

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

Yusto Clemence Mwandete

Department of Humanities, Catholic University of Mbeya, Tanzania

ABSTRACT: Colonial scientific forestry emphasized the demarcation, mapping, measurement, classification, and management of forest land for ecological and economic purposes. It was a key strategy employed by the British colonial administration to conserve soil, protect water catchments and exploit timber resources. Under the guise of scientific forestry, the British colonial government transformed indigenous forest land tenure systems and undermined traditional ecological knowledge. Forest reserves were established not only as instruments of ecological regulation but also as tools for imperial control, revenue generation and territorial reordering. In Tanganyika, the application of scientific forestry was shaped by the League of Nations Mandate and the policy of indirect rule. This study employs analytical, descriptive, and interpretive qualitative methods, drawing on written documents and electronic sources. It examines the implementation of British colonial scientific forestry in the creation of the Mbeya Range Forest Reserve through the displacement of local communities in the name of conserving water catchments and soil. The British administration's failure to involve local communities in the establishment of the reserve led to resistance and weakened the legitimacy and effectiveness of conservation policies. Furthermore, financial and human resource constraints, including inadequate budget allocation and staffing, hindered proper supervision of the project. The study concludes that the creation of the Mbeya Range Forest Reserve, while ostensibly aimed at environmental conservation, ultimately served to reinforce colonial authority and economic interests at the expense of indigenous land rights and cultural practices.

KEYWORDS: Scientific Forestry, Conservation, Mbeya Range Forest Reserve, Tanganyika.

INTRODUCTION

Forests were an integral part of the environment in pre-colonial African societies, as people relied on them in multiple ways. For centuries, African communities maintained a vital ecological relationship with forests by deriving numerous social, economic and cultural benefits from them. Beyond meeting human needs, forests performed key ecological functions including the protection of soils and the preservation of water catchment areas, both of which are essential for maintaining hydrological balance. Catchment forests served three major purposes: water conservation and watershed management, biological and gene-pool conservation, and forest production.¹ This interdependence led communities to develop traditional forest knowledge and practices that guided the sustainable use of forest resources. Pre-colonial African societies implemented various forest management methods that enabled them to obtain shelters, sustenance, and livelihoods from forest ecosystems. These forms of indigenous knowledge were deeply embedded in cultural norms and belief systems by ensuring both the effective use and conservation of forests. With varying degrees of success, African communities evolved conservation measures shaped by environmental practices, economic needs, and religious beliefs. Recent environmental historiography has increasingly recognized African agency by portraying Africans not as passive victims of their environment or as people awaiting external intervention,² but as active agents, doers, masters, and shapers of their landscapes. Numerous cases across Africa demonstrate that indigenous communities possessed norms and ecological knowledge that contributed to the protection and enhancement of forests.³ However, from an environmental scholarship, forests in

¹ S. B. Misana (1988) The Shrinking Forests and the Problem of Deforestation in Tanzania. *Journal of Eastern African Research & Development*. p. 108.

² V. C. Kwashira (2013) Environmental Change, Control and Management in Africa. *Global Environment*. P. 170.

³ E. Chiwanga (2006) 'Indigenous Knowledge Systems' in Environmental Management and Sustainable Development: Case of the Masai in Komba A.A (Ed.) Sustainable Development and the Environment in Tanzania: Issues, Experiences and Policy Responses (Dar es Salaam:OSSREA), p. 144.

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

addition to the already listed benefits also assist to naturally purifying of water, to restore soil and mitigate climate change.⁴ Environmental historians of Africa no longer see Africans as an inferior and unscientific race.

The establishment of German colonial rule in Mbeya began in Rungwe District in 1893, three years after the Anglo – German Agreement in 1890. German forestry management was under the Department of Natural resources and Surveying, which later became the Department of Agriculture. A separate German Department of Forestry and Wildlife was set in 1912.⁵ The German government in East Africa stayed for too short period to have left a lasting forestry legacy for British Tanganyika and independent Tanzania. In forestry management the Germans used strict ordinances and taxes which inflicted torture on Africans through coercion, cruelty and disturbance of traditional lifestyle.⁶ That situation made the Germans to encounter various uprisings and other forms of African resistances such as lack of support from local people that caused shortage of labour for forestry and other works. Thus, though German forestry made some major and lasting contributions to the development of natural resources in German East Africa, it largely failed to solve the socio-cultural problems. The ideological basis for colonial forestry was founded upon two key issues: ecological and economic benefits.⁷ From 1891 to 1919 the German colonial rule established forests for the preservation of resources from forests. German government controlled all forest destructive practices of burning, grazing, logging and others by using ordinances, edicts and severe punishments.

The British received the administration of the German East Africa after the German defeat in the First World War as a mandate territory under the League of Nations to fulfill part of the terms of the 1919 Versailles Peace Treaty. The Covenant of the League of Nations contained articles 22 and 23 which approved the principle of a mandatory administration for the German Colonies.⁸ Although the mandate system did not fulfill all the expectations initiated at the end of the First World War, but within its limited ability, it brought about some progress in care for the local people. The defect of the League of Nations was in the failure to supervise and prevent abuse without serious sociopolitical improvement in the colony.⁹ The mandate system shaped the British colonial management of natural resources. Its influence was in land tenure promulgated in the 23 Land Ordinance which though in contradictory manner emphasized the paramount interests of the local people.¹⁰ The British colonial natural resources' conservation was also modeled by indirect rule by which the traditional rulers under the supervision of the British colonial officials administered the government.¹¹ Indirect rule governed through the existed local African traditional leaders who were also used in the implementation of policies of conservation of forests at the local level. From the 1920s to the 1950s there was a transformation in British government that was accompanied with "second colonial occupation" which also led to the evolution of modernization and the use of science and technology in agriculture and the management of natural resources.¹² After the Second World War in 1945 Tanganyika became a Trust Territory under the United Nations Organization.

The British colonial government had policies which assisted the colonial officials in the management of natural resources of forests, water and land. The Land Ordinance 1923 became the basis of the British colonial government in the conservation of natural resources in Tanganyika. By using that Ordinance the British colonial government declared all land in Tanganyika public land controlled by the Governor.¹³ The declaration of all land as public through the 1923 Land Ordinance provided the essential legal foundation for the colonial administration to implement its conservation agenda. This act fundamentally shifted the power dynamic regarding land and resource ownership by enabling the British to unilaterally decide on land use, allocate areas for reserves and regulate activities with limited need for the consent or agreement of the indigenous population. This concentration of power was central to the implementation of their conservation objectives. Furthermore, the close relationship between land and forest policies indicated that water conservation was likely viewed as an intrinsic part of broader ecosystem management. Forests were recognized for their crucial role in regulating water cycles and protecting the sources of water. The Forest Conservation

⁴ S. Ongolo and M. Krott (2024) *Power Dynamics in African Forests. The Politics of Global Sustainability* (New York: Routledge), p.7

⁵ H. G. Schabel (1990) *Tanganyika Forestry under German Colonial Administration, 1891-1919 Forest & Conservation History*, p. 130.

⁶ *Ibid.* p. 139.

⁷ B. Bennett and F. Kruger (1983) *Forestry + Water Conservation in South Africa* History, Science + Policy (Australia: ANU Press), p. 344.

⁸ N. Bentwich (1946) *Colonial Mandates and Trusteeships. Transactions of the Grotius Society*, pp. 121 – 122.

⁹ *Ibid.* p. 124.

¹⁰ Land Ordinance Number 23 of 25th January, 1923.

¹¹ A. Jong (2000) *Mission and Politics in Eastern Africa, Dutch Missionaries and African Nationalism in Kenya, Tanzania and Malawi 1945 – 1965* (Nairobi: Paulines Publications Africa), p. 16.

¹² D. Low and J. Lonsdale, (1976) "Introduction," In D. Low and A. Smith, eds. *The Oxford History of East Africa*. (Oxford: University of Oxford Press), p. 12.

¹³ Land Ordinance 1923. Op.Cit.

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

Ordinance of 1921 was enacted to control forests in Tanganyika by restricting to access and use forest products.¹⁴ The ordinance prescribed the necessary legislation for the establishment of forest reserves and the control of various activities within their boundaries. The 1921 Forest Ordinance was revised to allow more access to natural products by modification in the Ordinances of 1926 and 1930.¹⁵ The permits were removed in the Forest Ordinance enacted in 1933¹⁶ aimed at protecting forests for water catchment and preventing forest loss from fire and grazing. Restrictions in the 1933 Forest Ordinance were retained in the 1957 Forest Ordinance. The 1953 forest policy statement for Tanganyika explicitly recognized forest reserves as being primarily for protection, with key objectives including the safeguarding of water supplies and the control of soil erosion.¹⁷ It emphasized among other things, the overriding importance of agriculture, that forests were a land bank to be converted to other uses as required, but that a permanent government-controlled forest estate was to be set aside for the protection of water supplies, catchments and soil. It also emphasized the need for sustainability of forest produce of all kinds.¹⁸

The use of the 1953 in colonial conservation interventions indicates a clear understanding within the colonial administration of the critical link between forest ecosystems and the availability of clean water. As a result, the establishment of forest reserves served not only to safeguard timber resources and biodiversity but also to protect vital water catchment areas under the serious control by the colonial authority. The prioritization of forest protection as a means of water conservation reflected the prevailed ecological understanding of the time which emphasized the crucial role of vegetation particularly forests in upland areas and around water sources in maintaining a stable hydrological balance. That understanding clearly influenced the types of interventions undertaken by colonial authority in Mbeya Range where forests were recognized for their importance in regulating water flow and quality. By protecting these forests, the colonial administration aimed at ensuring a consistent and reliable supply of water not only for environmental sustainability but also potentially to support colonial economic activities and settlements.

LOCATION OF MBEYA RANGE FOREST RESERVE

Mbeya Range lies immediately to north west of Mbeya town and is a mountain mass of 40,23 kilometres long with average width of 9.66 kilometres making an areas of 388.62 square kilometers.¹⁹ The Range runs in a west-north west to east south easterly direction falling away into the Rukwa basin to west and merging with Chunya scarp to the east. The highest peak in the Range is around 28,261,056 metres while the average height of the Range is around 24,384 metres.²⁰ When viewed from the surrounding plains the Range seems to consist of a solid block but it is in fact a long spine broken by deep valleys which are separated by spurs running in all directions.²¹ The main valleys begin on the very top of the ridge and are then broken by series of minor valleys. On the height of the Range, there were remnants of secondary rain forest around stream and river sources elsewhere the vegetation was composed of grassland and scattered trees. The steep sides showed a swift change to temperate bush was being destroyed gradually by fire.²² Dry forest occurred towards the western parts of lower elevation.

On the north side of the Range the main river system is that of the Shongo with its two chief tributaries the Ngogwe and Debwe. On the south side of the Range there are a large number of smaller rivers of which the most important are the Mshewe, Ilunga, Salizi, Mfiwizimo, Kizimba, Nonde and Amaso.²³ Therefore the Range forms a large number of streams and rivers which were vital to the inhabitants of the plains and which provided water supply for Mbeya township, the Daresco hydro-electric plant and thousands of acres of irrigated land along the Nzovwe river in Mbeya District and its tributaries and the Shongo River in Chunya District.²⁴ The Mbeya Range Forest Reserve was ecologically diverse, featuring Miombo woodland at lower and middle elevations, strips of upper montane forest along the courses of major streams and grassland in the higher altitude areas.¹⁵ This variety of ecosystems underscored the reserve's potential importance not only for biodiversity conservation but also for its role in water catchment, particularly the montane forests along the streams. The eastern part of the Mbeya Range Forest Reserve lies in

¹⁴ Forest Ordinance for the Conservation and Management of Forests Number 32 of 1921. 17th August, 1921.

¹⁵ Ordinance for the Conservation and Management of Forests Number 86 of 20th August, 1926 and of Number 163 of 9th October, 1930.

¹⁶ Ordinance for the Conservation and Management of Forests Number 119 of 4th August 1933.

¹⁷ Tanganyika Legislative Council, Forest Policy, Tanganyika Territory Session Paper Number 1 of 1953

¹⁸ P.J. WOOD (2006) Forestry in Africa, past and Present: a Personal View. *The International Forestry*. p. 141.

¹⁹ Mbeya Southern Highlands Zonal Archives (MSHZA), Report on the History of the Creation of Mbeya Range Forest Reserve

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ Ibid.

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

the Usafwa Chiefdom and the western section in the Usongwe Chiefdom. Although organized into separate and independent chiefdoms, the local communities in the Range were all Safwa.

LITERATURE REVIEW

In his analysis of state forest policy in colonial Tanganyika, Neuman (1997) hinted on how the Safwa people were evicted out of Mbeya Range Forest Reserve in 1954 by the application of colonial scientific forestry.²⁵ However, in this paper it is confirmed that final displacement of people in the Range was finalized in 1956. On the same Mbeya Range Forest Reserve Ngondya (2011) evaluated the ecological conditions by revealing that lack of conservation skills among local communities was the main cause of environmental degradation in the Range aggravated by charcoal burning, firewood collection, poor farming methods and overgrazing.²⁶ On Nature Forest Reserves similar to the Mbeya Range, Mmbaga and Athumani (2024) analyzed the Mount Rungwe Nature Forest Reserve found in Mbeya Region as one of the areas with ecological diversity serving as a water catchment with natural forest and wild animals.²⁷ The study determined the shared benefits, challenges, costs and involvement of the neighbouring communities in the conservation of Mount Rungwe. While the local people faced problem caused by wild animals but enjoyed ecological benefits of clean water, honey and controlled firewood collection.²⁸ In Namtumbo District, Tanzania, Kizigo (2023) had a study on local perceptions on community forest conservation. He confirmed that positive perceptions were influenced by ecological benefits, age, land ownership, policies and regulations and positions in decisions making.²⁹ It was observed that in spite of the involvement of local communities in conservation but achievement was not attained due to lack motivation and conflicts of interest.

In relation to effects of environmental conservation, Alawi (2014) assessed the colonial and post colonial environmental policies by using evidence from Morogoro and Shinyanga Regions in Tanzania. He realized that the setting of policies was determined by interplay of the prevailed internal and external influences in reference to the extent of environmental damage.³⁰ Kangalawe (2018) traced the history of establishment of Sao Hill Forest in Tanzania from 1939 to 2015. In his thesis he found that Sao Hill Plantation Forest was initially established to assist in environmental conservation around the white commercial farms and tea farms. During the post-colonial period the forest kept developed for the implementation of Basic Industrial Strategy with intention of fulfilling the policy of self-reliance after the Arusha Declaration in 1967.³¹ In relation to colonial water management in Kenya, Parker (2020) traced the history of colonial irrigation projects in eastern and northern Kenya, by highlighting the extent of the use of force in the establishment of the schemes and their effects on rural societies. His thesis exposed the threats in the segregative supply of water in remote areas and the effects they had on communities and landscapes.³² The colonial schemes adversely affected indigenous livelihoods by causing poverty and social resistances. On the creation and evolution of state forestry within colonial Kenya, Fanstone (2016) showed the colonial perception that the local community were destructive to forests. He traced the role of the Forest Department and its local communities, white settlers, and the colonial authority in fostering the notion of 'good forest' and the ways Africans were exploited by colonial state.³³ Agroforestry system, *Shamba* was the foundation of forestry establishment in the 1950s, and its progress highlighted the status of forestry conservation in Kenya as a top-down state-centred approach. Mutuga (2009) observed on how protected areas were affected by environmental degradation due to urbanization. She used a case study of Nairobi National Park to show Urban growth had adverse effects on nature due to

²⁵ R.P Neumann (1997) "Forest Right, Privileges and Prohibitions: Contextualizing State Forestry Policy in Colonial Tanganyika". *Environment and History*. P. 56.

²⁶ B. Ngondya (2011) Are Poverty and Illiteracy to Blame for Forests Degradation? A Case Study of Mbeya Range Forest Reserve. Mbeya-Tanzania. *Journal of Forest Science*

²⁷ N. E. Mmbaga and P.C. Athumani (2024) Community Perceptions on Conservation of Mount Rungwe Nature Forest Reserve, Tanzania: Opportunities, Threats, and Challenges. *Discover Conservation*, p. 1.

²⁸ Ibid.

²⁹ S. M. Kizigo (2023) Local Perceptions on Community Forests Conservation: Lessons from Namtumbo District, Tanzania *Journal of the Geographical Association of Tanzania*.

³⁰ M. H. Alawi (2014) an Assessment on the Effects of Environmental Conservation Policies in Colonial and Post Colonial Tanzania, 1922- 2000 : The Case of Morogoro and Shinyanga Regions. PhD Thesis: The Open University of Tanzania, p. vi.

³¹ H. Kangalawe (2018) Plantation Forestry in Tanzania: A History of Sao Hill Forests, 1939-2015. PhD Thesis: Stellenbosch University, pp. 212 – 213.

³² J. Parker (2020) The Fluidity of Late-Colonial Development: Water Management, State Building, and Rural Resistance in Kenya 1938-63 (PhD Thesis) Northeastern University, Boston, Massachusetts, p. 3.

³³ B. P. Fanstone (2016) The pursuit of the 'good forest' in Kenya, c.1890-1963: the history of the contested development of state forestry within a colonial settler state. PhD Thesis: University of Stirling, p. 3.

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

population increase and expansion of human settlements and infrastructure that resulted in the degradation of ecologically valuable areas like the protected areas.³⁴

In the observation of political ecology of conservation and development in Tanzania, Ponte et al (2022) used New Partnerships for Sustainability of a multi-disciplinary team to trace sustainability partnerships in key natural resource sectors including wildlife, forestry and coastal resources in Tanzania. Evaluation was done on in each of the sectors, if cooperation with local people, private and civil society stakeholders who fulfilled participatory approaches in the management of natural resources, had positive environmental consequences and enhanced better livelihoods.³⁵ Observation in the three sectors permitted the analysis of formal experiences and lessons that could be used in the conservation of natural resources. By also using a political ecology of forestry policy in Sierra Leone, Munro and Horst (2011) traced the conflicts and contradictions caused by 'forest conservation' and 'timber production' in historical and recent Sierra Leonean forestry policies. They demonstrated the close link that prevailed between conservation and exploitation assertions in the policies of forestry.³⁶ By basing on boreal forests, Girona (2023) examined the current approach for the conservation of the forest in relation to climatic change. He argued that climate change was affecting species distributions, natural disturbance regimes and forest ecosystem structure and functioning. Although sustainable management remained the central objective across the boreal biome, a current approach required for forest strategies and practices to climate change.³⁷ In relation to recent environmental history of Mexico, Boyer (2015) traced the history of forests of Chihuahua and Michoacán as political landscapes. Conflicts among local landowners, the federal government and timber companies politicized these geographies portraying the significant role that social factors influence the shaping of environments.³⁸ . Emphasis culminated on the importance of establishment of "community forestry," in which those who stayed and worked in the forests could get some of the benefits as stakeholders in management and sustainable use of the forest resources.

In tracing the history, science and policy of forestry and water conservation in South Africa, Bennet and Kruger (2015) evaluated discourses on the hydrological effect of exotic tree planting in South Africa how influenced the emergence of scientific issues and government policies in line to timber plantations, water conservation, invasive species control, and ecosystem management within South Africa and elsewhere in the world.³⁹ They also called for more interdisciplinary research and greater emphasis on integrated policies and management plans for forestry, invasive alien plants, water conservation and biodiversity preservation. Ojha et al (2025) analyzed current studies and approaches from Nepal's community forestry management by basing into when and how the method could lead to forest landscape restoration and equitable livelihoods.⁴⁰ In evaluating African environmental crisis, Oba (2020) examined on how and why the issue of the environmental problem emerged and prevailed through colonial and post-colonial and showed the reasons which made the problem to remain crucial in development discourse.⁴¹ He commented that that defective colonial observations and studies revealed wrong results on the environment in Africa. He evaluated the use of colonial scientific forestry for development across colonies and post- independent states of Kenya, Tanganyika (Tanzania) and Uganda in East Africa.

THE CREATION OF MBEYA RANGE FOREST RESERVE

The British colonial authority struggled to establish the Mbeya Range Forest Reserve by implementing its colonial conservation strategies and policies. Colonial scientific forestry emerged as a dominant strategy for forest management in many parts of the British Empire, it was set on the attentive and sustainable extraction of forest resources through demarcation, classification,

³⁴ F. Mutuga (2009) The effect of urbanization on protected areas The impact of urban growth on a wildlife protected area: a case study of Nairobi National Park. Thesis for the fulfilment of the Master of Science in Environmental Sciences, Policy & Management: Lund University, p. iii.

³⁵ S. Ponte et al (2022) *Contested Sustainability: The Political Ecology of Conservation and Development in Tanzania* (Rochester: James Currey), p. 3.

³⁶ P. G. Munro and G. H. Horst (2011) Conserving Exploitation? A Political Ecology of Forestry Policy in Sierra Leone. *ARAS*, pp. 72 – 73.

³⁷ M. M. Girona(2023) *Boreal Forests in the Face of Climate Change Sustainable Management* (Gewerbstrasse : Springer Nature Switzerland AG), p

³⁸ C. R. Boyer (2015) *Political Landscapes Forests, Conservation, and Community in Mexico* (Durham & London: Duke University Press), p. 4.

³⁹ B. Bennett & F. Kruger (2015) *Forestry and Water Conservation in South Africa History, Science and Policy* (Australia: ANU Press), p. 3.

⁴⁰ H. Ojha et al (2025) Reimagining forest communities Key insights from Nepal's community forestry. In H. Ojha et al, (Eds.)(2025) *Restoring Forests and Improving Livelihoods in Nepal Four Decades of Community Forestry* (New York: Routledge), p. 329.

⁴¹ G. Oba (2020) *African Environmental Crisis A History of Science for Development* (New York: Routledge), p. xii.

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

mapping, and centralized control of forests.⁴² Colonial scientific forestry has often been portrayed in the literature as a rational and ecologically-driven model aimed at conserving forest resources. Although methods of scientific forestry differed from one colony to other, its basic premise was the need for the state to assume control of forests and woodlands so that they could manage productively for their timber and other forest resources as part of a strategy of colonial development. Forest reservation meant demarcating forests, emptying them of peasants, pastoralists and policing them against encroachment by people and livestock.⁴³ The establishment of the Mbeya Range Forest Reserve was part of a broader pattern observed across British colonial Tanganyika where the colonial government increasingly exerted control over land especially in hinterland territories under the used of scientific forestry.⁴⁴ The District Officer, Brayne R. B (1954) reported in archival documents that the objectives of reserving Mbeya Range were to conserve its water supplies and soil conservation.⁴⁵ It was the British colonialists who started the struggle for the establishment of Mbeya Range Forest Reserve after shifting their administrative headquarters from Igale to Mbeya urban settlement in 1927.⁴⁶ British colonial administration started serious struggle to create Mbeya Range Forest Reserve in 1938 after realizing that there was a critical environmental degradation. There was environmental damage in the Range caused by unrestricted cultivation both on the steep mountain slopes and in the valley bottoms. There were disastrous grass fires every year.⁴⁷ The flow of water in the rivers in the dry seasons grew steadily less and for many years grave anxiety was felt on that problem. Grazing by domestic animals presented no problem as the number of animals was insignificant. It was reported that there were some 300 families that lived and cultivated on the Mbeya Range.⁴⁸ The families in their agricultural practices had no conservative ideas and their ambition was to be left in peace to live their lives in manner of their forefathers.⁴⁹ It was, however, their methods and places of cultivation which led to a grave diminution in dry season flow of rivers rising in the Range and thus to their eventual removal from the Range in the interests of preserving the water supplies for the inhabitants of the plain below. During the Second World War years and immediately after the war little further action was taken and it was not until those further serious efforts were made to tackle that problem.

The British colonial conservation efforts concentrated in the creation of Mbeya Range Forest Reserve with intention to conserve soil and water catchments. The Forester Officer ,Patrick B. Maxwell (1951) in archival documents reported on the past history of the Range that it was evident that originally the Mbeya Range was covered with protective forests and mountain grassland, but there was a gradual replacement of tree growth by tall grass which were degenerating into a rough types of tussock grass which were covering a ruined soil. Sheet erosion and scouring rivers were common.⁵⁰ Cultivation on precipitous slopes, firing, excessive grazing by cattle and goats combined with trampling and gradual dispersal of finely reduced soil particles by hot sun, wind and rain produced barren hillsides.⁵¹ The importance of protection was realized for many years but on the whole the efforts of interested people to formulate successful plans were defeated by lack of staff and money to carry out the proposals and by lack of interest on the part of chiefs, sub-chiefs and village headmen which enabled the non-compliance of orders to pass undetected. The Native Authorities although passed protection orders still showed a disinclination to see that they were into effect. There was no doubt that something was achieved in that by the efforts made, annual destruction of vegetation and soil was curtailed to certain extent.⁵² However, warnings given to the people on the consequences of bad land usage and instructions to close certain areas to cultivation were ignored to large extent. Reservation of the vulnerable areas before it was too late as was the case of Wombo River and Shongo River areas was the only answer to the problem.

Past records indicated that although demonstrations of suitable soil conservation measures were made in Mbeya District from time to time little interest was shown and it was not until 1937 that the local Native Authorities passed a rule enforcing erosion control

⁴² S. Saidykhani (2025) Colonial Scientific Forestry and its Challenges: The Creation of Forest Reserves and Local Resistance in the Gambia. *International Journal of Environment, Agriculture and Biotechnology*. P. 36

⁴³ T. Sunseri (2007) "Every African a Nationalist": Scientific Forestry and Forest Nationalism in Colonial Tanzania. *Comparative Studies in Society and History*. p. 886.

⁴⁴ Ibid.

⁴⁵ Mbeya Southern Highlands Zonal Archives (MSHZA), Report on the History of the Creation of the Mbeya Range Forest Reserve.

⁴⁶ Tanzania National Archives, Mbeya District Book 1.

⁴⁷ Mbeya Southern Highlands Zonal Archives (MSHZA), Report on the History of the Creation of the Mbeya Range Forest Reserve.

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Maxwell B. Patrick, Report on Proposed Mbeya Range Forest Reserve ,MSHZA.

⁵¹ Ibid.

⁵² Ibid.

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

measures.⁵³ From 1937 to 1945 a fair amount of progress was made in enforcing erosion control measures, primarily the construction of ridges or banks across the slopes of the land, due attention was paid to the alignment of the banks on the contours, lack of staff during the war years made continuity of effort difficult and some slackened in the tempo of campaign inevitably occurred.⁵⁴ Renewed efforts were made in 1946 with promulgation of a new set of Soil, Water and Forest Conservation Rule (dated 23rd May, 1946), the strengthening of the Soil Conservation Gang and a special agricultural course for instructors was held at Malangali in Iringa in an effort to 'pep' up instructors to take a more intelligent interest in their work.⁵⁵ Still local Native Authorities displayed little interest and cooperation in that important work of soil conservation.

Throughout the Range there was a complete absence among the farmers of any understanding of soil and water conservation. They did not believe that the land was eroding. The problem was explained, but majority of the farmers failed to understand it.⁵⁶ The numbers and disposition of the people who were living in the Range included: At headwaters of Shogo on the north of Mbeya Peak there were 53 families under Jumbe Nshinshi of Chief Lyoto, they always refused to move. Debwe found on the north of Ivuva Peak had 111 families under Jumbe Zongo of Chief Mwalyego of Usafwa Utengule, they were also averse to move.⁵⁷ Ngogwe on the north west of Debwe had 28 families which lived there under Jumbe Wyanga of Chief Mwalyego, they were always willing to move provided everyone else did. Shogwa on the south of the Range opposite the Debwe and Ngogwe areas had 61 families under Jumbes Mlekwa and Mujenda of Chief Mwalyego. They were not ready to move but were not adamant against it as the inhabitants of Shongo and Debwe.⁵⁸ There were 44 families scattered all along the south of the Range in the Usongwe Chiefdom. They had to follow the lead of the other areas. At Amaso river running along the south of the Range in the Usafwa Chiefdom, there were about 80 people cultivating along the river.⁵⁹ In the past efforts were made time to time to evict the inhabitants of the south side of the Range Some success was achieved but owing to the lack of continuity of staff pressure was not maintained. A few families still remained in the remote areas and there were several in Shogwa areas.⁶⁰ The eviction of the majority was completed in 1952. Other alternative was to use Ordinances as part of legal method of carrying out the measures necessary to safeguard the Mbeya Range were under the Forest Ordinance. Many parts were sanctioned under the Native Authority Ordinance or the Natural Resources Ordinance.⁶¹ The Provincial Administration became essential particularly if the Native Authority had any jurisdiction in the matter. It was unfortunate that most of the convenient legal method of carrying out the measures necessary to safeguard the Mbeya Range were under the Forest Ordinance. However, under the Ordinance it was not possible to evict people from any area.

During the war years and immediately after the war little further action was taken and it was until 1953 that further serious efforts were made to proceed with initiatives of the establishment of the Range Forest Reserve.⁶² After the period of the Second World War, British colonial conservation interventions were influenced by the "Second Colonial Occupation", that shaped policies of development and modernization in Africa. The second colonial occupation involved interventions by the colonial government to transform African settlements, agricultural and livestock keeping activities performed by scientific and technical personnel from Europe. African society and their modes of production were required to undergo some sorts of modernization for the case by using the colonial scientific forestry.⁶³ Within that colonial modernization framework, African communities were still perceived as primitive and backward people with no knowledge of future socio-political and economic progress. Africa communities of that period were a bit advanced as they could be transformed by the influence systematic capitalist development through the use science and technology.⁶⁴ Planning during the post war period was geared to set goals for increasing exploitation after improvement in production

It was by then agreed by all the concerned that the only satisfactory way of ensuring the preservation of catchment areas was by the creation of the Mbeya Range Forest Reserve and the eviction of all people living within the proposed boundaries of the reserve. The Forest Ordinance provided the only suitable machinery for creating a reserve of that nature and it was necessary to it a Forest Reserve although actual re-forestation was a secondary consideration. Several meeting/baraza were conducted on the issue, resettlement and the whole matter was referred to Dar es Salaam and in March, 1955 the Provincial Commissioner was

⁵³ MSHZA: Agricultural Notes – 1948 – 1956, File Number Agr. 1/157.

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ MSHZA, Report on the History of the Creation of the Mbeya Range Forest Reserve.

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² TNA, Mbeya Range Forest Reserve. 1955 – 1957, File No. F. 3/8

⁶³ R. P. Neumann (2002) the Postwar Conservation Boom in British Colonial Africa: *Environmental History*.p. 28.

⁶⁴ Ibid. pp. 28- 29.

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

informed to resettle all inhabitants from the Range.⁶⁵ As a result of the member for Local Government instructions of 18th July, 1955 the following officers were detailed as a team for duties on the Range: They were Mister J. A Fraser the Forester, Mister R.C. Faun the Field Officer for agriculture and Mister J. G. Cowap the District Officer.⁶⁶ Other steps were taken by construction of a road into the Range. The process also involved the establishment of camps at Shongo and Debwe, preparation of compensation schedules and Agricultural instructors and Forest Guards to be available to patrol in the Range. People were not ready to leave the Range.

In all meetings conducted by the British colonial officials the reasons for the creation of Mbeya Range Forest Reserve were seriously explained and the people who were living in the Range were asked to cooperate. It was emphasized that although the creation of the Forest Reserve would cause certain amount of hardship to those people living in the Range, the benefits resulting to greater number of people living below the Range and dependent on rivers flowing from the Range for their water supplies made the success of the project vital.⁶⁷ It was hoped that the inhabitants of the Range would realize that and agree to move voluntarily. The people replied to that by a flat refusal to move.⁶⁸ They always denied that the rivers were drying up and that their crops on the Range were poorer than formerly. They said they would die of fever or heat stroke if they left the mountains and went to live at Itete in Chunya resettlement areas. They offered to follow any soil conservation rules ordered by Agricultural Department as long as they were allowed to live on the Range.⁶⁹ That sounded not feasible as the land was so steep that it had to be permanently closed to cultivation. The remained land was insufficient to feed the large population in the Range. It required a very large staff to supervise the conservation rules.

The people all declined to move into the resettlement areas and found places for themselves outside the boundaries of the reserve. It was decided that all the people who moved would get an extra sum of money to help them in settling into their new homes.⁷⁰ To ensure that the agreement was not broken a Native Authority Order was made under Section 9 of the Native Authority Ordinance which embodied the terms of agreement. Mister L. Abrahamson, the Crop Supervisor, was stationed on the Range during the planting seasons. Two Agricultural Instructors and four Native Authority Messengers were permanently stationed on the Range from August, 1955 to June 1956.⁷¹ The 1: 50,000 map (1950) of Survey Division, Department of Land and Mines was used to keep record of boundaries.⁷² The map gives an idea of the numerous water flows in the Range with a serious impression for urgency of reservation. Finally, decision on displacement was achieved and a Certificate of Extinction of Rights was signed by the District Commissioner in Mbeya on 14th July, 1956 and handed to the Provincial Forest Officer who arranged for the Mbeya Range Forest Reserve for the gazettelement.⁷³ The total compensation paid was £5,179 to 321 people and the total cost of the whole operation was £6,106. The area of the Mbeya Range Forest Reserve finally demarcated was 38,520 acres.⁷⁴ From then the Forest Department became responsible for the control of the Mbeya Range and Ranger's house was built at Shongo. The East African Agriculture and Forestry Research Organization (E.A.A.F.R.O) was left to carry out experiments and measurements of rate of regeneration of the natural cover and the effect that had on rainfall and water retention in the soil.⁷⁵

The local people variously preserved the colonial conservation interventions, they resisted also with rare cooperation. That situation made the whole exercise of the creation of Mbeya Range Forest Reserve resulted into unintended consequences. The colonial archival documents have shown how local inhabitants were affected by all processes involved in the creation of Mbeya Range Forest Reserve in 1956. The strong opposition to resettlement signified clear resistance to the colonial efforts to the establishment of the Range for forest and water conservation. To win the opposition the British colonial government resorted to the use of various techniques by using persuasion that went together with compensation to local inhabitants in the Range after surrendering their land and other forest resources. Forceful eviction was also used after conducting several meetings between colonial officials and chiefs of Utengule and Usafwa chiefdoms. Intimidation by threatening farmers to use strict agricultural soil conservation measures and fining to those who did not follow the rules were also applied. It was clearly observed that local people in the Range did not freely cooperate in all activities of the creation of the reserve. It seemed that people in their traditional ecological setup were much used to their ancestral mother land and lifestyles. The attitude of local people was clearly contrary to the interests and requirement for colonial deeply explained rationale for the establishment of the Range. The traditional forest

⁶⁵ MSHZA, Report on the History of the Creation of the Mbeya Range Forest Reserve.

⁶⁶ Ibid.

⁶⁷ TNA, Forestry, Southern Highlands, Protection of Forests, Access No. 1, Box 10521, 1927 – 1930.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ MSHZA, Report on the History of the Creation of the Mbeya Range Forest Reserve.

⁷¹ Ibid.

⁷² MSHZA, Maxwell B. Patrick, (1954) Report on Proposed Mbeya Range Forest Reserve ,

⁷³ MSHZA, Report by District Commissioner (1954) on the Creation of Mbeya Range Forest Reserve

⁷⁴ Ibid.

⁷⁵ Ibid.

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

ecological knowledge was in mismatch to colonial scientific forestry. In that situation the local communities portrayed active resistance to the whole task of conservation of the forest.

All complains and oppositions related to loss of local forest resources contributed to the rise local nationalism against colonialism. Ant-colonial movements triggered by colonial soil conservation rules for forest conservation became essential pivotal elements in the African resistances against British colonial government in Mbeya. The interplay of resistance and colonial conservation with the nationalist movement portrayed that environmental complains had a important task in the wider African initiatives taken against colonialism. It was an open evidence of colonial government exercise of power and control not only for management of environment but also for land and people. Colonial environmental concerns became significant sources for the mobilization of mass support in the dynamics of movements for decolonization in Tanganyika. The colonial initiative taken to establish Mbeya Range Forest Reserve for the conservation of water catchment ended into causing disruptions to the lives of the local inhabitants in the forest. The colonial authority enforced strict ordinances that forbade local communities access to the forest, implemented displacement which disrupted traditional ecological habitats.

In the campaigns to create the Mbeya Range Forest Reseve, the British colonial government encountered several limitations and challenges which hesitated implementation of the project. There were limitations in terms financial constraints, neglect of local environmental knowledge, shortage of staff and resistances from local inhabitants. Shortage of fund delayed the colonial initiatives in the implementation for the creation of the Range for sometimes the local Native Authorities, headmen and the chiefs were not willing to cooperate in the task due to inadequate salaries.⁷⁶ It was once remarked that there was no increase in the allocation of forestry money and that under the situation there was lack of enough forestry fund.⁷⁷ The exclusion of local people from forest management under colonial scientific forestry made local inhabitants to remain unwilling to participate in the whole process of the creation of Mbeya Range Forest Reserve. It is emphasized that conservation makes sense when the needs and abilities of local communities are taken into consideration both at planning and implementation stages.⁷⁸ Colonial government did not pay attention in learning the ecological knowledge of local people in the Range. The establishment of Mbeya Range Forest Reserve, though was for the conservation of water catchments and forests assisted to enforce colonial domination and economic factors at the expense of local land rights and cultural practices. Colonial coercive initiatives mobilized local communities to resist through different ways of environmental, cultural, political and social setups.

Partly due to financial constraints, the number of European personnel assigned to colonial administrations was limited, and officials were expected to generate sufficient revenue locally to finance the costs of governance.⁷⁹ Consequently, for reasons of fiscal and administrative convenience, most colonial regimes in Africa adopted indirect rule, even when it was not explicitly articulated as their guiding imperial doctrine. In the case of the Mbeya Range Forest Reserve, colonial authorities relied on local intermediaries such as headmen, Jumbes, Chief Lyoto of the Usafwa Chiefdom, Chief Mwalyego of the Utengule Chiefdom, and Chief Zumba of Chunya to implement forest policies. Although colonial administrators later developed a more formalized framework for indirect rule, in practice they failed to preserve—or restore—stable systems of traditional authority. Instead, the colonial intervention often generated instability within local power structures and altered patterns of access to productive resources.⁸⁰ Problem of lack of enough staff to supervise the creation of the Range was broadly reported in many archival documents. Many measures taken to control soil erosion for the conservation of forests and water catchments were not well implemented due to lack of enough agricultural officers. It was asserted that, although the importance of conservation of the Range was realized for long period but the exercise was frequently delayed by lack of staff and money.⁸¹ It was once agreed that an Administrative Officer, a Forest Officer and Field Officer of Agriculture to be employed full time on the project. However, that proved impossible for the officers had to carry out their normal duties in addition to the work on the Range. In March 1938 four settlers signified their willingness to be appointed as Volunteers Non Forest Officers with a view to cooperate with the Local Native Authorities to stop the destruction of forest on the Mbeya Range.⁸² Local resistances were frequently staged against the establishment of reserve, local people were not willing to vacate from the Range. They resisted because the forest was the source of their survival for they were getting firewood, food, medicine and spiritual satisfaction. The colonial authority resorted to persuasion and coercion that ended into displacement of inhabitants from the Range.

⁷⁶ MSHZA, Report by District Commissioner (1954) Report on the Creation of Mbeya Range Forest Reserve

⁷⁷ MSHZA, Maxwell B. Patrick,(1954) Report on Proposed Mbeya Range Forest Reserve ,

⁷⁸ A. A. Komba and Y. M. Kihole (2006) Introduction in Komba A. A. (Ed.) *Sustainable Development and the Environment in Tanzania: Issues, Experiences and Policy Responses* (Dar es Salaam: Organization for Social Science Research in Eastern and Southern Africa), p. 3.

⁷⁹ S. Berry, (1992) "Hegemony on a Shoestring: Indirect Rule and Access to Agricultural Land. *Journal of the International African Institute*.p. 329

⁸⁰ Ibid.

⁸¹MSHZA, Maxwell B. Patrick,(1954) Report on Proposed Mbeya Range Forest Reserve ,

⁸² MSHZA, District Officer, R. B. Brayne (1954) Report on the Proposed Mbeya Range Forest Report.

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

In assessing the effectiveness of the British colonial interventions in the creation of the Mbeya Range Forest Reserve through the lenses of the colonial scientific forestry, displacement and local oppositions remains a task of this part. The British colonial government succeeded to create the Mbeya Range Forest Reserve after 18 years of intense struggle from 1938 to 1956. The achievement was after the displacement of all local inhabitants who were living and cultivating in the Range. The whole exercise was not easy as the local people were always not ready to move out of the forest. By the construction of roads, camps at Shongo and Debwe, building other field stations, surveying and mapping, demarcation for the activities of management of the Range effectively intensified the task of supervision and control of the local inhabitants and assisted the whole process of British colonial intervention in the reserve.⁸³ The colonial authority in Mbeya totally changed the former traditional ways of getting and using forest resources from the Range. However, assessments for achievement and effectiveness of colonial soil and water catchments conservation after the creation of Mbeya Range Forest Reserve in 1956 remain as a continuous demanding task to all environmental stakeholders.

During the pre-colonial period, forests conservation in local communities was mostly through customary institutions under the traditional leaders, who presided over the culture. That was in observation of traditional norms and lifestyles. Land was a communal property in which the extraction of forest resources served the immediate consumption fulfillment.⁸⁴ Exploitation of forest resources was for meeting the basic needs of the local communities. In Tanganyika, forests had a detailed history of traditional conservation methods applied by local communities. Before colonial conquest, societies employed indigenous management approaches which included the setting of sacred forests and locally-based customary norms of sustaining the ecological setup of the forests for accessing the subsistence requirements of the inhabitants.⁸⁵ British colonial initiatives to forest conservation as portrayed by the creation of the Mbeya Range Forest Reserve and broader policies, were featured by a top-down, state-centred approach. The colonial government invested total power and authority over the control of land and resources, always enforced conservation initiatives without the involvement or including the local ecological knowledge of the local communities in the Range. It was the colonial scientific forestry with European superiority tendency which shaped the approaches to consider indigenous land use practices as destructive to the environment, forcing the use of measures which ended in the neglect of the local environmental knowledge. Moreover, the colonial preservation initiatives were often associated with intention of exploitation and domination of the local inhabitants with exclusion of other benefits for their livelihood.

British colonial ordinances and policy of 1953 did not encourage the involvement of other stakeholders in the conservation of forest. Also the Forest ordinance of 1957, which was amended in 1959, emphasized protection rather than the use of community participatory forest conservation.⁸⁶ The Policy did not incorporate the use of local communities with their ecological knowledge in the management of forests. The approaches were not effective because other stakeholders realized that the forests were the properties of colonial government.⁸⁷ Nowadays new approach of forest conservation has become widespread which has been participatory that requires involvement of multiple stakeholders.⁸⁸ Consequently, application of laws has transformed, setup framework has changed to be more sophisticated, and international considerations have been influencing local decision making.⁸⁹ While the dynamics fostering for these recent improvements have been widely differing, there has been currently notion among stakeholders to enforce forest conservation that has been participatory and including as many stakeholders.

CONCLUSION

The British colonial government established the Mbeya Range Forest Reserve between the 1930s and 1950s with the objective of conserving soil and protecting water catchments, as part of broader land and forest management policies. These conservation efforts, guided by the principles of scientific forestry and the interests of the colonial state, often imposed strict restrictions on land use and, in the case of the Mbeya Range Forest Reserve, led to the displacement of local communities. As a key proponent of scientific forestry, the colonial administration frequently overlooked the social and ecological complexities of the region, resulting

⁸³ MSHZA, Report on the History of the Creation of the Mbeya Range Forest Reserve.

⁸⁴ R. T. Talla et al (2019) Assessing Indigenous and Colonial Forest Conservation Policies on the Kilum-Ijim Forest of the Bamenda Grassland, Pre-colonial to 1961. *International Journal of Research and Innovation in Social Science*, p. 378.

⁸⁵ M. C. Kiplagat et al (2024) Pre-Colonial Forest Conservation Mechanisms: Traditional Practices and Indigenous Management in Embobut Forest. *International Journal of Humanities Social Science and Management*. p. 125.

⁸⁶ Morogoro Catchment Forestry Project (2004) "Management Plan for Kimboza Catchment Forest Reserve, Morogoro District, Morogoro Region 2004/05 – 2008/9". P. 29

⁸⁷ Ibid.

⁸⁸ K, E., Olwig, et al. (2018). *Partnerships and Governance in Forest Management in Tanzania: Historical and Current Perspectives*. Copenhagen Business School, CBS. NEPSUS Working Paper No. 2018-1. p. 4.

⁸⁹ Ibid.

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

in unintended and undesirable consequences.⁹⁰ The colonial authorities faced significant constraints, including limited financial and human resources, as well as a poor understanding and minimal incorporation of local ecological knowledge. Moreover, there was considerable resistance from the local population, who perceived these interventions as direct threats to their livelihoods and traditional land-use systems. Local perspectives were therefore shaped by opposition, particularly in response to land alienation and the loss of access to forest resources, and colonial policies often inflicted negative socio-economic impacts on communities. The long-term environmental and forest resource legacies of these colonial interventions in Mbeya are complex and demand further in-depth research to fully comprehend. Nevertheless, the establishment of the Mbeya Range Forest Reserve clearly left a lasting imprint on the landscape and likely influenced local hydrological systems. A comparison between the top-down, state-controlled conservation strategies of the colonial era and contemporary practices in the Mbeya Range reveals a significant shift towards participatory, community-centered, and scientifically informed approaches. Modern conservation initiatives place greater emphasis on integrating indigenous ecological knowledge, upholding the rights of local communities, and aligning conservation with sustainable development goals.⁹¹ Despite these advances, several technical challenges remain, including balancing human needs with environmental protection and securing adequate funding for conservation programs. The historical experience of colonial conservation under the doctrine of scientific forestry in the Mbeya Range provides valuable lessons for current and future environmental management. The limitations and adverse impacts of exclusionary, top-down approaches highlight the importance of engaging local communities, respecting their knowledge and rights, and designing conservation strategies that are both ecologically effective and socially just.

REFERENCES

- 1) Alawi M. H. (2014) an Assessment on the Effects of Environmental Conservation Policies in Colonial and Post Colonial Tanzania, 1922- 2000 : The Case of Morogoro and Shinyanga Regions. (PhD Thesis) The Open University of Tanzania.
- 2) Bennett B. & Kruger F (2015) Forestry and Water Conservation in South Africa History, Science and Policy. Australia: ANU Press.
- 3) Bennett B. and Kruger F. (1983) Forestry and Water Conservation in South Africa History, Science and Policy. Australia: ANU Press.
- 4) Bentwich N. (1946) Colonial Mandates and Trusteeships. Transactions of the Grotius Society,
- 5) Berry, S. (1992) "Hegemony on a Shoestring: Indirect Rule and Access to Agricultural Land. Journal of the International African Institute.
- 6) Boyer C. R. (2015) Political Landscapes Forests, Conservation, and Community in Mexico Durham & London: Duke University Press.
- 7) Chiwanga E. (2006) 'Indigenous Knowledge Systems' in Environmental Management and Sustainable Development: Case of the Masai. In Komba A.A (Ed.) Sustainable Development and the Environment in Tanzania: Issues, Experiences and Policy Responses. Dar es Salaam:OSSREA.
- 8) Fanstone B. P. (2016) The pursuit of the 'good forest' in Kenya, c.1890-1963: the history of the contested development of state forestry within a colonial settler state. (PhD Thesis) University of Stirling.
- 9) Forest Ordinance for the Conservation and Management of Forests Number 32 of 1921. 17th August, 1921.
- 10) Girona M. M. (2023) Boreal Forests in the Face of Climate Change Sustainable Management. Gewerbestrasse : Springer Nature Switzerland AG.
- 11) Jong A. (2000) Mission and Politics in Eastern Africa, Dutch Missionaries and African Nationalism in Kenya, Tanzania and Malawi 1945 – 1965. Nairobi: Paulines Publications Africa.
- 12) K, E., Olwig, et al. (2018). Partnerships and Governance in Forest Management in Tanzania: Historical and Current Perspectives. Copenhagen Business School, CBS. NEPSUS Working Paper No. 2018-1.
- 13) Kangalawe H. (2018) Plantation Forestry in Tanzania: A History of Sao Hill Forests, 1939-2015. (PhD Thesis) Stellenbosch University.
- 14) Kiplagat M. C. et al (2024) Pre-Colonial Forest Conservation Mechanisms: Traditional Practices and Indigenous Management in Embobut Forest. International Journal of Humanities Social Science and Management.
- 15) Kizigo S. M. (2023) Local Perceptions on Community Forests Conservation: Lessons from Namtumbo District, Tanzania Journal of the Geographical Association of Tanzania.

⁹⁰ E. R. Sungusia(2018) Reproducing Forestry Education, Scientific Authority, and Management Practices in Tanzania.(PhD Thesis) Sokoine University of Agriculture, Morogoro, Tanzania., p. 228.

⁹¹ S. Saidykhan (2025), Op. Cit., p. 42.

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

- 16) Komba A. A. and Kihole Y. M. (2006) Introduction in Komba A. A. (Ed.) Sustainable Development and the Environment in Tanzania: Issues, Experiences and Policy Responses. Dar es Salaam: Organization for Social Science Research in Eastern and Southern Africa.
- 17) Kwashira V. C. (2013) Environmental Change, Control and Management in Africa. Global Environment.
- 18) Land Ordinance Number 23 of 25th January, 1923.
- 19) Low D. and Lonsdale J. (1976) "Introduction," In D. Low and A. Smith, eds. The Oxford History of East Africa. Oxford: University of Oxford Press.
- 20) Misana S. B. (1988) The Shrinking Forests and the Problem of Deforestation in Tanzania. Journal of Eastern African Research & Development.
- 21) Mmbaga N. E. and Athumani P.C. (2024) Community Perceptions on Conservation of Mount Rungwe Nature Forest Reserve, Tanzania: Opportunities, Threats, and Challenges. Discover Conservation.
- 22) Morogoro Catchment Forestry Project (2004) "Management Plan for Kimboza Catchment Forest Reserve, Morogoro Region District, Morogoro 2004/05 – 2008/9".
- 23) Munro P. G. and Horst G. H. (2011) Conserving Exploitation? A Political Ecology of Forestry Policy in Sierra Leone. ARAS.
- 24) Mutuga F. (2009) The effect of urbanization on protected areas The impact of urban growth on a wildlife protected area: a case study of Nairobi National Park. Thesis for the fulfilment of the Master of Science in Environmental Sciences, Policy & Management: Lund University.
- 25) Neumann R.P. (1997) Forest Right, Privileges and Prohibitions: Contextualizing State Forestry Policy in Colonial Tanganyika. Environment and History.
- 26) Neumann R. P. (2002) the Postwar Conservation Boom in British Colonial Africa: Environmental History.
- 27) Ngondya B. (2011) Are Poverty and Illiteracy to Blame for Forests Degradation? A Case Study of Mbeya Range Forest Reserve. Mbeya-Tanzania. Journal of Forest Science.
- 28) Oba G. (2020) African Environmental Crisis A History of Science for Development. New York: Routledge.
- 29) Ojha H. et al (2025) Reimagining forest communities Key insights from Nepal's community forestry. In H. Ojha et al, (Eds.) (2025) Restoring Forests and Improving Livelihoods in Nepal Four Decades of Community Forestry. New York: Routledge.
- 30) Ongolo S. and Krott M. (2024) Power Dynamics in African Forests. The Politics of Global Sustainability. New York: Routledge.
- 31) Ordinance for the Conservation and Management of Forests Number 119 of 4th August 1933.
- 32) Ordinance for the Conservation and Management of Forests Number 86 of 20th August, 1926 and of Number 163 of 9th October, 1930.
- 33) Parker J. (2020) The Fluidity of Late-Colonial Development: Water Management, State Building, and Rural Resistance in Kenya 1938-63 (PhD Thesis) Northeastern University, Boston, Massachusetts.
- 34) Ponte S. et al (2022) Contested Sustainability: The Political Ecology of Conservation and Development in Tanzania. Rochester: James Currey.
- 35) Saidykhani S. (2025) Colonial Scientific Forestry and its Challenges: The Creation of Forest Reserves and Local Resistance in the Gambia. International Journal of Environment, Agriculture and Biotechnology.
- 36) Schabel H. G. (1990) Tanganyika Forestry under German Colonial Administration, 1891-1919 Forest & Conservation History.
- 37) Sungusia E. R. (2018) Reproducing Forestry Education, Scientific Authority, and Management Practices in Tanzania. (PhD Thesis) Sokoine University of Agriculture, Morogoro, Tanzania
- 38) Sunseri T. (2007) "Every African a Nationalist": Scientific Forestry and Forest Nationalism in Colonial Tanzania . Comparative Studies in Society and History.
- 39) Talla R. T. et al (2019) Assessing Indigenous and Colonial Forest Conservation Policies on the Kilum-Ijim Forest of the Bamenda Grassland, Pre-colonial to 1961. International Journal of Research and Innovation in Social Science.
- 40) Tanganyika Legislative Council, Forest Policy, Tanganyika Territory Session Paper Number 1 of 1953.
- 41) Wood P.J. (2006) Forestry in Africa, past and Present: a Personal View. The International Forestry.

Archives

Mbeya Southern Highlands Zonal Archives (MSHZA)

Agricultural Notes – 1948 – 1956, File Number Agr. 1/157.

District Officer, R. B. Brayne (1954) Report on the Proposed Mbeya Range Forest Report.

Maxwell B. Patrick, (1954) Report on Proposed Mbeya Range Forest Reserve ,

Colonial Scientific Forestry, Conservation, Displacement and The Creation of Mbeya Range Forest Reserve in Tanganyika

Report on the History of the Creation of the Mbeya Range Forest Reserve.

Tanzania National Archives (TNA)

Forestry, Southern Highlands, Protection of Forests, Access No. 1, Box 10521, 1927 – 1930.

Mbeya District Book 1.

Mbeya Range Forest Reserve. 1955 – 1957, File No. F. 3/8.

Southern Highland Provincial Book.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.