et al., 2006). It reduced their territorial jurisdiction over forests, entrusting ownership and management of forest reserves of less than 100 ha to local governments while retaining forest reserves larger than 100 ha under the central government. These constraints on local government were imposed because of their perceived lack of capacity of to manage forestry resources (Nsita, 2005).

The new Forest Act of 2003, delineated responsibilities for forest management in Uganda. The Forest Inspection Division (FID) in the Ministry of Water and Environment was formed to supervise the activities of the newly-created and autonomous National Forest Authority (NFA). NFA was mandated with the management of Uganda's central forest reserves where approximately 15% of Uganda's forests and woodlands are located. The District Forest Services (DFS) was also created to offer advisory services to private and customary forest owners, who together make up 70% of the total forest estate in Uganda. The Uganda Wildlife Authority oversees national parks and game preserves which similarly include about 15% of Uganda's forests and woodlands. . Both the National Forest Authority and the District Forest Services are overseen by the Forest Inspection Division (FID) which is a technical arm of the National Environmental Management Authority. The FID, NFA and DFS replace the Forest Department, which managed all forests prior to the decentralization of the forest sector (Republic of Uganda, 2003). While NFA holds a large proportion of central forest reserves as conservation areas (i.e. no timber harvesting or extractive activities), portions of central forest reserves are being managed for revenue generation by way of auctioning hardwoods to timber dealers or leasing portions of CFRs for private plantation developers.

The District Forest Service has responsibility for the vast majority of Uganda's forest and woodlands (70%), the majority of which are under private ownership. Districts are expected to employ a District Forest Officer (DFO), forest rangers, and forest guards as they see fit. Though they have the largest land area to cover, the DFS is seriously lacking in both human and financial capacity. Not all districts employ DFOs, and where there are DFOs they generally work alone, with no transport or budget to support advisory services for timber harvesting, forest extension work, the distribution of tree seedlings etc. The National Tree Planting Act (2003) gives serious attention to the notion of communities forming associations for the management of forests, and for the provision of incentives that will encourage private land owners to maintain their land as forests or woodlands. However, given the scarcity of time and resources of the District Forest Officers (in districts where they are present), the ability of the DFS to facilitate such trends in the management of private forest lands seems unlikely. Finally, it is noteworthy that the Forest Inspection Division (FID), though charged with the very significant responsibility of overseeing NFA and the DFS, has only 6 personnel (all based in Kampala), and very limited financial resources or meaningful powers to take action when they identify discrepancies between policy objectives and what is happening on the ground.

Overall, in the years prior to their adopting decentralization reforms, the forest administration and management structures of both Kenya and Uganda were identical. Both were highly centralized in government bureaucracies. Both were under-resourced and faced severe motivational and capacity constraints that undermined their mandates. Both were silent on the roles of community level actors in forest decision making, yet allowed minimal use and access for subsistence by forest adjacent communities. Paradoxically, the strict preservationist approach of both Forest Departments was ineffective in achieving their respective mandates not least because they alienated local communities even as they (the Departments) faced severe resource deficits and difficulties in monitoring the forest estates. However, it's worth noting that both administrations did implement some minimal form of decentralization. In Kenya, there was deconcentration of personnel and activities from the center to the districts. Similarly, much earlier in Uganda's institutional history, there was an even more profound decentralized management of local forests by local authorities. Until 1967 when the tide changed solidly in favor of centralized management.

Forest Management after Decentralization in Kenya and Uganda

Forest Management after Decentralization in Kenya

Unlike Uganda, Kenya's reform of the forestry sector is very recent. A key motivator has been the very rapid decline of the extent of the forest estate (about 8% in the 1990s) and some recognition of the roles of local communities in management. The Forest Act of 2005 provides for the development of new institutions and partnerships for improved forest management. The previous Forest Department was in May of 2006 replaced with a Kenya Forests Service, mandated with the development of partnerships for sustainable forest management. Kenya Forests Service is in the process of developing participatory forest management plans for all forest areas in the country in close consultation with Forest Associations and gender-balanced local forest management committees. This is a major break from prior policy and practice, which was authoritarian and failed to recognize the role of different actors. In addition, new rules are being formulated to enhance the processing and marketing of forest products. The Act also allows non-residential cultivation by community members in areas intended for the establishment of industrial plantations. The plots allocated would be a minimum of a quarter of an acre and preferences for allocation would be given to the poor and the vulnerable members of the community. This is yet again another break from the previous forest act, which was ambiguous and thus caused the Forest Department to oscillate between plot allocation and eviction in between general election years. The effort to decentralize is thus cognizant of the equity dimension of forest management (in addition to sustainability), and makes clear reference to the poor and vulnerable groups in communities, including women, the disabled, youth and children.

Beneficiaries of Decentralization in Kenya

Because the reform of the forestry sector is still in its infancy, an analysis of the implications is tenuous. However, according to the law, the targeted beneficiaries are local communities and private entrepreneurs. The Forest Act recognizes the central position of forests in the livelihoods of the rural communities and proposes measures to enhance community participation in forest conservation as follows:

- Encouraging sustainable use of forest resources by communities
- Supporting the establishment of community forests through which communities can be able to participate in the conservation and management of forests

- Protecting the traditional interests of local communities customarily resident within and around forests
- Recognizing cultural practices that are compatible with sustainable forest management

The Act also recognizes the importance of marginalized groups especially youth and women in forest conservation and proposes strategies to address their inclusion as follows:
1. Enhancing training and education opportunities in forestry for the youth and women
2. Endeavoring to deliberately involve youth and women in participatory forest management
3. Encouraging the youth to take more responsibility in the management of forests to ensure that future generations are catered for when decisions affecting forests are made.

These benefits are however subject to formal organization, the creation of committees and associations, the adoption of constitutions and the drawing of management plans.
It also provides for the compensation of any takings.

The Forest Department (FD) now the Kenya Forest Service (KFS) is said to be a beneficiary in the New legislation since it has gained the much needed autonomy in the management of the forests. As a Department in the Ministry of Environment and Natural Resources, forest management was subject to the slowness and difficulties of bureaucratic decision making. Revenues generated through the sector were also submitted directly to the treasury. The Kenya Forest Service on the other hand can make decisions independent of the parent ministry and has the privilege of determining the use of revenues generated from its enterprise. Thus despite a loss of the tight grip that the department held over forests and having to share authority with new actors, the losses are well countered by the gain in control over revenues which can be ploughed back into enhancing the quality and effectiveness of management.

Forest Management in Uganda after decentralization

Forests in Uganda cover approximately 4.9 million ha (24%) of the total land area. These comprise tropical high forests (18.7%), woodlands (80.5%) and plantation forests (0.7%). Prior to decentralization all forests were owned and managed by the Forest Department, largely managed by the District Forest Offices. After reforms, about 70% of the total forest is now categorized as private land, now managed by the District Forest Service. 15% of the forests are now categorized as Central Forest Reserves managed by the National Forest Authority. A similar percentage (14.5%) of forests occurs as National Parks under the management of Uganda Wildlife Authority, while a small amount (0.03%) are LFRs under the District Forest Service. This last category is also new and did not exist prior to 1997. The current 2001 forest policy, unlike the prior policy, places an emphasis on three areas: the management of forests outside gazetted forest reserves, collaborative forest management with non-government actors and the involvement of the private sector in the development of commercial plantation and urban forestry.

In Uganda, the forest sector reform process relied on the development of three institutions for guidance. These included the Uganda Forest Policy (2001), the National Forest Plan (2002), the National Forestry and Tree Planting Act (2003). All three provide an institutional framework for forest management, in which the roles and responsibilities of multiple stakeholders including central and local government agencies, the private sector, civil society and local communities, are clarified. The following are the roles and responsibilities of key stakeholders in the forest sector. These three institutions authorize and coordinate the actions and activities of government organizations involved in forest management at different levels of governance. These include the Ministry of Water and Environment, the National Forest Authority, Uganda Wildlife Authority and Local Governments, as well as a host of ‘new’ actors such as local communities, civil societies, universities and research organizations.

The Ministry of Water and Environment, hosts the the Forest Sector Support Department (FSSD) which is responsible for planning, formulation of appropriate policies, legislation and standards for the forest sector. FSSD provides oversight to the NFA nad the DFS. Other key functions of the Ministry include coordination of the National Forest Plan, ensuring cross-sectoral linkages, and resource mobilization for the forest sector. National Forestry Authority (NFA), an autonomous body that replaced the Forest Department is the lead agency for the management of Central Forest Reserves on a sustainable basis in partnership with local governments, private sector and local communities, while the Uganda Wildlife Authority (UWA) is the lead institution for wild life management. Its mandate includes sustainable management of half of the government entrusted forest estate in Uganda. Local government, through the District Forest Services (DFS) is responsible for technical planning, formulation and enactment of district bye-laws affecting the forest sector in the district as well as extension to farmers, watershed protection, law enforcement, licensing and taxation of extractive activities. In addition to these formal organizations, local communities and the private sector are empowered to participate in various ways in forest management. Local communities have the option of drawing collaborative management plans with NFA or DFS, while private sector operatives have the opportunity of securing plantation concessions, financing timber development and supporting local communities.

Exploring the nature and character of decentralization in Mabira and Kakamega Forests

Eeven though Kenya Kenya passed decentralization laws in July of 2005, these have barely been implemented and on the ground management is still reflective of prior arrangements. Kakamega forest is one among 3 forests in Kenya that had been selected to pilot collaborative forest management between local communities and Forest Department as the official management authority. This piloting is an exception to the highly preservationist approach which excludes local communities. The purpose of this section is to take a closer look at this somewhat decentralized approach and to determine the ways in which local communities are engaged in forest decision making and whether these provide incentives for communities to engage in sustainable management. This minimal decentralization of Kakamega forest is here contrasted with a more profound decentralization in Uganda’s Mabira forest, which has had close to a decade of implementation experience. The general point is to draw lessons across similar historical, ecological, and demographic settings.

Kakamega forest: Actors and interactions

There are several actors in the forest who have direct or indirect contribution to its conservation and management. These organizations can be categorized into 5 major groups:

1. Government organizations: Ministry of Agriculture, Ministry of Culture and Social Services
2. Parastatals: Kenya Forest Service; Kenya Wildlife Service;

Kenya Forestry Research Institute, National Environmental Management Authority

3. International organizations and NGO's: International Centre for Research and Agro Forestry, ICIPE**-** International Centre for Insect Physiology and Ecology
4. Local organizations: Community Based Organization, Community Action for Rural Development, Kakamega Environmental Education Programme, Kakamega Community Forest Association.

The roles are diverse. They range from direct management, information sharing, training, collaboration and fund raising among others. Collaboration between the different organizations is high. The international organizations are mainly involved in funding activities, facilitation and information sharing. Most local organizations contribute to conservation issues through group mobilization, facilitation of different activities dealing with conservation and income generation. There are many women taking part in activities related to forest conservation and most are members of local NGO's and local CBO's. The organizations dealing with research and policy such as KEFRI and NEMA mainly contribute through research, co-ordination and both play advisory roles on environmental issues. The international organizations are mainly involved in funding activities, facilitation and information sharing. Although the community living adjacent to the forest are mainly involved in consumptive use, they are largely involved in forest protection activities through local groups and conservation efforts. There are local groups and individual farmers with nurseries, botanical gardens and others that are all directly linked to conservation efforts. The main theme tying these numerous organizations together is conservation of the forest.

As yet, there are no major changes since the development and operationalization of the policy guidelines are yet to be implemented. The Forest Department (FD) has changed into a semi autonomous body named Kenya Forest Service (KFS) with the mandate to manage all forests in Kenya unlike before when its mandate was only on gazzetted forests. The community is also expected to be institutionalized in form of Community Forest Associations (CFAs) registered under the Societies' Act who can sue or be sued. This way the community can be able to apply to the KFS for management of a forest which will be done with the help of a management plan and an agreement signed by all concerned parties. The community is potentially a significant beneficiary under the new act especially for extractive purposes though they have as yet very little influence on the implementation of the new act.

A broad range of interactions amongst key actors are manifest in the Kakamega forest. Figure 2 illustrates the set of actors. It is evident that in the management and conservation of the forest, the Forest Department is the central figure, with all other organizations interacting directly with the FD either in providing research and policy information (see KEFRI and NEMA and international NGOs), sharing information and in turn having their activities synchornised and coordinated by the FD.

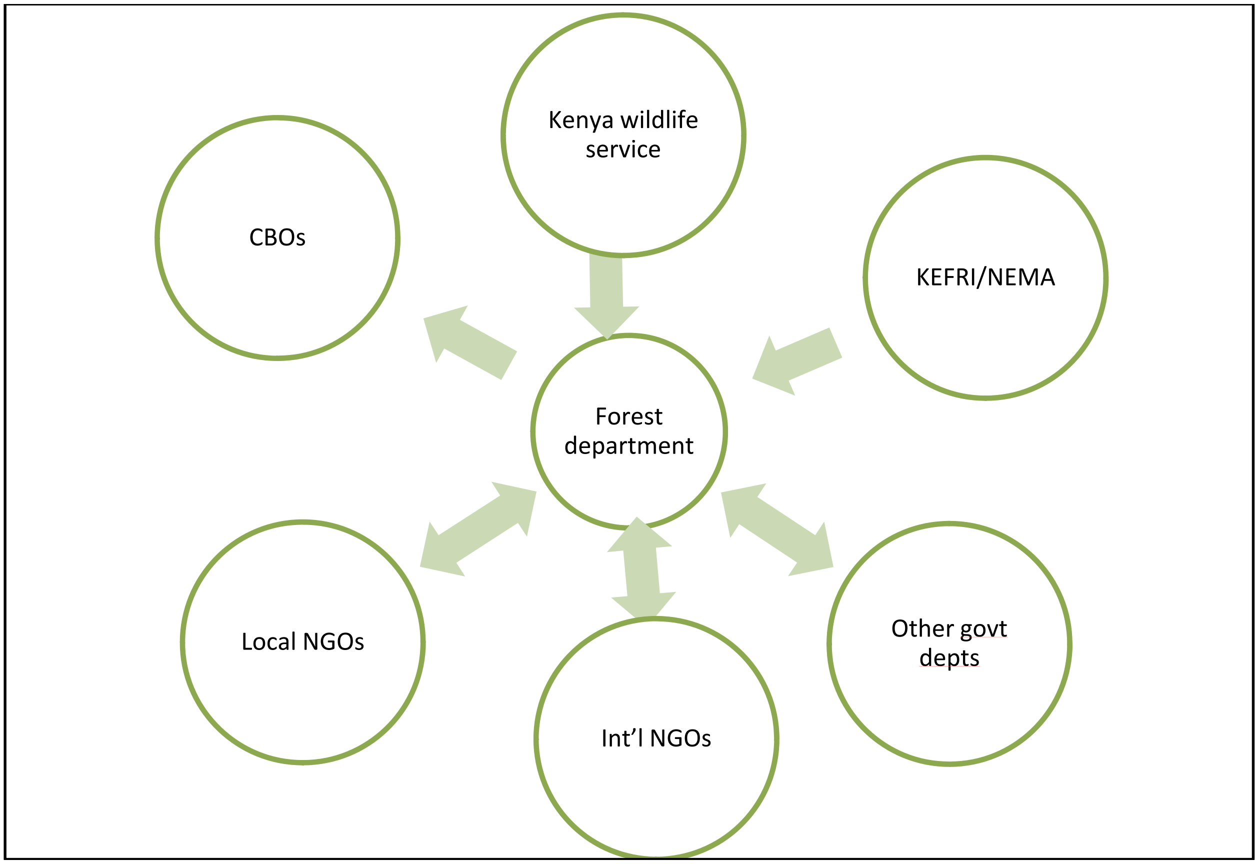

Figure 2: Forest Management in Kenya before Decentralization (Conservation)

Key

MoA- Ministry of Agriculture
MoCSS- Ministry of Culture and Social Services
CBO- Community Based Organization
FD- Forest Department
KWS- Kenya Wildlife Service
NEMA- National Environmental Management Authority
KEFRI- Kenya Forestry Research Institute
CARD- Community Action for Rural Development
ICIPE- International Centre for Insect Physiology and Ecology
ICRAF- International Centre for Research and Agro Forestry
KEEP- Kakamega Environmental Education Programme
KACOFA- Kakamega Community Forest Association

It's worth noting that even in a situation such as Kakamega forest where community management is well recognized by the authorities and where there are numerous community based organizations, the flow of information is decidedly unidirectional. Very few arrows originate from the CBOs and NGOs, if anything; they are the receivers of information of various kinds. Not only are their activities coordinated by the forest department, they are the recipients of information and advice such that would serve to reduce pressure on forest resources through tree nursery development as well as in the advancement of ecotourism.

In addition, a subset of the above organizations is directly involved in monitoring forest use and in forest protection (See figure 3).

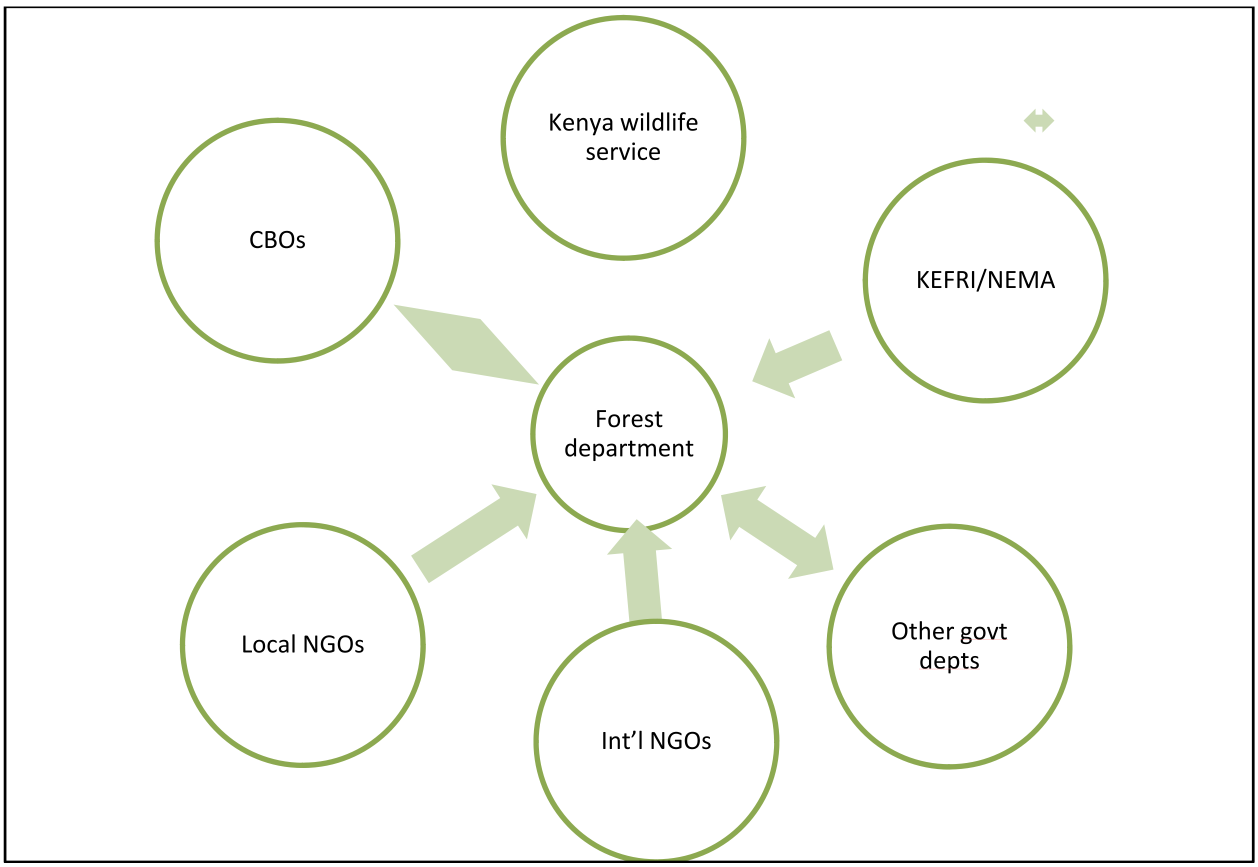

Figure 3: Forest Management in Kenya before Decentralization (Protection)

The FD and KWS are the major organizations involved in forest monitoring and protection. The two organizations however collaborate (directly or indirectly) with NGOs (International and local), Government Departments (such as Ministry of Agriculture, Ministry of Culture and Social Services) and other research organizations (such as KEFRI and NEMA) in policy issues and training. These organizations also share information through trainings, workshops and conferences. Once again, the FD is the primary organization with regard to forest monitoring an protection. It authorizes forest activities, both consumptive (such as harvesting of forest products) and non-consumptive (such as ecotourism) with its areas of jurisdiction. This authorization is largely targeted at local communities and community organizations. In return, communities are mobilized to helping to monitoring and patrolling the forest. Funding for forest activities is largely obtained through international NGOs and from local NGOs. The point here is that despite the piloting of collaborative forest management, the central authority in decision making is the Forest Department. They still determine who can benefit from forest use and in what way. Local community organizations are significant in so far as their labor and organization is useful for assisting the policing of the resource and in so far as their efforts serve to decrease pressure and reliance on forest products. Their interests and capabilities are not central to forest management, indeed they are subject to the same forest department, with few if at all alternatives for conflict resolution and redress of grievance. There are no arrows backwards from local community organizations to the forest department.

Mabira Forest: Actors and Interactions

Before the reform the Forest Department (FD) was directly responsible for the management of both Central and Local Forest Reserves. The District Forest Office was at the center for the management of the forests within districts including forests in Central Forest Reserves (CFR), Local Forest Reserves (LFR) and trees on both private and public lands. NGOs of environmental nature were working with the Districts, and the locations where they would operate were influenced by the District Forest Office. The CBOs, which are community based, operated at the local level. CBOs would directly consulted the district officials either as individuals, groups or as CBOs. See Figure 4. This line of authority was similar in structure and content to the one that pertains in Kakamega forest.

After the reforms, Mabira forest reserve is now managed by the National forest authority –an autonomous government agency. Local communities can assist in the management through collaborative forest management. A broad range of actors are involved in collaborative forest management, and each of them is empowered to do so by the legal and policy instruments that gave force to decentralization. The National Forest Authority is one of the actors, under whom several individuals and positions function. These include the Area Sector Manager, the Area Supervisor and Patrol Men. The Area Sector Manager, who is equivalent in rank and responsibility to district forest officer prior to decentralization, is responsible for managing the forest reserves in his sector. He is supervised by a range manager who is equivalent to a regional forest officer before decentralization. The Area Supervisor, situated at the forest level, provides technical information to all local actors including local councils, households and communities. he reports to the area Manager. Patrol men contracted from the local communities; They are equivalent to forest guards before decentralization.

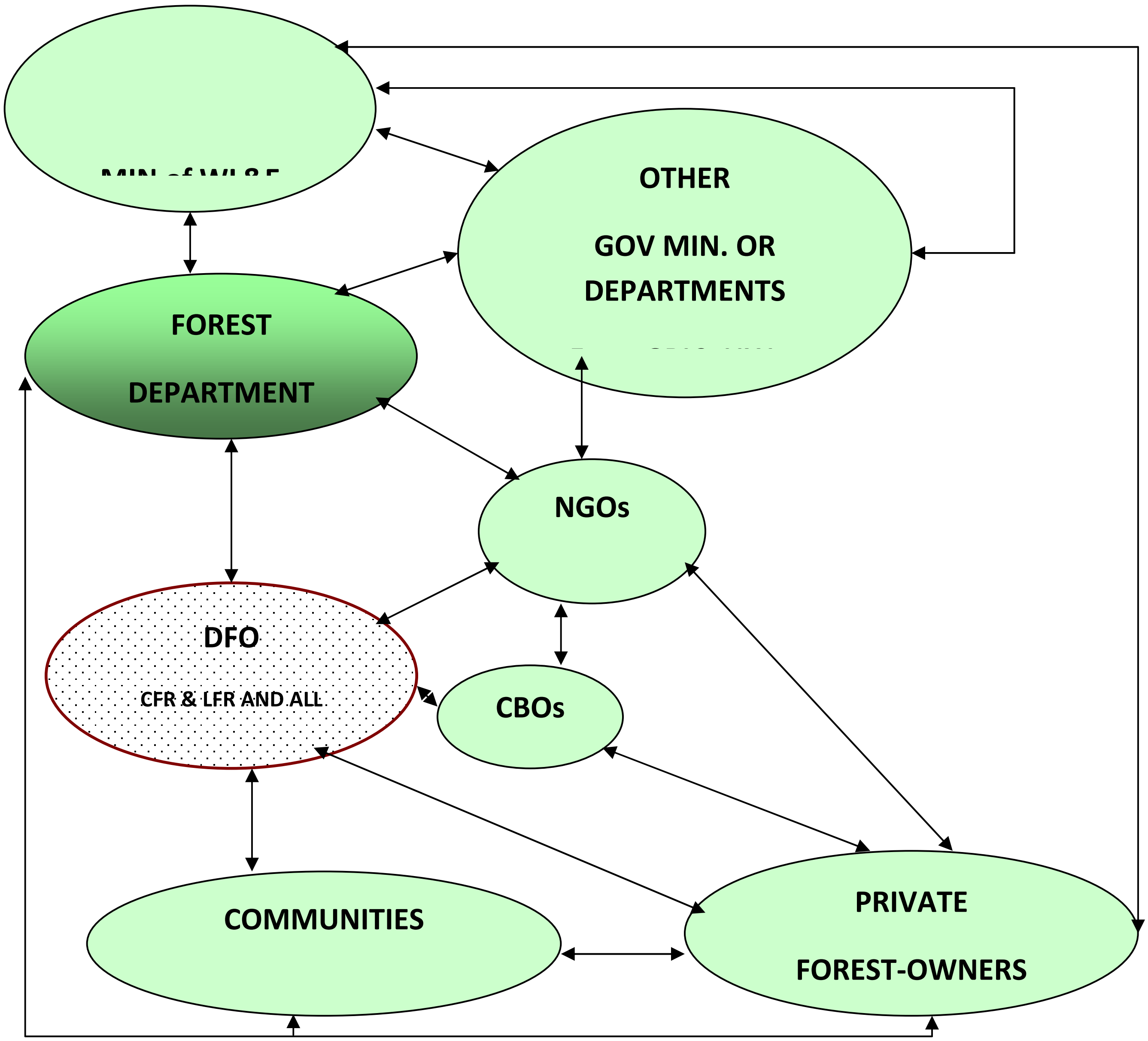

Figure 4: Pre Decentralization Reform Management Structure, Uganda

NFA staff is involved in forest protection, rules enforcement, forest improvement, regulating resource use and in providing training.Communities are involved in patrols and other forest operations as requested by the area supervisor. Local CBOs are contracted to plant and maintain trees in degraded areas, assist in conflict resolution between illegal harvesters and NFA. Local CBOs are also encouraged to assist households to diversify income generating activities to reduce reliance on forests. In Mabira, local communities are undertaking Bee keeping, Pineapple cultivation and Animal husbandry to reduce forest dependence. Local communities are also involved in forest protection and improvement, the formation of by-laws, the search for alternative income sources to reduce forest resource dependence and advocacy for sustainable use of forest resources.

Figure 5 illustrates the range of actors and interactions after the reform. The DFO, the prior forest department, is now under the Ministry of Local Government in what is currently known as the District Forest Services (DFS) and is mandated to manage Local Forest Reserves. The Central Forest Reserves are management by the National Forest Authority (NFA), which is a governmental organization under the Ministry of Water, Lands and Environment. The operations of both the NFA and the DFS are supervised by the Forest Inspection Division (FID) also under the Ministry of Water, Lands and Environment. The relationship between the NFA and DFO is symbiotic as communities surrounding both Central and Local Forest Reserves derive benefits from these forests for their domestic use. Other relationships as shown in the two-way-direction arrows are either by providing operational funds, monitoring,, community mobilization, information sharing, instruction, etc. Revenues collected from the Central Forest Reserves are for the National Treasury, while revenues collected from the Local Forest Reserves are for use within districts where they are located under the guidance of the District Local council five (LC V). Looking at the Mabira forest Site in context, there are several major players including the Sector Managers in charge for the management of Mabira Forest Reserve and Sector Manager in charge of Ecotourism and Collaborative Forest Management (CFM). Below the two Sector Managers is the Area Supervisor. These are NFA staffs who work with the support of the Sub-county LC III, LC II and LC I.

While the range of actors and activities have increased and might at first sight appear confused and convoluted, The structure of decision making introduced by the reform seems to have diffused the prior centralized decision making authority. We now have local government as an actor in forestry, officials of which are subjected to periodic elections, an important avenue of recourse for those dissatisfied with their performance. The communities, through local government, are now participants in rule making (and not just in enforcement as before) via the opportunity to define by-laws. Additionally, local government has the authority to not only vet the licensing of forest extraction, but to also collect and retain revenue from some of these activities. The Forest sector support division of the ministry of water and environment supervises all activities in the forest sector, including of the National Forest Authority and of the District Forest Services. So both organizations that have day to day contact with local communities are not the final authority, but are under the oversight and regulation of a third authority. In addition, both organizations are also subject to oversight by a fourth actor at the local level, the District Environmental Committee, which coordinates their activities at a more localized level.

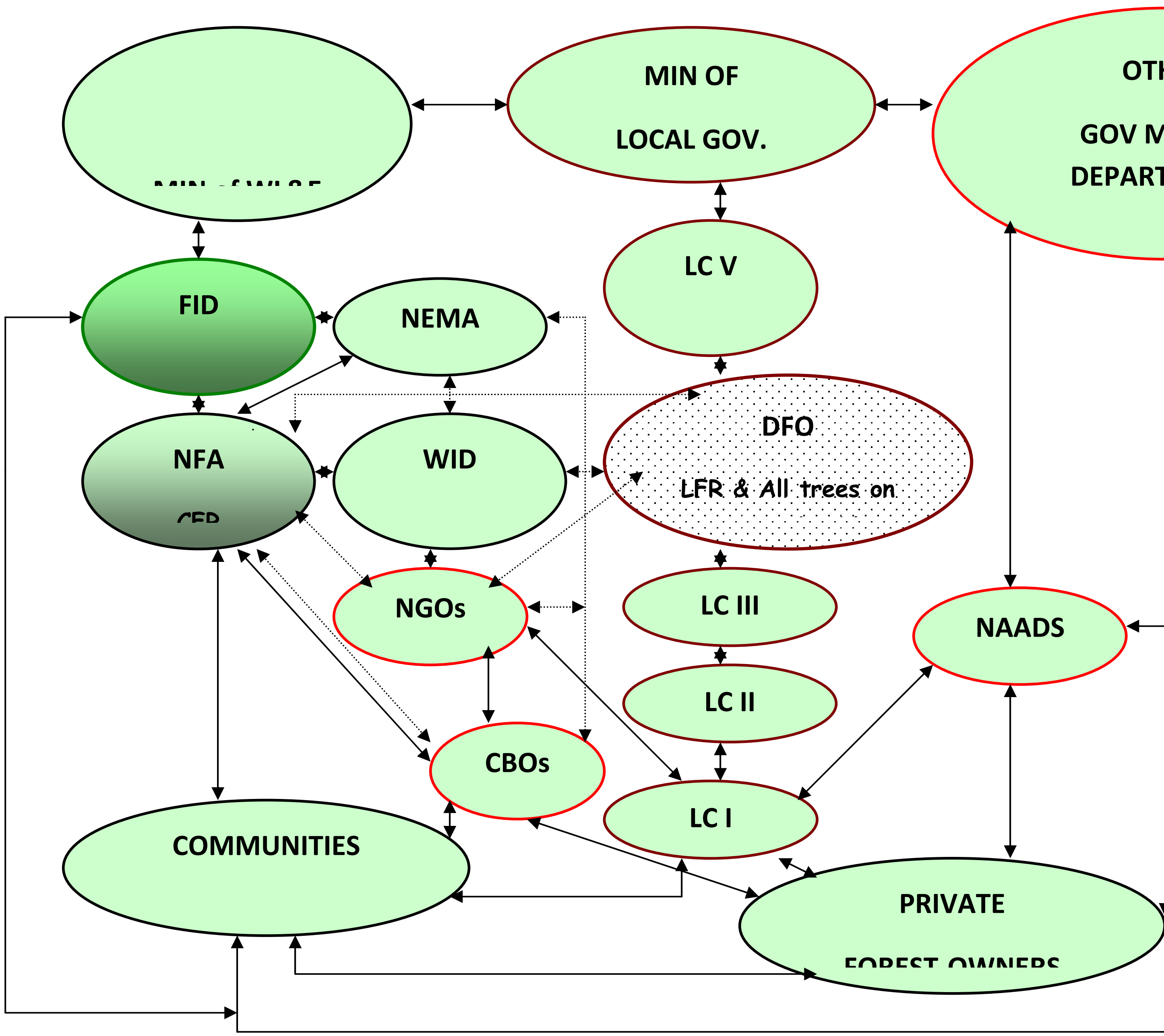

Figure 5: Post Decentralization Resource Management Structure, Uganda

It is worth emphasizing the decentralization reforms transferred the management of large forest reserves (i.e. greater than 100ha) to the NFA and the district councils have now been left with smaller forests, many of which have been degraded. But this seizing of resources by NFA is countered by the new capacities assumed by local government. They are now able to develop effective forest services at the district level and to invest in forest enterprises—an activities that was previously controlled by the center in the now obsolete forest department. Unlike before, local communities and other community based organizations are now officially recognized as partners in forest management and can participate in monitoring, rule enforcement and forest improvement. Also, unlike before, the private sector can now lease forest land for the planting of commercial plantations. Such leases of the public forest estate to private investors can however undermine community use and management, who face the possibility of losing access and decision making powers on the use and management of forest resources that have been leased out to private investors.

To reiterate, prior to the reforms individual farmers/local communities if dissatisfied with forest management decisions or had concerns, they had fewer avenues to which to channel their concerns. If dissatisfied with forest decisions, they would have to work with forest guards, forest rangers, the district forest office and the commissioner of forestry. All these actors belonged to one organization—the forest department. As mentioned earlier, a situation not very different to that confronted by local communities in Kenya, even under piloted collaborative management schemes. After the reform however, the range of organizations to which farmers could forward their concerns have increased. These include local level collaborative forest management committees, area supervisors and sector managers, sub-county officials, district forest office, range manager, NFA head office and FSSD. Farmers/communities now have a diversified pool of people to help solve their problems, from different organizations and at multiple levels, as against dealing just alone with an overly-rigid bureaucratic structure of the previous the forest department.

Community based organizations, local councils and private commercial tree growers prior to decentralization only had access to the district forest office and the commissioner of forestry. After decentralization, their options for redress have increased. All of them have access to the area supervisor/sector manager, district forest office, and range manager. CBOs and Local Councils have the additional support of the NFA head office, which private commercial enterprises don't. On the other hand the latter have access to FSSD as do the Local Councils. Overall, the range of organizations from which individuals, especially local communities can seek redress has increased to include options within and without the forest authority and at multiple levels.

But how effective are these new organizations and relationships? While the channels of accountability and for voicing concerns are numerous, especially where it concerns individual community members, the effectiveness of these channels and processes is unclear. For example, individual farmers are not always accountable to the rest of the community, and tend to be so largely were communities are sensitized to environmental issues. Similarly in some areas, the collaborative management committees are inactive or need constant supervision. Community based organizations are often 'brief case organizations,' with nothing to show for their activities. While local councils are involved in making decisions and rules for the management of local forest resources, most do not. In addition most local councils are strapped for resources and not making sufficient allocations to the forest sector. Most district forest services are not operational due to limited human and financial capital.

While decentralization reforms create an obligation to improve local incomes and to support local, forest adjacent farmers, the reforms also convey some powerful disincentives. By allowing the lease of forest reserves to private investors, it lowers accessibility to forest products by locals who previously had access. Even though there are provisions for joint forest management and for participation in forest decision making, it means that financial rewards to communities are much lowered by the leases and accrue instead to the private sector, which also receives funding through the saw log scheme. If the amount of time and labor invested by communities in forest patrol and rule enforcement is factored in, then costs might run higher than benefits and incentives to engage in sustainable management run the risk of being undermined. Local councils on the other hand face better incentives. Not only do they have concrete authority over forest management and decision making, but they are entitled to the revenues generated from the taxation and licensing of forest products. Still, they are under financed and understaffed. They forests over which they have jurisdiction are generally of lower quality, if not already degraded, the bulk of high timber volume forests being under the management of NFA.

Improving incentive structures: Early lessons from the implementation of decentralization reforms in East Africa

Decentralization reforms in Kenya and Uganda are still in their infancy. Both countries are struggling in their search for institutional arrangements and structures that promise to deliver benefits to local communities while at the same time assuring forest sustainability. Kenya's experimentation is still early, yet what is clear is that collaborative forest management piloted in a few forests in the country have few lessons to offer the profound institutional changes that are anticipated in the new forest act. While the piloting did not change the structure of engagement between the forest authorities and the local communities, it was still top down and concentrated in the forest department, and exploited the labor of communities in forest monitoring, and did not give them sufficient alternatives for redressing dissatisfaction, it nonetheless served two purposes. First, it paved way for the interaction of multiple interests, including the development of community based organizations and forest associations, for forest management. Much of their involvement in management was in activities that served to deflect pressure off forest resources, these included planting of trees, regeneration of degraded forest patches and even ecotourism. These different forms of organizing will assume even greater importance once the new forest act is implemented; as it requires the vesting of management responsibility and benefits to already organized local actors. Second, even though local communities were not officially recognized as legitimate rule makers and could not engage in the harvesting of forest products for income, they were engaged in non-consumptive income generating enterprises such as tree nurseries and low level eco tourism. This served to develop their entrepreneurial capacities in ways that did not threaten forest sustainability. It may well be that a stewardship culture is in the making, one that may help guard against unsustainable behavior once full management responsibility is ceded to communities. The general point is that the current incentive structure, where the forest department draws disproportionate benefits and has a strangle hold on decision making authority, is insufficient to warrant greater effort at sustainable use from local communities. If anything, it is a disincentive, and the decline of the forest cover and its quality, including an increase in illegal harvesting are reflections of this.

While Uganda's decentralization program may be beset with internal contradictions (for example leasing forest patches for plantation development at the expense of forest access by local communities), it has a lot to offer to its neighbor Kenya. First, because the district council, the official manager of local forests, is subject to an electoral process, there is scope for enforcing some political accountability. Officials can be directly rewarded or punished for their performance. Second, local actors have an assortment of actors and options if they seek redress over grievances and/or advisory support for their activities. Note that these actors are in turn subject to oversight by higher and lower authorities. Third, there is recognition of the importance of forests for livelihoods and incomes of forest adjacent communities. These elements are fundamental for enhancing community interest and sustaining participation in decision making sustainable forest management. The Ugandan experience so far also suggests that it is important to address inconsistencies that can potentially undermine the objectives of decentralization. For example, under resourcing of local governments require creative measures for fundraising, hopefully with some support from the central government to which revenue from high productive forests accrue. In addition, revenues collected from product taxation and permits can be ploughed back to reward community managers involved in patrolling and forest improvement activities. Finally, in order to improve the incentives for individual farmers, instead of leasing forests only to private investors, a given percentage can be leased back to farmers or tree planting, while part of the forest reserve should be left natural so that farmers can continue to obtain the products.

Decentralization can take many different forms. It can range from partial devolution of management responsibility and/or benefits, to a more profound devolution of benefits and responsibility to community or districts, and can even include political mechanisms for enforcing accountability. While it is still early to tell the exact implications of such major reforms, signs are that the more profound devolution can engender incentives necessary for sustainability. However it is still unclear from the comparative case of Kenya and Uganda whether the level to which power is devolved, i.e. local communities or district councils, matters.

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