



## THE DESTOCKING QUESTION AND ENVIRONMENTAL DEGRADATION IN MACHAKOS COUNTY, KENYA: MYTHS AND FACTS

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### Abstract

This article analyses environmental degradation and the destocking question in Machakos County. The establishment of colonial rule led to a considerable transformation in the environmental conditions of Machakos County. Human activities have always changed the physical environment, but the scale and impact grew enormously during the colonial period. In order to survive, the Akamba responded to the altered environmental conditions under the demands and restraints of colonial policies. Forceful destocking in the context of land alienation is discussed in this article from the political ecology theoretical framework. Akamba response to these changes is demonstrated as well as the consequent reaction of the colonial administration. Data for the article was drawn from both primary and secondary sources. Primary sources included archival records at the Kenya National Archives (Nairobi and Machakos). Both published and unpublished works were used to collect secondary data. Descriptive data analysis using qualitative methods of content analysis was applied. This article concluded that political considerations were made in regard environmental conservation. The intersection between colonialism, resource utilisation, and local and international politics fall in the context of environmental history. The area recommended for further research is the Second World War, the Mau Mau war and the clamour for independence as relates to land and its resources in terms of environmental conservation in Machakos County.

**Key Terms:** Machakos, environment, livestock, destocking, reconditioning.

## 1.0 INTRODUCTION

Colonial land alienation negatively impacted on African subsistence systems that had attained a state of equilibrium before the establishment of colonial rule. These systems were disrupted since Africans had to devise ways and means of economic and political survival in smaller land areas than they held in the pre-colonial period. Pastoralist economies, which relied on large tracts of land for pasture, were acutely affected leading to conflict between the colonial government and the indigenous peoples. In Machakos County, the government termed the Akamba as not only wasteful cultivators but also holders of livestock of no economic value. A destocking policy was devised since land degradation that resulted from land overuse was blamed on the Africans. Policies were drawn to limit African livestock forcefully as a measure towards environmental management. This article examines this intersection of government policy of destocking and African response in Machakos County. It further examines the environmental management policies adopted after forceful destocking failed up to 1945.

## 2.0 LITERATURE REVIEW

The persistent impact of colonialism is a subject that generates conflicting debates. While some believe that the impact of colonialism was an episode that came to an end in Africa in the 1960s (Ibadan School), others believe that the impact of colonialism is an ongoing process (Dar es Salaam School and postcolonial theories). From understanding the continuous impact of colonialism, land alienation in Machakos County can be interpreted. The land use and settlement patterns in Machakos during the colonial period represented a radical transformation from the circumstances of the nineteenth century. European colonialists were intruding into a landscape crowded with pre-existing local uses and claims. Conflicts over land between Africans and Europeans during colonial rule revolved around African attempts to recreate nineteenth-century models of land use on the one hand and European determination to prevent them from doing so (Anderson, 2002:23). Therefore, Europeans made their goals and rationales of subordinating those claims (Beinart, 1989:145).

## 3.0 METHODOLOGY

Data for the article was drawn from both primary and secondary sources. Primary sources included archival records at the Kenya National Archives (Nairobi and Machakos). Both published and unpublished works were used to collect secondary data. Descriptive data analysis using qualitative methods of content analysis was applied.

## 4.0 RESULTS AND DISCUSSION

### Land Alienation in Machakos County

The imposition of colonial rule in Africa led to land alienation, especially in Sub-Saharan Africa. In order to justify land alienation, colonial writings on Africa pursued a theme of African wastefulness due to their 'irresponsible' and 'wasteful' production techniques such as pastoralism and shifting cultivation. According to this colonial history, Africans occupied delicate lands, and their "poor land-use systems" had led to the creation and enlargement of deserts such as the Sahel (McCann, 1999:6). Machakos's story is entwined within a development narrative par excellence, the narrative of overstocking, which told the tale of a pre-colonial Eldorado of environmental stability ruined by the excesses of herders who exploited the common pasture beyond its capacity to endure and whose actions, therefore, needed to be controlled to prevent a once rich land turning into a desert (Anderson, 2002:23). By blaming African farmers and pastoralists, international agencies sanctioned colonial rule's centralised organisation and control of rural environmental resources, chiefly agricultural land (Amanor, 1994:3). Much of colonial literature, portraying

Africans as lacking environmental wisdom, sought to justify control of African indigenous land tenure through land alienation and natural resource utilisation. For example, the Kamba understood the relationship between tsetse flies, wild animals and bush and the survival of their cattle. In fact, the African pastoralist economy resulted from the successful imposition of a man-controlled ecological system (Kjekshus, 1996:13).

The most productive farming and livestock grazing areas were alienated from European occupation or set aside as crown lands. Africans, therefore, lost their reserve grazing areas leading to the overuse of the Machakos Reserve. This led to environmental degradation, which the colonial administrators interpreted as a problem with all Africans who were regarded as wasteful cultivators and as having an inordinate attachment to livestock. On the contrary, environmental problems in Machakos County were not the result of Africans being wasteful farmers and herders who could not have any meaningful impact on their physical surroundings. Policies formed on the basis of single perspectives have repeatedly distorted resource use and allocation in a complex, multi-faceted landscape with a diversity of actors (Rocheleau et al., 1995:1038). The lack of understanding of African land tenure and economic activities led the British to conclude that the Akamba were wasteful farmers and herders. Colonialism, therefore, exacerbated environmental problems that negatively affected the residents of Machakos County.

Under these circumstances of land alienation, shortage, degradation, and African impoverishment, the Kenya Land Commission, headed by Morris Carter, was set up in 1932 to undertake an inquiry into the land question in Kenya. The Land Commission illuminated the extent to which the colonial administration did not understand or was unwilling to understand African grievances. This unwillingness was more pronounced in the official policy of land alienation. As a result, Africans in the Kenya Colony saw themselves as victims of colonial land alienation because rights that they viewed as customary were trampled upon (Coray, 1978; 179).

## **Impact of Land Alienation**

Colonial land alienation from 1893 disrupted the Kamba system of land tenure that was to a certain extent optimally adapted to the vicissitudes of the material environment. The Kamba had developed interdependent crop-livestock systems, investing in varying geographical areas and communal reciprocity arrangements over varied climatic regions, which reduced loss and offered mechanisms for dealing with drought and famine (Rocheleau, 1995:12). When colonialism closed the frontier, took over existing settled lands, controlled the livestock economy by limiting the Akamba to the Machakos reserve, land degradation set in. The reserve became overstocked almost immediately after its creation (Matheka, 1992:79). Frequent and, at times, continuous quarantine conditions made the environmental situation dire.

During the pre-colonial period, there were certain natural checks and balances in the use of natural resources in Machakos. The number of Akamba livestock increased and declined through natural cycles of drought and disease. When water supplies failed, grazing areas became limited, pushing the people to more fertile and wetter areas. This then gave an opportunity for eroded areas to recover naturally. These areas would be reoccupied in better times when seasons changed. These measures ensured that pressure on land was always checked to avoid environmental stress. This is not an indication that if colonisation had not come, there would have been no soil erosion and land degradation at all in Machakos. It simply means that British colonial land use policy accelerated such degradation. Even the Europeans themselves admitted that the environmental degradation of Machakos County and of other areas within the Kenya

Colony, were in one way or another, a result of colonial policies. European administrators observed that land degradation was proceeding faster under colonial rule. Within a few years (especially between 1895 and 1911), soil erosion was noticeable in many parts of Machakos County. The vegetation of the County had changed drastically by 1917 when soil erosion was officially reported in the County (KNA/DC/MKS/26/1/1, 1948:2).

Unfortunately, much of the colonial interpretation of environmental degradation in Machakos County became fixated on Kamba livestock. From 1911 Africans were forced to deal with the mortality of cattle for lack of grazing and the permanent destruction of the soil due to erosion (Munro, 1975:78). Soil erosion was officially reported in reserve in 1917. According to the European agricultural officer R.O Barnes, 'since 1917 the reserve has become desiccated and denuded out of all knowledge. Large areas which were then good pasture land and in some cases thick bush are now only tracts of bare soil' (KNA/MKS/DC/10A/29/1,1937:32). The general failure of rains from 1909 led to the official realisation of significant ecological disturbances in Machakos County (KNA/DC/MKS/14/3/2, 1958:4).

Coupled with the failure of crops in some areas for around five years, communal interdependency was no longer a solution. Moving into other areas considered reserved by Africans was not an option (Matheka, 1992:73). In this way, a natural phenomenon was met by human-created conditions and government policies that led to serious environmental implications for decades to come. Indeed, up to 1917, grass within the African areas decreased due to lack of rainfall, over-cultivation and overgrazing. European government reports, seeking to blame the Akamba, insisted on an increase in livestock numbers. In 1917, the so-called Machakos Problem of land degradation, severe soil erosion, and overstocking was first documented (KNA/DC/MKS/1/5/11, 1917:10). The solution at such a time, in the absence of European policy and limitations, was for the people to take their stock or even a sizeable part of the human population and move to better areas returning only when conditions improved within the Machakos reserve. The other was the death of stock but not as a great catastrophe as was from 1911 since some of the cattle would have survived in the areas migrated into. Only a few people managed to move out of the reserve to the slopes of Kilimanjaro, especially those in the lower southern areas in Kikumbulyu who had faced drought for a longer time (KNA/DC/MKS/1/5/11, 1917:4).

The introduction of the plough from 1910 as part of colonial agricultural modernisation effort had a flipside of contributing to soil erosion. Cultivation was carried out on steep slopes and flat land without protective hedges and furrows (KNA/DC/MKS/10A/29/1:4). Such practice was spreading from the flatter tops of the hill massifs to the steeper hillsides and into more marginal soils, further increasing chances of erosion (Munro; 1975:207). Perbody, a government gazetteer, gave a description of the problem in 1958, though exaggerated, which illustrates European understanding of environmental conditions in Machakos in the period 1909-1912. He stated:

During these early years, the population was growing rapidly. Most of this expansion took place in the hills, where there was more rainfall and where custom said that it was safer to live because the hills could be defended from the Masaai. The majority of the trees had to be felled, for many *shambas* were being opened up to feed the expanding population. When the grazing on the hills had been finished, the cattle were taken down to the flat land, daily, to graze and brought back to their *bomas* at night. By August 1909, one can imagine very heavily grazed hillsides with heavily grazed land on the flat, gradually becoming less bare as it receded from the hill masses (KNA/DC/MKS/14/3/2:5).

Consequently, there were declining food yields, especially in the hilly areas that were expected to produce better yields due to their climatic orientation, even when relatively low rainfall. Decrease in soil fertility due to over-cropping, since the people could no longer practice-shifting cultivation in the face of land scarcity, was the major cause of decreasing yields. In addition, from the early colonial period, administrators such as Ainsworth distributed maize seeds to farmers who abandoned the cultivation of indigenous crops for maize (KNA/DC/MKS/1/5/10, 1911-1914:12). Since maize required greater soil fertility, the soil could no longer support high yields after a few seasons, leading to food shortages (Mackenzie, 2000:702). In addition, maize was less resistant to drought compared to sorghum, millet or cassava.

Contrary to European belief that Akamba request for extra grazing land was a consequence of increasing stock numbers, a Veterinary Department census in 1917 proved the contrary (KNA/DC/MKS/14/3/2, 1958:6). The community did not own livestock beyond the dictates of their needs. Indeed, the heads of livestock available to the individual Kamba had begun to decrease in 1911. The problem was, therefore, of land alienation rather than of overstocking. With a further consciousness of the importance of land for both livestock and crop production, residents living in areas that are densely populated, such as Maputi, began to fence out portions of land by planting hedges in order to lay private ownership claims to certain places (KNA/VQ1/29/5:35). This practice was discouraged by the colonial administration through chiefs who threatened to take away all the land from such individuals (KNA/DC/MKS/1/1/2:47). The administration was wary of the emergence of a landless class. Furthermore, the fencing out of private portions of land would have had the advantage of allowing individuals to determine the carrying capacity of their own portions, thus working against soil erosion and general land degradation (Matheka, 1992:79).

Africans provided labour for agricultural work in the European farms, in addition to roadwork and portage (considered as part of the civic duty of the Akamba) at no pay, which increased grievance against colonial rule. While agrarian problems persisted and became acute, the government provided no technical advice. A 'restless and discontent spirit' in the context of Harry Thuku and Kikuyu Central Association's (KCA) political activities manifested itself in the 1920s. The Akamba harboured resentment following their removal from the Yatta, leading to the loss of cattle. A series of indignation meetings were held in reserve. Suppose it had not been that, the Akamba knew the impending visit of the Ormsby-Gore Parliamentary Commission to which they felt they would be able to put up their grievances. In that case, it is difficult to say what form their resistance would have taken to make their voice heard (KNA/DC/MKS/1/1/15, 1924:4). The Ormsby-Gore Commission was set up in June 1924 to investigate various concepts of administration and development in the British colonies of East and Southern Africa.

The whole question of grazing for Kamba livestock required a longstanding, sympathetic and scientific solution acceptable to the community (Tignor, 1976:133). Indeed, Akamba attitudes could not change since Europeans and Africans operated from separate worldviews with the Europeans, turning a blind eye to the economic difficulties of the people whom they claimed to govern but whom they exploited through land alienation and unpopular policies, a major point of political ecology (McCann, 1999:29). Moreover, veterinary services were not available for Africans until the late 1920s, even in the face of purported increasing stock numbers (Munro; 1975:227).

## Forceful Destocking Efforts

Limitation of stock was a common idea within European circles, but devising a practicable scheme for such limitation remained a difficult task. The government was faced not merely with the problem of disposal of stock, but the "unwavering conservatism of the Akamba and the fact that cattle still take the place of currency" (KNA/DC/MKS/1/1/15, 1925:5-6, Tignor; 1976:337). Moreover, the administration was aware that it was no more reasonable to expect a Kamba to limit his stock as it was for the European to limit his bank balance (KNA/DC/MKS/14/3/2, 1958:10). The so-called 'cattle complex' was an understanding of the importance of cattle to the sustenance of the family and the community at large. In an ecologically unstable economy, livestock was insurance against the uncertainties of food production. A man would die of hunger, but he would never slaughter all his animals, as they would be left as a means by which the younger generation would survive famine (Osborne, 2014:46). As such, money was not a substitute for cattle and any money acquired in squatter or other forms of labour was converted to cattle or goats at the earliest opportunity. As such, livestock gained increased significance in a uniquely insecure environment. In contrast, the administration interpreted the Akamba as unreasonable, living off their capital, land, which they were "ruining by running about four times more livestock to it than it ought to hold" (KNA/DC/MKS/1/1/15, 1925:5-6). As such, the Akamba could not continue as a stock keeping people since they "were initially mere hunters and had to become mixed farmers with a bias towards cultivating crops" (KNA/DC/MKS/10A/29/1, 1937:4).

In an attempt to deal with the overstocking problem, the Crop Production and Livestock Ordinance was passed in 1926 by the Legislative Council. The content of the Ordinance was three-fold: education of the people to realise the facts of environmental degradation, drastic dealing with the goats (elimination) and the limitation of cattle to the carrying capacity of the land (Newman, 1974:9). Persuasion of community elders was the first method applied by the government in the effort to reduce Kamba livestock. Despite participating in *barazas* in which information on the limitation of stock in relation to the environment was conveyed by the administration, these elders seldom implemented any of the suggestions. The administration was already aware that destocking rules required cautionary application to avoid controversy and possible resistance.

Following the passing of the 1926 Ordinance, a livestock census was carried out in 1929, and the cattle population was an inflated figure of 190,000 head (KNA/DC/MKS/14/3/2, 1958:10). As a consequence of drought, over 60,000 head of cattle were either sold or died in 1926 alone. In the period of famine and drought, the government offered no famine relief as a tactic to force the option of livestock sales on the Kamba. The Chief Veterinary Officer differed with the views of the DC that the reserve was carrying a large number of livestock, commenting that "it was possible to travel over quite large areas of Mbooni Hills, Iveti Hills and Kilungu Hills without seeing many cattle" (KNA/DC/MKS/1/1/15, 1926:7). Though conflict of opinion equalled its abundance in European circles, evidence pointed to a steady decrease rather than an incline in the number of cattle owned by the community (Matheka, 1992:119).

A Commission of Inquiry was created in 1929 to make recommendations pertaining to general agricultural progress in Kenya. The Hall Commission (named after the chair Daniel Hall) raised soil erosion in Machakos to the status of a serious environmental threat as compared to the rest of the country. The visibility of degradation increased with a locust invasion and drought between 1926 and 1931 (Colony and Protectorate of Kenya, 1929:25). The poor condition of the reserves and settler political fears coalesced within 1935 with the global anti-erosion movement and the reaction to the Dust Bowl phenomenon of the

early 1930s. The concern over a crisis of soil erosion was further propelled by the new professionalism of the colonial agricultural officers whose conservationist concerns were based on the Dust Bowl. The policy response to solve this environmental hazard in Machakos was that of reconditioning and destocking (Rocheleau, 1994:12).

His description reflected a well-developed colonial narrative of African agency in degradation in support of drastic conservation measures. The Machakos County was described as an "appalling example of a large area of land which has been subjected to uncoordinated and practically uncontrolled development by natives". The chief cause of such degradation was the increase of livestock stock under "benevolent British rule". Thus, the degradation was affecting the reserve, which was descending into a state of hopeless poverty because their land was turned into a desert of rocks sandstones. (McCann, 1999:59).

The more pressure the government exerted through propaganda over the matter of stock-limitation, the more the LNC became adamant and was determined to prevent any legislation to control their livestock economy. Any pressure in that direction could only emanate from the colonial administration (KNA/DC/MKS/10A/29/1; 1934:10). For instance, the Council turned down stock tax or cess on goats and even lowered the cost of grazing in the Yatta in 1932 in favour of African herders (KNA/DC/MKS/1/1/25; 1932:6). In 1934 however, following constant pressure on the LNC by the Provincial Commissioner C.R.W. Lane, a resolution was passed that "this Council, in order to check and remedy the severe soil erosion which has occurred in the Machakos Native Reserve, directs that the chiefs of Masii and Kiteta be empowered to control or forbid the use of pastures by any form of stock in their locations, which locations this Council have now set apart for the purpose of reconditioning for the planting of fodder producing plants and grasses" (KNA/DC/MKS/14/3/2, 1958:13). Although this did not bear much in terms of tangible results, the ground for destocking and reconditioning was laid, and the European administration's determination was emboldened. This was in the adoption of the 'firm hand' preferred in mitigating soil erosion borrowed from South Africa and which was part of the 1932 Land Commission recommendations (Anderson, 1984:327). In reality, however, the stock held in 1932 was actually far less than what the Akamba owned in 1910 or 1915 (Munro, 1975:214).

Since earlier ordinances had proven unable to achieve the desired effect, stringent legislations were passed to deal with the Machakos Problem once and for all. These included The Yatta (Grazing Control) Rules under the Crop Production and Livestock Ordinance Gazette Notice number 705 of 3<sup>rd</sup> September 1937 and "Crop Production and Livestock Ordinance (Amendment) Rules", which applied the original 1926 destocking law to the Yatta. These two enactments provided the legal backing required for the Yatta destocking but were superseded by the consolidated Crop Production and Livestock Rules of December 1937. These rules applied equally to reserve residents and squatters on European farms (Tignor, 1976:339-342).

The cost of regenerating the reserve was estimated at £120,000, with £34,000 being obtained from the Colonial Development Fund by the end of 1937. From this amount, £10,000 was the only money granted to the County, with the remaining to be repaid by the LNC as a 'sinking fund' of development (KNA/DC/MKS/1/1/27, 1937:9). In addition, the Yatta was opened up for settlement, livestock inoculated, the area organised in a rotational grazing system, and only 12,000 head of cattle was accepted that were inoculated and branded with a distinct branding (KNA/DC/MKS/14/3/2, 1958:15). The Makueni fly area was cleared to experiment as a relief area for the more eroded locations that would require more grazing that

would be available in reserve under reconditioning conditions but was however not popular for there was no assurance that livestock taken there would not contract trypanosomiasis (KNA/DC/MKS/8/2, 1937:12).

After this was achieved in the Yatta, the next step was to find means to carry out in reserve some similar process of relating the number of cattle to the land and getting rid of the excess. The Crop Production and Livestock Rules of 1937 provided the legal backing for the exercise. Thereafter, early in 1938, an attempt was made to apply the same system generally in the reserve as had been carried out in the Yatta that is, calling on stockowners to register their cattle, fixing a quota for each location and allocating this quota pro-rata to the number of stock possessed by each individual. This policy was then carried through with some difficulty in Kangundo and Matungulu and the cattle branded (Newman, 1974:15-16). This resulted in a count of 27,000 heads against a quota of 4,500 in Matungulu Location, which was all that the land was considered capable of maintaining. In March 1937, the Akamba stated the fact that they were not ready to comply with the activities of reducing their cattle before the Chief Native Commissioner in March 1938. To avoid a confrontation with the community, the government involved community leaders by carrying out a village-to-village survey for the purpose of assessing the number of cattle the land would carry. The village elders worked under oath to make the distribution as fair as possible. The accepted cattle would then be branded, while the worst cattle would be put for sale by auction. Encouragement of the community would follow this to plant fodder crops, enabling an increased number to be branded later (KNA/DC/MKS/8/2, 1937:14).

All the other locations followed this except Mbooni, Nzau and Kaumoni. About 21,000 cattle were sold to Liebig, realising £15,000 (KNA/DC/MKS/1/1/27, 1938:3). Difficulties for this process became intense when it was time for the Iveta sub-location, and very definite resistance was encountered to the carrying out the accepted policy, a resistance that outside political organisations and individuals inspired. Towards the end of June, the people of the area were called upon to produce elders to allocate the quota that would be branded, with the last date to comply being the 7<sup>th</sup> of July. These deadlines were met with open defiance. On the 8<sup>th</sup>, the administration moved on the basis of the Crop Improvement and Livestock Rules, conducting a raid through the area resulting in the removal of 2,500 cattle from an area of about 11,000 acres with a carrying capacity of about 500 head of cattle. It was anticipated that this would induce the Akamba to claim their cattle and get them back reduced by the apparent culls and with the quota branded. However, resistance was so well organised that the expected result was not attained. The administration tried taking up cases with the known owners of the cattle, but these cases proved ineffective since the owners did not identify their cattle. It then became apparent that the only solution was to strengthen the rules to allow for the impounding and sale of cattle in the event of absolute refusal to cooperate with government requests. This provision was allowed in September 1938 (Tignor, 1976:349).

## Resistance to Forceful Destocking

As this was going on, a party of about 3,000 Akamba men, women and children proceeded to Nairobi on the night of 27<sup>th</sup> of July and morning of 28<sup>th</sup> July and took up a position close to the Race Course where they remained for four weeks (Newman, 1974:19). Their stated objective was to gain an interview with the Governor. They were well organised as to relief and food supplies, and it was more of a quiet rebellion (*Ibid.*). Although the Governor refused to meet and address them in Nairobi, their point of concern had been communicated effectively. The Governor addressed the Akamba on the 25<sup>th</sup> of August in Machakos, stating the government position on destocking. The government's language had changed the Governor,

stating, "there had been an expression of dissatisfaction over the auctioning of their cattle" (KNA/DC/MKS/1/1/27, 1938:7).

These protests were organised by the Ukamba Members Association (UMA). The confiscation of livestock in March set African politics in Machakos on a path of political militancy and organisation absent in the area up to this time. Sergeant-Major Ndumba Mwatu of the Kenya Police was the first person to challenge destocking. His home was at Ngelani, and when he returned home on leave at the end of April 1938, he discovered that two of his cattle had been taken by the government in the first attempt to force destocking on the location. Ndumba directed his protest to the chief while spurring his neighbours and friends into a more basic attack on the destocking programme. After holding several meetings of elders in the area, on 3 May 1938, three men (Isaac Mwalonzi, Elijah Kavulu and Samuel Muindi) from Ngelani sent a telegram and a petition to the Secretary of State to the Colonies. These meetings of these elders led to the formation and strengthening of the UMA, attracting membership from the wealthy cattle owners in most locations. They criticised the low prices paid for auctioned cattle, a ploy to impoverish the Akamba to enrich the Liebig's factory. This factory, constructed in 1937, was assured by the government of a steady supply of livestock (Newman, 1974:20). The Europeans' self-servicing political and economic interests were laid bare in the Machakos reserve situation.

Part of the intention of destocking was to mobilise Kamba resources for transfer to the European-managed economy. The rise of government-guided conservation led to the criminalisation of land use and resource utilisation in the local areas. Livestock owners were not viewed as enemies of the environment (Beinart & Hughes, 2007:69). It was this ploy that the Akamba were rising against when after months of intense propaganda and organisation, they marched to Nairobi demanding nothing less than an audience with the Governor. For a short time, the Akamba marshalled all their political experience and connections under the auspices of the UMA to confront colonial policy. KCA links became critical, and the leaders of the UMA (Samuel Muindi, Isaac Mwalonzi, Kavula Muli, Shem Muthoka, Zakaria Music, Joseph Mwaka, Elijah Kavula and Jacob Mutiso) used their education, urban exposure and wealth status to influence the society and organise a revolt. Their efforts bore fruit when the government backed down on forceful destocking resorting to subtle destocking measures. This was through weekly cattle sales in designated cattle markets organised by the government. The Governor consented to an experiment of three months where the Akamba would voluntarily sell their cattle on prescribed days without the placement of any other conditions or restrictions. Although the Akamba presented a memorandum of compliance, the response to the proposal was, by all intents and purposes, non-existent (KNA/DC/MKS/1/1/27, 1938:17).

This was well demonstrated through the 2,500 heads of cattle confiscated from them on the 8<sup>th</sup> of July. They were returned to the location six times with the hope that the owners would claim them to no success, a clear sign that the colonial administration had underestimated Akamba resistance and treated the administration as an unwanted ally (Osborne, 2008:76). The government was stuck with cattle; it could neither return to the owners successfully nor auction since it would be against the law. Further, the arrest of the prominent members of the association brought the active political protest to a halt (Tignor, 1976:337). In Ngelani, Iveti Location, however, active resistance, which was the stronghold of the Association and a police force, was stationed there to deal with the agitation.

The European administration severally observed that degradation was proceeding at a much faster rate than reconditioning. Forced destocking through compulsory sales was a very unfortunate mistake as the

colonial administration, in their zeal, had overestimated their control over the people. The Akamba were uncooperative, and this "Red Letter Order" had far-reaching effects on future reconditioning. Eventually, the 2,500 cattle impounded were returned unconditionally to their owners and intensive reconditioning campaign under the joint auspices of the DC, and the Senior Agricultural Officer were instituted almost immediately (Matheka, 1992:81).

In Machakos County, the marketing of African livestock was hindered by quarantine regulations. The situation was made worse by colonial alienation of vital dry season pasturelands for European settlement had negatively affected the productivity of the Kamba pastoral economy (Anderson, 1984:334). Destocking was viewed as the plain answer to the overgrazing and productivity decline of Machakos lands. The Kamba were unwilling to sell their livestock at the values given by European buyers. This gave strength to the view of forceful action by the government to reduce Kamba livestock by obligatory sales or livestock levy. Grazing land capacities were calculated with those identified as exceeding these capacities marked for destocking (Tiffen & Mortimore, 1994:43). In short, compulsory destocking was not an easy policy to implement in Machakos County.

At the same time, the Soil Conservation Service financed by the Colonial Development Fund commenced soil conservation measures in Kilungu and Mbooni in 1937. Using terracing and implements drawn by oxen and tractors, thirteen areas, with a total of 304 acres, were planted and terraced in these locations, ample supervision being made for the trench ways. In addition, a few demonstration bench terraces were made, and great efforts were made to induce the people to lay all waste vegetation and trash from their *shambas* in contour lines. However, poor rainfall hampered conservation activities. Moreover, cooperation of the people was almost non-existent as any reconditioning effort was associated with destocking, and as the year ended, the mechanical unit ceased to function. This was due to political agitation on the part of the UMA, which continued into 1939 and mid-1940 (KNA/DC/MKS/1/1/27, 1940:6).

The inhabitants of these locations remained "stubbornly unruly" with regard to the regulations governing soil conservation and the instructions given to them by the local authorities (KNA/DC/MKS/1/1/28, 1942:3). Contour pegs placed in their *shambas* by the Agricultural staff were pulled out by the people time after time in the early 1940s. Residents of Ngelani and Iveti locations declined to carry out necessary soil control measures. The highest stage of this agitation was evident when about 500 women protected by their men commenced rioting, which was quickly quelled by the police force. Under distress, then the inhabitants carried out extensive soil control necessary in a comprehensive manner. Some 4,000 acres in the Ngelani and Iveti areas were properly controlled with contour ridges and grassed drainage ways necessary for the big cultivation blocks. However, drought conditions in the eroded areas made large-scale grass planting difficult, leading to the adoption of closing these areas to all grazing and the appointment of grazing guards in all the locations working under Native Agricultural Instructors (KNA/DC/MKS/14/3/2, 1958, 22).

Colonial administrators might have been accurate in setting guidelines and astute to choose forceful destocking. However, they failed to show the Kamba cultivator and livestock keeper what concrete profit the conservation endeavour would convey to the land, and rarely could it provide sufficient inducement for such work. During the 1930s, the colonial administration in Kenya adopted an active concern in agricultural systems to address challenges resulting from the Depression. The colonial administrators were fixated with the perceptible risk threatening the African land productivity due to overcrowding, land overuse and soil erosion (Thurston, 1987:15). During the 1930s, conservation of resources became a central

concern of the colonial government. Various factors worked to promote the shift in the direction of policy involving Africans in the agricultural development of the reserve. These were the economic reconsiderations brought about by the Great Depression of the early 1930s, the international panic generated by the disastrous effect of the Dust Bowl at its height in 1935, the acknowledgement at the time that pressure on land in the reserves had been created by an increase in both livestock and human numbers and finally, the fear that the droughts experienced in Eastern Africa between 1925 and 1935 were an indication that a desert was being created (Anderson, 1984:312).

The Depression greatly exposed the weakness of the settler economy in Kenya. In response to the Depression, settlers in Kenya adopted a defensive attitude by actively campaigning to solidify their position in the long-term affairs of the colony. The disquiet of the settlers throughout the Depression was over the legality of European land tenure. The 1932-33 Kenya Land Commission challenged settlers to validate their elevated status in the colony while also presenting the opportunity to cement their claims to irrevocable title to land (Munro, 1975:245).

## **Environmental Reconditioning Measures in Machakos, 1938-1945**

The Second World War (1939-1945) greatly affected how colonial territories were administered. Kenya was no exception. In Machakos County, the ecological challenges experienced since the inception of colonial rule peaked during the Second World War. The conscription of many young people into the war, frequent famines due to drought, poor soils, and declining livestock numbers meant that the community's economic fortunes declined further (Rocheleau et al., 1995:26). After the 1938 destocking experience, the colonial administration's tone towards the Machakos Problem of environmental degradation and reconditioning mellowed. The British assumed a more interventionist approach in the County, initiating many large projects meant to benefit the Africans. Here, in the 1940s, the colonial policy was undergoing enormous reworking, with profound consequences. Administration voices in Britain raised the idea of 'local government' to imply a new approach to colonial administration. In Machakos, a policy to 'purchase' or buy back the co-operation of the Akamba, whose trust had been lost in the activities of March to July 1938, was mooted (Osborne, 2014:183). Through the Colonial Development and Welfare Act of 1945, a grant of £ 120 million over ten years for the colonies was set up, which funded integrated plans for projects significant in the political ecology of Machakos in the emergency years (Thurston, 1987:19). Since the inception of colonial rule, Europeans had remained aloof, serving Africans from a supervisory position. This new approach was more inclusive of African affairs, especially in Machakos County.

The economic and administrative adjustments of the 1930s laid the foundation on which policy formulation in the 1940s was built and executed. During the Depression, settler agriculture received unprecedented financial support from the Kenyan government. The colonial government also began to take an interest in African production during the Depression. In the administrative field, the policy of strict indirect rule changed to a more interventionist strategy with policies of African land use and reconditioning being reinforced (Green, 2009:249). Environmental policies that had developed by 1938 were a result of a combination of local and international circumstances, including the Great Depression and the Dust Bowl phenomenon. The Second World War added parts to this structure (Anderson, 1984:343). In Machakos, the problems that attained international concern were those of soil erosion and rapid land degradation due to destructive Kamba agricultural practices (Rocheleau, 1994:8). Consequently, soil conservation acquired an integral position because it rested at the core of African development strategy.

In 1937, the Colonial Office drew a larger budget for soil conservation for Machakos County 1937 (KNA/DC/MKS/1/1/27, 1937:22). Direct action by the British government was deemed as a necessity. In February 1938, all the colonies were required to vide a Colonial Office circular to submit annual reports of soil conservation activities undertaken by various departments in any particular year (Anderson, 1984:341). Suggestions for the mechanical construction of conservation work in Machakos began in 1937 under Frank Stockdale, the Agricultural Advisor to the Colonial Office (KNA/DC/MKS/1/1/27, 1937:2-4).

As soil erosion became a recurrent theme in Colonial Office's deliberations on agricultural production, Stockdale gave 'professional' judgment and drew proposals on policy. He guided the administration on what strategies to apply and which ones to dismiss and prepared propaganda material to enlighten European officials on the weight of environmental degradation. Stockdale pushed the view that soil erosion had commonalities in all British colonial possessions (Thurston, 1987:22). He opined that it was uneconomical to employ heavy machinery in soil conservation. According to him, most African lands could not sustain the cost of maintaining mechanical anti-erosion works since they had low productive capacities (Rocheleau, 1994:12). Mechanisation, however, played a central function in the execution of development plans throughout Machakos County after 1945. Even though the costs of mechanisation were high, the government believed that the inferences of solving land-use crises through labour-intensive ways superseded the advantages in applying better farming methods (Anderson, 2002:205). Voluntary communal conservation was a very heavy burden on the farmer, who opposed colonial conservation even when it was meant to benefit the Kamba agricultural and pastoralist economy.

Increasingly convinced of its own authority and of the urgent need for reform after 1945, the colonial state in East Africa advocated scientific agriculture in tandem with an ambitious programme of social engineering (KNA/DC/MKS/14/3/2, 1959:22). Land-tenure was the central element of this push for modernisation leading to an end to communal rangelands, the consolidation of plots of land and the introduction of the individual title deed to land in agricultural areas such as Machakos County (Fazan, 2015:89). This transformation is seen as part of a wider application of the new colonialism of the second colonial occupation (Lonsdale, 1991:173). The 1940s saw the emergence of a new kind of colonial rule. The state was reinforced by an army of officials and technicians who imposed this new order leading to new forms of African resistance to this invasion. The actions of the colonial state after 1945 were not always popular with Africans, and in many places, the emergence of the politics of African nationalism was fuelled in the rural areas by opposition to colonial development and conservation policies (Osborne, 2014:189). The dynamics of colonial land policy and African response after 1945 is discussed in chapter four.

Nevertheless, the administration was convinced that the Akamba were prepared to cooperate with the government to save their 'unfortunate' country. 'The activities of a few local semi-educated men who, together with their colleagues in the KCA, found political agitation an occupation of easy money' acted as an impediment (KNA/DC/MKS/1/1/27, 1938:9). The sanction for £34,000 obtained in 1937 from the Colonial Development Fund was divided into a free grant of £10,000 wherewith to get soil conservation methods (terracing, tree and grass planting) started in the Matungulu-Kangundo area and a sum of £24,000 secured and repaid as a sinking fund by the LNC, for expenditure on the rest of the County. Soil conservation headmen were appointed as well at the rate of one or two per location to work under area supervisors (KNA/DC/MKS/1/1/27, 1938:8).

A new system of destocking based on mixed farming was adopted, which received a better response from the Akamba. This system encouraged the planting of sisal hedges around individual holdings, the use of manure, and closing up cattle shades at night to help form such manure. From 1939, this reconditioning work was carried out through Kamba chiefs, elders and *asili* (judges) with the supervision of two Europeans. However, the Akamba took long to accept the limitation of stock and reconditioning since they were not involved in the formulation of policy. Rather, European-formulated policy was forced on the people through the LNC with the agency of the DC (Munro, 1975:230).

The Colonial Development Fund purse allocated to the County was exhausted in 1941. This change meant a reduction in staff, especially of untrained labour. Staff for reconditioning was divided into soil conservation works, reconditioning grassland (closing and grass planting) and dam construction and maintenance (Thurston, 1987:17). From 1942 therefore, reconditioning work was carried out with the aid of funds provided by the government and the LNC. The fact that this money was considerably less than that, which was available the previous years, was a blessing in disguise hence avoiding African resistance. While the money was sufficient for all reasonable requirements, it was a strictly limited amount, and this ensured that reconditioning measures were not pushed so vigorously as to engender opposition (KNA/DC/MKS/1/1/28, 1942:3). European attention on the Machakos Problem was thus reduced due to lack of finances. Nevertheless, the Akamba continued to critique theories, policies and practices of economic development and environmental conservation taken on the basis of colonial intentions and judgment to the detriment of the Kamba (Rocheleau et al., 1994:4).

Soil conservation measures imposed forcefully on hungry people only made them angry with government policies. Tangible positive change in reconditioning work was not widespread. Though the administration kept looking at the Akamba as lazy towards conservation work, it was not laziness but lack of a sense of ownership towards conservation efforts because Machakos reserve had become less productive areas over time despite all exertion to improve environmental conditions (Green, 2009:263). Where European supervision lacked, there was also an absence of rigour towards environmental work (KNA/DC/MKS/1/1/28, 1943:3). Africans did not develop a sense of ownership towards environmental reconditioning activities, nor did they view such activities to be of direct benefit. Africans harboured feelings of political exploitation through their environment and never reaping benefits from economic and political prosperity in the colonial order of things and the numerous labour-intensive conservation works (Anderson, 2002:195). Indeed, political ecology highlights the nature and complexity of the relationship between the natural environment and its human elements (Aseka, 1993:1).

Closely connected to the environmental history of Machakos County were famines due to drought and human factors. Rainfall failure and famine occurred on varying high scales between 1933 and 1950. The political nexus of these famines in the colonial period is well discussed by Matheka (1992). The County suffered a severe food shortage in 1941, culminating two years of poor and badly distributed rain. It was hard to find any food reserves at all in the villages, and thus the inhabitants relied on imported maize. Moreover, grazing was practically non-existent, and food supplies were obtained from Kikuyu land (areas of Nyeri and Karatina), Kitui or relief food sold by the government. Grazing was scarce as grass suffered greatly from the long droughts. As a result, much of the livestock was slaughtered for food. The government reported that "it is difficult to understand how the Akamba continued to carry on without appealing to Government for assistance and I know of no other tribe, except perhaps the Turkana, which could have survived the lack of food so successfully and so cheerfully" (KNA/DC/MKS/1/1/28, 1941:2). The

gradual incorporation of Kenyan communities into the capitalist system through the colonial state progressively led to a crisis in pre-existing production and distribution systems (Matheka, 1992:33).

In most areas of the reserve, people were induced to sell their surplus food by high wartime prices. Continuous drought conditions, coupled with the fact that many of the young men had joined the war leaving inadequate labour in the reserves, plunged the reserve into famine conditions that lasted up to 1947 (Matheka, 1992:139). As a result, there was an insufficiency of food supplies for the people to buy. That is, although money was abundant in the reserve, the general shortage of foodstuff in the colony meant that it was difficult to find food to buy (KNA/DC/MKS/1/1/28, 1943:1-2). War income was beneficial to the Akamba at this time of drought and famine for subsistence. They relied on wartime remittances from their kin in the war to buy food from the Kikuyu at inflated prices (Parsons, 1999:684). The administration realised that the environmental conditions in Machakos County had deteriorated to such an extent that demobilisation was difficult in such circumstances. According to the DC J.G. Hopkins, the situation could not be ignored since "nothing of importance can happen in a native reserve without its having administrative repercussions sooner or later ...." (KNA/DC/MKS/8/3, 1944:1). This line of thought was undertaken in the next chapter.

Politics greatly influenced the evolution of a conservationist policy in Kenya due to the control of the administrative affairs of the colony by the settler community. Political factors, therefore, played a major role in the policies adopted to deal with environmental degradation in Kenya in general and Machakos in particular up to 1945. European settler demands swayed the colonial administration leading to better coordination of government effort, which quickly attained a broad outlook covering several parts of the colony. European direct involvement in Kamba farming practices was identified in the Report of the Kenya Land Commission. Department of Agriculture pamphlets distributed in the early 1930s and the visit to the Colonial Office Agricultural Advisor Frank Stockdale were also important. Kenyan agricultural officers who visited South Africa and South America brought their observations to contribute conservation methods in Machakos. Forced destocking failed in Machakos. The Kamba, while in agreement on the need to reduce their stock, were in favour of voluntary livestock sales on stated days of the week adhered to with difficulty. Therefore, the government placed no further restrictions or conditions on the community regarding destocking.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

**Conclusion:** This has concluded that political considerations were made in regard to the environment. The intersection between colonialism, resource utilisation, and local and international politics fall in the context of environmental history.

**Recommendation:** The area recommended for further research is the means adopted for environmental reconditioning and conservation in Machakos County after forceful destocking failed. Second World War developments, the Mau Mau and nationalism towards independence in relation to Machakos County's environmental history are also interesting areas of study.

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