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**COLONIALISM, SELF-GOVERNANCE AND FORESTRY IN
KENYA: POLICY, PRACTICE AND OUTCOMES**

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1.0 INTRODUCTION

Forest management in Kenya officially began when Kenya was declared a British Protectorate in 1895. It moved through a series of stages- colonial and post-colonial, each reflecting the social, economic and political realities of the time. The objectives of forest demarcation in the colonial period was to protect forests from destructive indigenous land use practices, to prevent European settlers from obtaining private ownership, and to generate revenue for the forest department through the sale of timber and minor forest products. Post-colonial objectives were catchment protection, industrial forestry development, and protection from encroachment by local communities.

Prior to the onset of colonialism (pre-1985), forests were managed by indigenous communities. They had their own rules and systems for controlling access to and utilization of forestry resources. Many of these systems were comprised of sacred groves and religious taboos as a form of protection. Others however were utilitarian, motivated by a need to ensure a sustainable supply of resources.

In this paper, I outline the evolution of forest policy and practice in Kenya. I divide the relevant period of analysis into three : pre-colonial, colonial and post-colonial. I examine the policies and laws governing forestry during each period, and the outcomes of these rules. I consider outcomes in relation to the objectives set out by each administrative system. In addition, I consider the effects of policy and legislation on the welfare of communities and their relations with the forest department. Since the issue of forest management and access have political ramifications, I also examine constraints imposed on forestry by political interventions. My overall purpose is to show how differing political situations influenced forest policy and practice. My hypothesis is that political situations differed greatly, and that this difference is reflected in the way forestry is organized during the different time periods. Due to limitations on data for the pre-colonial period, I have concentrated my analysis on the colonial and post-colonial periods, for which information is more readily available. My findings suggest that there are no real differences in forest governance between the two time periods. At independence, the new Kenyan government chose to retain the centralized administrative structure of the colonial bureaucracy. The outcomes of these two periods were similar, a loss of forest cover, and

increased hostilities between the forest service and the communities living adjacent to forests.

2.0 PRE-COLONIAL PERIOD (PRE-1895)

Prior to 1895 when Kenya was declared a protectorate of the British empire, the use of forest resources, like other resources, was controlled through a system of traditional rules and rights. For most communities, the rules were enforced by a council of elders, who through sanctions and fines, ensured the sustainable use of communal tree and forest resources. Characteristic of traditional systems of management were those pertaining to religious and cultural systems, for example amongst the Kikuyu (Castro, 1988), Masai (Ongugo and Mwangi, 1996), the Digo (Luke and Robertson, 1993) and the Luhya (Ongugo and Mwangi, 1996).

Sacred groves represented an excluded forest area in which traditional religious ceremonies were conducted by elders. Such ceremonies included sacrifices for bountiful harvests, for rain, thanksgiving, and rites of passage e.g. circumcision, burial sites for elders. Consumptive activities, for example firewood collection and grazing were excluded from such sites. Any such activity was fined, shunned, considered a sacrilege and treated as a serious anti-social act. Drought, epidemics and other calamities were frequently attributed to illicit use. Sacred groves occupy relatively small areas, and may range in size from one tenth of an acre to two to three acres (Castro, 1990).

Beyond the highly fragmented sacred groves, large areas of forest were utilized under specific rules. For example among the Samburu Masai, a system of elders imposed sanctions on people who destroyed live trees, or cut protected species (Trench and Makee, 1994). Certain areas of the forests were reserved for dry season grazing, and certain species used specifically for fencing, construction or roofing. Amongst the Luhya in Kakamega forest, although forests were communally owned, they were managed by clans living in proximity to the forest. Management within each clan was divided according to specialization and function. For instance, a group of families of medicine men ensured sustainable exploitation of medicinal species, and deliberately planted trees to replace or check against losses (Ongugo and Mwangi, 1995). Many communities collected deadwood for firewood, and practiced selective maintenance of valued species for medicinal purposes, as fodder and as timber reserves.

Land management in forest areas was closely regulated. Around Mt. Kenya forests for example, the Kikuyu and Embu, both agricultural communities, had evolved a system of land management in which forest land was owned by clans, but only up to a maximum of two miles into the forest (Castro, 1988). Land above this cultivation line belonged to the community. The forest was inviolable, and bringing new land into cultivation was the result of community consultation and consensus.

These examples indicate the existence of organized, well-defined forest management systems amongst indigenous communities prior to the onset of colonialism. Such systems comprised scattered core areas (sacred groves) protected by religious sanction, from which human interference was excluded. These were surrounded by utilization zones, the use of which was determined and regulated by specific rules. Forest management fell under a clearly defined structure of authority (elders, clans, family heads). These systems combined to promote sustained production of the forest's goods and services.

Contradictory accounts of destructive indigenous practices exist. Ofcansky (1984) describes the shifting cultivation practices of the Kikuyu, and the grazing practices of pastoral communities as particularly destructive to forests. He asserts that the ravages of war, disease and famine, which limited population, kept in check the spread of this destruction. Ofcansky's account is based on information recounted by British forestry "experts" whose exaggeration of the situation may have provided a rationale for the colonial forest department's bureaucratic expansion. Such a position may also have served to promote the interests of the settler community who needed productive land for settlement. Indeed, the amount of degradation may have been exaggerated by colonial observers who viewed land use methods other than those preferred by themselves as necessarily degrading. Logie and Dyson (1962) claim that surviving blocks of forest had survived under special circumstances of "non-inflammability or because they were mountainous, cold or inaccessible." Castro (1988) observes that misconceptions about Kikuyu agriculture may have caused some writers to over estimate its impacts, and proposes that the issue of Kikuyu deforestation be accorded further historical attention.

Today, very few of these traditional systems survive, particularly in the highly productive closed canopy forest areas. The most important are the Loita Masai and the Digo groups at the

Kenyan coast. The former are found on hilly outcrops in remote semi-arid areas, and the latter in relatively remote areas at the coast.

Increasing population, resettlement patterns associated with urbanization, introduction of modern economies, changes in local government and a shift to western cultural practices had some impact on Kaya conservation (Kangethe et al, undated). Castro (1990) indicates challenges to sacred groves as land appropriation by colonial administration and white settlers; the formation of a formal political hierarchy by the colonial government which eroded traditional authority of clan leadership, religious conversion to Christianity, mass education, land privatization, all of which diminished the status of sacred groves and traditional systems of management. The survival of some traditional strategies and their effectiveness in forest conservation serve to indicate the potential role they could play today.

3.0 COLONIAL FORESTRY (1895-1962)

3.1 Forestry Legislation

The Ukamba Woods and Forest Regulation of 1897 represents the first forestry legislation in Kenya (Logie and Dyson, 1962). This regulation aimed at ensuring fuel supplies for railway locomotives, after the construction of the Uganda railway. The regulation placed forests within one mile of the railway line under the control of the railway administration. Forests beyond this were placed under the local government administration i.e. under the District Officer's management.

The East African Forestry Regulations, published in 1902, transferred management mandate to the Forest Department (FD). These regulations were designed to curtail forest destruction by shifting cultivators and pastoral groups. These rules provided for the gazettement or de-gazettement of forests; outlined forest offences and their penalties; introduced the compounding of offences; authorized the issuing of licenses for permitted activities; and allowed *bona fide* travelers to use dead and fallen timber for fuel. These laws set the backbone for the reservation of gazetted forests. Initially, reservation targeted potentially productive forest areas, consistent with timber production objectives. But as the available productive forests diminished, emphasis shifted to catchment protection, rather than production forestry. By 1908, most major

forest blocks had been declared forest areas. Also by 1908, 264410 acres of prime forest land had been alienated to the settlers.

Vaguely entrusted with the task of rationalizing the use of forest land, the forest department in 1902 encountered competition in the form of the settler community interest. Since the mid-1890s the settlers had been clamoring for land in the mile zone, and their wishes were given priority. In 1903, the chief conservator of forests stressed the need to act with dispatch to demarcate the forests, or the settlers would destroy them. Throughout the decade forest officers insisted in vain that settlers be kept away from forested areas, or only be allowed in if they took out timber contracts to supply the railway with fuel under forest department supervision.

Later amendments to the 1902 regulations comprised the Forest ordinances of 1911, 1915 and 1916. These expanded the earlier law by making provision for the recruitment of honorary forest officers (farmers with forestry interest, but live in remote areas); and the recruitment and terms of service for forest guards. The Forest Ordinance of 1941 provided for the creation of nature reserves within forest reserves. It also consolidated provisions of forest guards terms of service under the control of this ordinance, and not as separate legislation. Nature reserves are sections within forest reserves which do not permit any form of consumptive utilization. Most importantly, the 1941 Ordinance required the formulation of a forestry advisory committee whose main task was to formulate forest policy for promoting timber production in the Colony. The Ordinance required that committee members have experience in commerce, woodland management and silviculture.

Amending Ordinances of 1949 and 1954 attuned forestry administration to the political and constitutional changes within the Colony. Forestry responsibility was transferred from the Governor, to a member of the legislature, and finally to a Cabinet Minister in 1954. The 1949 amendment more narrowly defined the offense of illegal entry into the forests. Further, "closure of forests rule" were defined as subsidiary legislation in 1954, with the purpose of restricting public access to certain forest areas during seasons of high fire danger. This final rule was enacted two years after the declaration of a state of national emergency by the Colonial administration. The state of emergency was declared to deter the spread of the *Man Mau* nationalist movement which was formed by indigenous Kenyans to agitate for freedom and

independence from British rule. *Man Mau* activities were concentrated in Kenya's central highland forests, and the closure of forest rules was likely designed to limit these activities.

The progress of colonial forestry legislation reveals an interesting pattern. First, a move by the forest department to define or carve out an area of jurisdiction via the reservation process, as an attempt to justify and legitimize its existence. This contrasts with the Ukamba Woods and Forest Regulations of 1897 which conferred management responsibility of forests to the railway administration, and those not under railway administration, to local government administration. Secondly, a deliberate attempt to consolidate and concentrate control of forest resources to the forest department by restricting entry, defining offenses, imposing fines and penalties for offences. Thirdly, defining an administrative structure for enforcement through forest guards, and a forestry advisory committee. Finally, by placing forestry under the direct responsibility of a cabinet minister, the legislation entrenches forestry as a national imperative.

This protracted history of forest legislation resulted in the emergence of a legal framework for the sector, which provided the fundamentals for forest protection measures, and in particular for the creation of forest reserves. The laws reflected the concepts and forest policy objectives mainly as they were understood and pursued by the administrators at the time. Instead of being oriented towards a balanced socio-economic development, they were to a large extent regulatory in character and were promulgated with little reference to local conditions. Nevertheless, they offered a first start for planned use of forest resources and the institutional basis for the activity of a national forestry administration.

3.2 Forest Policy and Practice (1895-1962)

White Paper number 85 of 1957 is Kenya's first forest policy. Prior to this, forest management was based on specific guidelines and recommendations by visiting experts. Hutchings (1909) report on the forests of East Africa provides the earliest coherent statement of the direction forestry in Kenya should take. Hutchings proposed boundary demarcation; policing of reserved forest to protect them from destruction; the establishment of tree nurseries; enrichment planting to assist natural regeneration; selective cutting to replace indiscriminate felling; the use of the *Kumri* or collective cultivation system of the Kikuyu to establish forest

plantations. Hutchinson's plan contributed to the low cost establishment of fast-growing exotic plantations through the shamba system (a modified Taungya, using the Kikuyu *Kumri* system of cultivation).

Initially reservation was a more urgent objective; but later during the world war, increasing timber supplies to the war became more important. By the end of the second world war, the government appointed a development committee to review the country's national development strategy. A sub-committee was appointed to determine and prepare a forest policy for Kenya. The sub-committee recommended further reservation of protection forests and catchments, as well as expanding the annual planting of exotic softwood plantations.

In spite of the numerous laws, rules and ordinances passed between 1902 and 1954, no formal forest policy was passed, but rather legislation was enacted to support recommendations by visiting colonial experts. In tandem with legislation, when policy was finally formulated, it was also concerned with forest reservation, and exotic plantation establishment through the Taungya system. Under this system, plantations were established by a resident labor force, who tended plantation seedlings in return for farm land for growing subsistence crops that would enable them meet their food needs. After 3 to 5 years of cultivation, the tree seedlings would shade the crops, and cultivation would come to an end. The residents tended, weeded and protected plantation seedlings in exchange for cultivation land. This catered for the landless populations displaced during the reservation process, and during the settling of the settler community. It also provided a cheap source of labor for plantation establishment (Oduol,1986).

I view the commissioning of a forestry sub-committee, within a broader development committee, as a significant development. This represents an early dissatisfaction with narrow sectoral approaches to forestry, and reflects a realization of the inter-connectedness of forestry with other development activities. Equally significantly, mandating the sub-committee to develop a formal forestry policy for Kenya indicates the government's concerted effort at planning for the resource. This may have been prompted by the increasing acreage of forests under its control, or possibly the high timber demand during the world wars. In addition, competition between forestry and other land uses may have been increasing, and a growing awareness among policy-makers that the process of reservation without specific economic and

social justification may be self-defeating. Thus the need for a planned strategy.

3.3 The Outcomes of colonial forestry

The forest estate:

The reservation process increased forest areas under government control. In 1902 the reservation process began; by 1908, 1378 square miles, about 2.6% of the fertile part of the country reserved. By 1930, 4812 square miles had been reserved (Logie and Dyson, 1962). By 1932, 43 forests re-defined as government forests, covering an area of 830 000 hectares, and by 1940, the gross total of gazetted forest land had increased to 1 050 000 hectares (Wass, 1995).

The colonial contribution to forestry was to slow down the forces of destruction, both real and perceived, and to develop additional forest plantations to cater for the country's increasing timber requirements. In spite of this progress, the war years left large areas of montane forest denuded of all accessible timber (Logie and Dyson, 1962). Areas subjected to degradation, and whose natural potential for regeneration was impeded were converted to exotic softwood plantations. Unfortunately, there are no exact records of the areas destroyed, nor the degree of exploitation.

Alienation to settlers:

By 1908, 264410 acres of prime forest land had been alienated to settlers, and much forest was in private ownership (Uhler, 1982). By 1930s over 10 000 square miles of agricultural land had been handed over to a few thousand settlers. Passing of the Land Grants to Settlers regulations in 1902 was supposed to reduce forest destruction by settlers. Under this regulation, after conversion to agriculture, 10% of farms had to be kept under perpetual forest, and to be made up to 10% where necessary, except on treeless farms where only planting of up to 2% could be enforced. The Conservator of forests had discretion to reduce these requirements, but did not seem to have been enforced it for long.

Displacement of indigenous populations and forest squatters:

Forests alienated by Forest Department either provided a home for forest-dwelling people

(the Dorobo), or had been utilized by non-forest dwellers for fuel, water, grazing, honey, salt-licks, refuge or territory for expansion and protection. The forest department claimed land without considering the rights of local inhabitants and imposed strict regulations on the use of forest products by forest-adjacent communities. Native rights to the forests were not recognized, instead they were termed as either illegal squatters or tenants-at-will of the Crown.

The displacement of indigenous peoples resulted in their being confined within native reserves, under the Native Lands Trust Ordinance of 1930. Under this Ordinance, forests within native reserves were declared as native forest reserves. The provisions of this law limited further reservation of native lands, a great source of frustration to the forest department. An important consequence of confining indigenous populations to native reserves, restricting access to large forest blocks and charging for fuel, was the depletion and over-exploitation of forests within native reserves (Uhler, 1982). Forest department attempts at instituting afforestation programs in native reserves met with hostile resistance since native reserves were managed by local native councils. Later, however, the chief conservator gazetted forests within native reserves, effectively foreclosing the last opportunity for access to forest products by the indigenous population.

While the Taungya system of plantation establishment lowered forest department costs, and provided a temporary solution for the landless/displaced people, it created more problems than anticipated, even beyond the colonial forestry administration. After plantations were established the landless peasants had nowhere to go, and remained against the department's will on forest land. By virtue of the length of time settled, the landless acquired squatter rights, and resulted in the government excising forest to provide for the land needs of the squatters. In this way, much forest land was lost to settlement in the 1950s.

Tensions between forest department and local administration:

Forest department's disregard for indigenous population rights; their reluctance to compensate natives their loss of access to forest goods and services met with strong disfavor and opposition from local government officials and administrators. The local administrators had to contend with complaints from an increasingly discontented native population. This made their

administrative job more difficult, particularly in the 1940s and 1950s due to rising political consciousness and re-assertion of native rights and national freedom. The administration insisted that the forest department re-instate native rights and work out a firm policy regulating forest reservation. The Government officials felt that the forest department should clarify its boundaries, and also insisted that the department give up some grazing areas, salt licks, watering holes and provide land for cultivation by dispossessed right holders. Without such concessions the intensification of political discontent was inevitable. Nowhere was this most evident than in the Lembus forest, where traditional use of forest was restricted due to a 99-year lease to concessionaires (Anderson, 1987). In order to defuse the political tension over Lembus, and to protect free grazing rights of the native populations and the customary rights that may have been exercised in the forest prior to the dates of the concession, the Governor crafted the "Coryndon definition" of 1923. This provided usufruct rights for grazing, cultivation and fuelwood gathering to the Africans. The Coryndon definition was specific to native use of Lembus forest and did not apply to other forest areas, further fueling native discontentment.

The Coryndon definition over-rode the forest department's legislation, and stoked the tensions between forest department and the local administration. Political expediency, rather than forest department's preservation policies, was the ultimate deciding factor.

4.0 POST COLONIAL (1963 TO PRESENT)

4.1 Legislation

The legal framework for forest management in Kenya is provided by the Forest Act, Chapter 385 of the Laws of Kenya of 1942 (revised in 1982 and 1992). The Act was enacted by Parliament to provide for "the establishment, control and regulation of central forests, and forest areas in the Nairobi area and any unalienated government land." Section 4 of the Act provides for the declaration of unalienated government land as forest; alteration of forest boundaries and the de-gazettement of forest areas by the Minister. Prior to degazettement, the Act requires that the Minister issue a 28-day notice of this intention to the public via the Kenya Gazette. Section 6 authorizes the Minister to create nature reserves within existing forest reserves for the purpose of nature preservation. The section prohibits any form of consumptive use of forest resources within

a nature reserve. The director of forests is authorized by section 7 to issue licenses/permits, and prescribe and collect royalties or fees from permitted users. Section 8 lists prohibited activities or prohibitions to include the unlicensed harvesting of forest produce, cattle grazing, forest cultivation, honey collection, among other prohibitions. Section 10 authorizes the director of forests, through his personnel, to accept compensation for offences, provided the compensation does not exceed five times the value of the estimated damage or where the value cannot be estimated, two hundred shillings (\$4) for each offence.

Section 9-14 are enforcement provisions. Section 13 outlines prescription concerning forest produce, for example, "where questions arise whether produce has been obtained from a central forest, it shall be presumed to have been so cut or obtained unless the contrary is proven." Section 15 empowers the Minister to develop regulations for the sale of and/or dispatch of forest produce; for the use of and for residence, agriculture, cultivation, commercial or industrial purposes, or for camping or picnicking or cattle grazing. This authority is afforded the Minister with the intention of enhancing the protection and management of indigenous forests on government land, and to facilitate the implementation of the Act's provisions.

The Forest Act, enacted more than 30 years ago is a legacy from the colonial administration. Its purpose of reservation, protection, centralization and control of forestry within government echoes that of colonial forestry objectives in Kenya in the late 19th to mid 20th Century. The Forest Act, passed in 1942, predates the 1968 policy and could not have been framed to meet the goals of the 1968 forest policy. The Forest Act is purely procedural, it does not provide any standards or principles along which forest management can be modeled, but rather provides a procedure consistent with its reservation and protection goal. It prescribes punishment for non-compliance with its restrictions. Most importantly it accord discretion to the Minister and the Forest Department, and does not set standards by which the Department's actions or inaction can be held to violate the law. Penalties prescribed under the law are minuscule and do not serve as an adequate deterrent thirty years after its enactment. Low levels of fine do in fact provide incentives for breaking the law. The most contentious provision in the Act is the authority conferred on the Minister for de-gazetting forest areas, via a 28-day public notice. Wass (1995) criticizes the period as too brief; and cites the lack of a legally-defined

procedure for handling objections to excisions as an important constraint to sustainable forest management. He also cites the lack of environmental impact assessments and adequate consultation between the forest department and affected parties as another constraint. Although the Act permits forest protection on unalienated government land, rarely has such protection been implemented, until after gazettement (iTJCN, 1996). Furthermore, the legislation does not recognize traditional systems, local knowledge and traditional rights (KENGO, 1995). But rather has been used under Section 8 to expel forest squatters without regard for how they came to be in the forest. The Act also limits the creation of nature reserves to areas within previously gazetted forests; this excludes areas or potential areas which may not be currently gazetted forest areas.

Subsidiary legislation passed under the Forest Act allows some communities, by virtue of customary practice and law, are right holders and have the right to use forest without license or fees. The Act however, does not provide for the settlement and inquiry into such claims.

The Forest Act applies to public lands and does not give protection to other forests; it fails to address the protection and conservation of forests on private land. Thus in addition to being exclusionary and prohibitive, the Forest Act does not provide adequate protection and safeguards to Kenya's forests. It does not anticipate future threats to the resources caused by demographic change and human activities. It does not provide definite procedures for integrated planning.

Presidential directives have been used to regulate certain forestry activities, for example, the extraction of indigenous timber was banned through a presidential directive. While the directive has no legislative support, it is enforced, within forest reserves by the Minister under the Forest Act; and outside forest reserves it is enforced through the Chiefs Act, Trustlands Act and Local Authority government Act. Other legislation applicable to forestry, but which is enforced by other agencies include, the Wildlife Act, Agriculture Act, Trust Land Act, Fisheries Act, Registered Land Act, and Antiquities and Monuments Act.

4.2 Forest Policy

Kenya's first official forest policy was formulated in 1957, through White Paper number 85. This was subsequently restated by the government of Kenya in 1968 as sessional paper

number 1 of 1968. It sets out the basic principles under which forests will be managed for the greatest common good.

The 1968 forest policy aims to reserve forest areas for catchment protection; to provide timber and other forest products; to protect forests from fire and grazing and eliminate private rights in gazetted forests; to promote sustained yield management; to develop industrial forestry ; to provide funds for policy implementation; to provide employment, in particular under the Shamba system for reforestation and forest maintenance; to designate county council forests; establishment of private forests for protection and production, recreation, conservation, research and education. The policy says little about afforestation efforts outside government forest reserves, and did not visualize extension services as doing anything other than issuing tree seedlings on national tree planting days.

This policy assumes centralization of forestry under government, and government control of all initially important forests; but does not provide for other forest areas e.g. Private forests. A crucial shortcoming. As with legislation, which predates it, the forest policy's intent was reservation, restriction and prohibition. Beyond protection forestry, its other purpose was the sustained production of timber, through industrial forestry. The policy does not recognize or acknowledge the role of forestry in local livelihoods; and any such consideration (e.g. through the shamba system) is purely incidental, with a central purpose of reforestation, plantation development and forest maintenance.

Kenya's forest policy objectives are adjusted to and integrated into periodic national plans. They may change from one plan period to another and are increasingly a reflection of the dynamic nature of economic development in the country. Sessional paper no. 1 of 1986 focuses on economic management for renewed growth. It defines a broad strategy and specific measures to achieve a targeted GDP growth of 5.6% by 2000. It forms the framework for all future development plans. This paper views agriculture as the key sector for economic growth, and emphasizes the growth of coffee, tea, wheat and horticultural products. Although no current studies have been conducted to examine the effects of this policy, the implication on forestry are clear. Expanding agricultural production in these mentioned crops may have meant sacrificing forests, particularly those outside government control.

The national forest policy has been strengthened or constrained by policy pronouncements in other sectors of the economy. The national food policy (sessional paper no. 4 of 1981) for example, promotes food self-sufficiency, and emphasizes the production of export crops to earn foreign exchange. This policy fueled strong pressures to convert gazetted forest reserves to crop land, particularly those adjacent to places with high population densities. The fifth development plan (1984-1988) proposed further forest reservation, protection, conservation and management; agroforestry development and tree planting on private and trust lands. It noted constraints facing forestry as competition with agriculture and grazing, woodfuel shortage, inadequate financing, and lack of long term master planning for integrated forestry development. It outlines strategies such as tree planting on private land, intensification of plantation production, it gives credibility to rural afforestation and extension schemes. Similar sentiments are echoed in the 6th development plan of 1989-1993. From both plans it is clear that the government strategy of forest reservation is intractable and increasingly challenged by land unavailability and other pressures. As a result, both communicate a change in government strategy, to increase the areas under forestry by focusing on private and communal lands. A task unsupported both by policy and legislation.

It is not until the economic reform paper for 1996-1998 (GK/IMF/World Bank, 1996) that the government came to terms with the real solution to forestry problems. This paper acknowledges key forestry concerns as decline of indigenous forests and unproductive plantation forests, and mandated the re-formulation of existing policy to reflect the current socio-economic and political situation in the country. It mandated the development of supportive amendments to the Forest Act. The economic reform paper came five years after the institution of the Kenya Forestry Master Planning process which began in 1991. The Kenya Forestry Master Plan projects the forestry sector in the country to beyond 2000, and has a broad objective of enhancing the role of forestry sector in socio-economic development and to contribute to environmental conservation (KFMP, 1994). The Master plan comprises both a macro-level and micro-level planning component. The former considers future scenarios under varied policies and socio-economic conditions. The micro-level component is concerned with operational strategies at the local or district level. The most important outcome of the master plan process is a review of the

current forest policy, done in consultation with government agencies, NGOs, education and research institutions, concerned individuals and international donors. The reviewed policy looks beyond government forests, and includes private forest and cross-sectoral issues affecting forestry. Despite its completion in 1994, and its presentation to the Attorney General for endorsement, the paper has not undergone Parliamentary debate.

An important policy directive is that concerning the resident cultivation system of plantation development-the Shamba system. The Shamba system had been an economical and technically successful method of plantation establishment, but was based on squatter labor. Between 1985 and 1989 it was wound down and officially terminated after a Presidential directive. The squatter status of the laborers became a source of strong political pressure to excise land for permanent settlement. Despite problems inherent in the Shamba system, its abandonment reduced plantation establishment rates, and a new system based on non-resident labor was established to replace the original system.

The establishment of the Nyayo Tea Zone Development Corporation (NTZDC), first by Presidential order in 1986, and later by an Act of Parliament in 1989 also affected forestry in Kenya. Under this program, plantations were established adjacent to indigenous forests to act as buffers against agricultural encroachment on forests designated for catchment protection. The plantations were also expected to generate income and employment. This program obtained land from the government forests. It initially targeted 20 000 hectares for tea production. By 1990, 6000 hectares had been cleared (Wass, 1995). Tea zones were established in the high potential forest areas of Aberdare, Kakamega, Kikuyu escarpment, Cherangani, Mt. Elgon, Mt. Kenya, North and south Nandi, South West Mau, Tinderet and Trans Mara.

4.3 Outcomes of post colonial forestry

Forest Loss

The forest estate has shown a steady decline over the years. Since the 1970s a 10-year running average has been computed at 5000 hectares per year (Hodgson, 1992). Earlier estimates between 1972-1980 indicate an average loss of 2% per year (Ochanda, 1981). For 1980-1992, a ten year running average was 3700 ha per annum, ranging from 2000 hectares per year,

increasing to 5000 ha per year at the end of the 1970s and early 1980s (Wass, 1995). In addition to diminishing forest cover, biodiversity and socio-economic surveys show declining forest quality (Wass, 1995).

Loss of forest estate is through a legal process of excisions. Majority of excisions occurred between independence and 1972, amounting to 67000 hectares. Losses to gazetted forests are 290 000 hectares, with 3500 hectares proposed for future excisions (Wass, 1995). Out of the 290 000 hectares, 210 000 hectares have been excised, while 115 000 hectares have been transferred to national parks or reserves. The transfer of forest estate to non-protected status amounts to 13% of Kenya's total gazetted forest reserves. Most excisions have been undertaken for agricultural purposes, but have been recorded as de-gazetted for "settlement". Forest department does not indicate the amount of private forests lost to agriculture.

Central to the excision process is the ease with which excisions occur. Wass (1995) and KENGO (1995) extensively criticize the 28-day degazettement notice as insufficient; and observe that excisions are instigated for political purpose or private gain. Both recommend the inclusion of a two-phase excision procedure which incorporates parliamentary and technical vetting. The former to ensure that excisions are conducted in the public interest; the latter to ensure that alternative land use, after excision, is environmentally sound.

According to the forest department, the establishment of nyayo tea zones resulted in an estimated clearance of 6600 hectares of forest for tea establishment. However, in 1989, a world bank/FAO mission estimated a total of 11000 hectares cleared. Nyayo tea zones were initially intended to be ribbon-like 100m strips adjacent to forest boundaries to prevent encroachment. Some areas have however extended beyond the 100 meter limit, while others have gone as far as 500 meters into the forest. A survey of 350 000 hectares of indigenous forest that contain nyayo tea zones indicates that 3600 hectares (1.4%) of the forest reserves is occupied by tea (Wass, 1995).

The jurisdictional limitations of the Forest Act to gazetted forests may have accelerated forest decline in other areas for example, private forest. By 1982 the extent of private forests was 141 000 hectares. The 1989-93 development plan indicates that these forests have been reduced to 124 square kilometers. It is likely that much of this has succumbed to pressures to convert to

agriculture, as well as charcoal production. Policy and legislative silence on private forests, and the government's passive attitude may have motivated the decline. However, the sensitivity of land issues stemming from colonial expropriation, and the subsequent primacy attached to individual landownership by the constitution may serve to limit the government's involvement in developing policy and legislation that may affect private land forestry.

Jurisdiction over forests is not vested solely in the forest department. Majority of forests not gazetted under forest department occur on Trustlands. Forests on trust lands are under the jurisdiction of the county councils which have neither the expertise, resources nor incentives to protect forests. These are held in trust for local communities by local county councils with advisory support from the forest department. Most county councils are under intense pressure from their constituents to permit clearance for more profitable development projects. There is little incentive to preserve and protect forests. Information on the extent of Trustlands forests is limited, but by 1995 forests on Trustlands directly under county council management covered about 100 000 hectares (Wass, 1995). This is no indication of the extent before then, but it can be reasonably assumed to have undergone considerable decline. There is evidence to this effect, for example forests in Trans Mara district have been converted into tea and wheat plantations.

Standing volumes of commercial timber species in remaining forests have substantially decreased due to over-exploitation. This has adversely affected biodiversity conservation as well as long-term yields. The situation became so critical that a presidential directive in the late 1980s banned the extraction of indigenous timber in the country. Similarly grazing in forests was prohibited. Yet, even with these bans, illegal felling and grazing continue in many forests due to inadequate controls.

Conflicts

The presence of traditional hunter-gatherer communities dwelling within forest areas has been a major dilemma ever since the creation of forest reserves. In the South-West Mau forest there exists the largest population of forest-dwellers, Okiek Dorobo, of up to 15000 people, scattered deep within the forest. Their presence was originally ignored by forest authorities, but was later deemed incompatible with forest conservation. Attempts by the government to evict the

Dorobos have met with resistance; while attempts at resettling them has also been unsuccessful since the Dorobo have been unable to adjust to a sedentary, agricultural lifestyle. Politicians have cruelly manipulated the plight of the Okiek to gain political capital, and have offered no substantive solutions for the placement of the Dorobos.

In addition to forest-dwellers there is an estimated 4000 squatters living and cultivating within the forest reserves, who are not traditionally forest dwellers. These people were originally cultivators under the Shamba system of plantation development. The Shamba system is a modified Taungya effected in the early 1900s to reduce plantation establishment costs, while meeting the requirements of the landless poor. The system came under increasing challenge due to increasing populations of the cultivators and their families . The current squatters are a legacy of this system; they acquired squatter rights due to prolonged settlement on forest land, and ave resisted attempts to evict them.

Ultimately, continued forest department restrictions on forest use by forest-adjacent communities reduced access to forest resources has fostered a deep resentment by communities to forest department and government, and resulted in heightened confrontation between the forest department and local communities over the use of resources. The conflict is exacerbated by a mix of issues such as, declining land availability, increasing population, and declining economic conditions. This mix of factors make forest resources all the more crucial for the survival of rural populations.

An important outcome is that the forest department is realizing that its administrative approaches have failed to achieve forest sustainability, and that their capability for management is limited. To this end, the forest department has been experimenting with participatory approaches to management in Samburu, Kakamega, Shimba Hills and Arabuko-Sokoke forests. This change in approach is presented in the forestry master plan process, which seeks to promote a new forest policy more receptive to community needs.

The most obvious conflict is between agriculture/settlement and forestry. Increasing populations and subsequent land pressures, as well as the need for agricultural production, exert considerable pressure on forest resources. Most of the forests are located in the more productive zones of the country where up to 80% of the nation's population reside. Conflicts between

forestry and agriculture are indicative of a wider and more generalized problem, that of conflicting land use. Diverse land use interests for industrial development, human settlement, wildlife conservation are in competition for forest resources. Forest land in Kenya is viewed as idle land, waiting to be exploited in other more beneficial ways, and is accorded lower priority in the face of competing uses. The national policy environment exacerbates the problem. Most articulate the importance of preserving forest, but emphasize agricultural production. These policies, though they acknowledge the deterioration of forestry resources, and the need for environmental protection, remain a vague proclamation of goals. None provides explicit means of achieving its goals, nor guidelines for achieving the desired results. As government agencies set out to implement these policies, serious conflicts can develop, creating institutional bottle necks or political obstacles. The conflicts are intensified by the sectorally stratified mandates of government agencies.

The impact of the forest legislation and policy on the intensity and frequency of conflicts between competing interests cannot be overstated. The Forest Act is outdated, and in its present form is incapable of implementing an integrated approach to forest management. It also does not support or reinforce forest policy primarily because it predates the adoption of the policy. In addition there has also been no comprehensive forest policy since 1968; relevant policy statements have been made on an ad hoc basis, mainly in the form of presidential directives. These are difficult to enforce because they are often not backed by appropriate legislation. Secondly, legislation relevant to forests is spread over various Acts, and administered without coordination by a wide range of public institutions, many of which are ignorant of the conservation significance of the legislation. In addition to conflicting policies, the presence of forest land provides strong political incentives. For example, Parliamentary members often pressure for excisions in response to their constituents land needs. Allowing forest excisions is a form of political patronage through which members of parliament endeavor to ensure that constituents vote during elections.

5.0 DISCUSSION

The first century of colonial domination broke down the traditional African production systems that had functioned for a long time. The colonial forestry department was primarily concerned with delimiting a permanent forest estate, and focused its energies on developing suitable legislation for a national forest reservation policy. Its administrative approach was to declare public ownership of the forestry resources, and to systematically eliminate community rights and resource management systems. In addition, land was also progressively alienated from the indigenous population for European settlement. Thus forestry development was driven by political and economic imperatives during this time; settling Europeans and expanding the forest estate for increased timber production.

The process of reservation resulted in tensions at three levels: between the forest department and the dispossessed communities; between the forest department and the settler community; and between the forest department and local government administration. Tensions between local communities and the forest department is self-evident. Tensions between forest department and the settler community, and later between forest department and local administration is indicative of the struggle faced by the forest department to assert its importance/legitimacy, within a political structure that did not recognize forestry's contribution to development. In the early stages of British rule in Kenya, forestry was largely the responsibility of the local administration, whose main concern was providing land for in-coming settlers. Even after the forest department was formed in 1902, the needs of forestry preservation were often subordinated to the land needs of settlers clamoring for land. The political connections of the settler community to the leadership back in Britain made it impossible for the local administration or the forestry department to act independently. The local administration at the time served the needs of the settler community.

The 1911 Forest Ordinance, shifted the locus of power to Forest Department. The Ordinance was passed at a time when there was urgent demand for timber to supply the world war; strengthening the forest department served to ensure the protection of timber supplies. International politics, and the subsequent need to ensure timber supplies to the military resulted in forestry gaining importance over the settlement of the white community. From this time, the

forest department zealously undertook a two-pronged objective of saving remaining forests from settlers and from destructive indigenous practices. The 1950s signified another change in the political environment which served to limit the forest department's freedoms, and which resulted in severe conflicts between local government administration and the forest department. Hostilities engendered between the forest department and local communities were used as part of the local community's reasons for agitating for independence from British rule. The local government administration's attempts at pacifying the locals did not succeed because the forest department's reservation exercise continued to ignore the land needs and rights of local communities. Attempts at getting the forest department to re-define its reservation process resulted in further tensions between the forest department and the local government. The formulation of the Coryndon definition by the Governor, which restored local community rights to forest product in certain forests, epitomized the tensions between the local administration and the forest department. Once again forest department policies were subordinated in favor of defusing political situations which would threaten/undermine political administration by the local government.

Although forestry development during the colonial period was often influenced and constrained by developments in the socio-political arenas, forest department efforts did result in putting in place a legal and policy framework, and an administrative structure for forest preservation and management in Kenya.

At independence, the legal arrangements which had been codified in the run-up to independence, as well as the complementary institutional norms, were preserved by the independent state. The forest governance systems, in particular, bore the imprint of centralized power evident in the colonial government. A possible explanation for the maintenance of the status quo by a new government may lie in the political environment at the time of independence. Hayden (1979) observes that at independence, the political instability of the political alliances formed immediately before independence led to the unwillingness of the first national government to reduce the central government's powers. There was a strong likelihood of these alliances splintering into its constituent groupings based on ethnic or similar ties. In order to offset the disintegrating tendencies of such a system, the Kenya government opted to retain the

well-established central administration inherited from the colonial authorities. Attempts to introduce any structural changes in government organization were blocked. This decision permeated every sector of government.

Despite an increase in population and related land pressures over the past thirty-five years, most forests are still in existence, and are performing some of their functions, such as catchment protection. However, the decline of the estate must be noted; but this is not because nothing is being done. To the contrary, a department exists, plans have been implemented, but the actions have not produced the desired outcomes. Instead the same constraints that dogged colonial forestry are at work in the post-colonial times. These include a sectoral approach to forestry, lack of integrated land use planning, inadequate provision (finance, personnel, equipment) for the fundamental safeguarding of the forest resource, and a low economic valuation of the forest resource. The forest department continues to discharge its duties as a minor department within the Ministry of Environment and Natural resources, and is often dwarfed, starved of resources and disenchanting. Forestry is denied recognition for all its contributions and its budgetary allocations are a mere fraction of its requirements and of its contribution to the national economy. Yet, forest services are increasingly called upon to provide additional goods and services to the fast-growing rural and urban populations.

A fundamental problem to forest management and conservation is the existence of conflicting and competing policy objectives adopted by different government institutions. For instance, although development planning recognizes forest degradation as an important issue, it prioritizes agricultural expansion for export crop production, or carves out forest land for resettlement schemes. This inconsistency in national planning may be the result of several factors. First, to maintain its credibility with national and international constituents, as well as to maintain funding eligibility at the international level, the government must be seen to identify with environmental concerns. In addition, to justify the presence of a forest department, the government must also be seen to support forestry initiatives. Thus policies will be structured to communicate these 'concerns'. However, political pressures to resettle the landless, improve agricultural/economic growth, forces the government to reduce forest land in order to meet these needs. After all, forestry as a land use is perceived as having lower economic value than

agriculture.

More importantly, a lack of political will to alter the *status quo* is evident in the negative political responses to proposed forestry legislation brought before the parliament in 1977. Proposals for legislative reform aimed at strengthening the forest department were introduced to Parliament and defeated. Members of Parliament representing rural constituents challenged the legislation, claiming that their constituents' livelihoods depended on the activities regulated by the proposed legislation. More recently still, attempts at introducing the revised forest policy for Parliamentary debate have been unsuccessful. The reviewed policy seeks to increase community participation and recommends partial devolution of decision-making powers to forest-adjacent communities. In addition, the policy's recommendation that industrial plantation development be contracted out to private parties may not gain favor with government officials who have benefitted from these plantations. Such proposals are perceived to alter the status quo, potentially eroding the powers of individuals and institutions.

Given that almost one century of state forest ownership and centralization of power in the forest department has not been successful in promoting sustainable, long term, productive use of forest resources, the validity of such an arrangement comes to question. The Kenyan forestry experience shows that it is not the existence of formal structures which matters. What is important is the performance of the system, whether it works, whether the citizens have confidence in it, and whether they have the ability to maintain its functions. With regard to forestry in Kenya, both currently and under colonial government, the answers to these questions are negative. Ongugo and Mwangi (1995) indicate that forest depletion on state-owned forests in Kenya is the result of ineffective management systems, rules and sanctions, and advocate for the re-establishment of strong local governance and legitimacy as the best option for sustainable forest management.

While I acknowledge that traditional forms of forest governance should be re-examined, I think that in themselves they do not provide an answer. They generally illustrate systems which have worked in the past, usually under different socio-ecological conditions from today's. It may be more appropriate to evolve new institutional structures by merging traditional and statutory systems. The long history of community organization in many areas in Kenya provides some

social memory of institutional organization, accountability and purpose. While this may not provide a sufficient basis for large scale forest management systems, it does provide a foundation for community-based conservation.

6.0 CONCLUSION

The colonial forest department handed to the newly independent state a forestry resource base with vast opportunities for satisfying national needs. Practically all existing forest reserves in Kenya were declared and consolidated during the colonial period. In addition, to the forestry base, the colonial forest service passed on a policy and legislative framework unsuited to the socio-economic needs of a newly-independent state. It also handed over a legacy of hostility and suspicion from the local community and a sensitivity to land issues that constrains land resource management today. Lastly, it handed over a sector that was poorly funded, understaffed and whose political profile was subordinate to other land uses such as agriculture and settlement. Political tensions from landlessness and squatter status were also important legacies of the colonial forest administration.

The independent state had opportunity to change this inheritance, but political expediency at the time of independence dictated that the new government maintain the centralized system of governance. Thus in the new state, forestry remained as it was during the colonial administration. The political tensions have however increased tremendously due to population growth, inadequate land resources to support the increasing population, and a deteriorating economy. In many cases, the forest department has yielded to pressures to degazette part of the forest estate. The forest department's prospects of maintaining the bulk of the forest estate, and for developing the resource in order to contribute to socio-economic development are declining. To reverse this decline, the forest department must urgently seek both technical and legislative/policy solutions. Technical solutions should strive to more intensively use and manage existing forests, while bringing more land under forestry through afforestation efforts on both public and private land. Policy and legislative reforms are needed to reduce the distance between resource users and decision-makers; and to harmonize or integrate forestry with other sectors.

Graham (1945) observed that unless the colonial forestry department could rely on the

support of the general public and the government itself, it would be difficult to carry out its task. This is as true today as it was then. He also noted that **"...an understaffed forest department, uncertain of what funds may be allocated to it from year to year, working in a haphazard way on a short-term policy with no specific aim other than the protection of the existing forest reserves and the replacement of what timber is being cut out, may succeed in preserving the *status quo* for a long time, even though it is probable that the number of excisions made from forest reserves, for political or other reasons, may eventually become a serious problem under such circumstances."** This observation is true of the forest department even after fifty-three years.

Thus although the political environment between the colonial and post-colonial periods are superficially different, the forest governance systems and structures are still the same, and the pressures on forestry development in the country are also similar to colonial ones. What has changed is the intensity of the problem.

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