

The monograph is copyright. All rights reserved as permitted under the Copyright Law. Enquiries should be addressed to the publisher.

Association of Philosophy Professionals of Nigeria (APPON)

Department of Philosophy

Benue State University

Makurdi, Nigeria

Email: apponafricanstudiesmonographs@gmail.com

<https://www.appon.ng>

Online Host: <https://acjol.org>

Series Editor: Professor Alloy S. Ihuah

© APPON 2024

ISSN 1119-7196

ISBN: 978-978

© Cover Design, O.O.P. Ltd., 1999

**A HISTORICAL DECONSTRUCTION OF ANIMAL
TRYPANOSOMIASIS IN KWIMBA DISTRICT,
TANZANIA 1920s-1970s.**

Vol. 10, 2024

**A HISTORICAL DECONSTRUCTION OF ANIMAL
TRYPANOSOMIASIS IN KWIMBA DISTRICT,
TANZANIA 1920s-1970s.**

Victor Itule

Ph.D Candidate, University of Dodoma
victorwaitule@yahoo.com

Mussa Sadock Ph.D

Senior Lecturer-Department of History,
University of Dar es Salaam

Victor Mtenga Ph.D

Lecturer-Department of History and Archaeology,
University of Dodoma

Printed in Nigeria by
Eagle Prints Nigeria
Eagle Dove Mega Business Ltd.
Abuja-Ibadan-Kaduna-Lagos-Makurdi
Km2 Gboko Road,
P.O Box 2123, Makurdi, Benue State-Nigeria.
email: eagleprints2014@gmail.com
08053398895, 07037976537



TABLE OF CONTENTS

Abstract	1
Introduction	2
Bush Clearing Campaigns against Animal Trypanosomiasis in Kwimba District	8
Local People Responses to Bush Clearing Campaigns	27
Conclusion	37
Bibliography	38

ABOUT AFRICAN STUDIES MONOGRAPHS' SERIES

African Studies Monographs (ASM) is a serial formerly published under the aegis of Onosomegbowho Ogbinaka Publishers Limited. It is now fully published by the Association of Philosophy Professionals of Nigeria (APPON). It aims to promote research and scholarship as they relate to the African perspective worldwide. Each serial is topically focused on African issues and problems. This includes matters of philosophy, literary studies, politics, arts and culture, environment, business and economy, religion, history, law, international relations, crisis management, comparative studies, education, science, technology, etc.

Author(s) and not ASM or its editors, are fully responsible for the position(s) and view(s) they hold or express.

CONTRIBUTIONS

Papers intended for publication should be sent by email to The Series Editor, Prof Alloy Ihuah, African Studies Monographs, Department of Philosophy, Benue State University, Makurdi, Nigeria. Email: apponafricanstudiesmonographs@gmail.com.

Manuscripts should be typed double space on MS Word, 12 points. The Chicago Manual Style Reference, 17th edition should be used. Authors are responsible for checking all quotations and supplying complete references. The editor(s) may edit papers for purposes of clarity, consistency and appropriate title. Received papers with a minimum of 20,000 words but not exceeding 35,000 words will be acknowledged. Authors shall be duly informed if their papers are favourably assessed for publishing by experts.

SERIES EDITOR

Professor Alloy Ihuah, Ph.D
Benue State University ,Makurdi ,Nigeria
Email aihuah@bsum.edu.ng

SERIES CONSULTORS

Prof J.C.A. Agbakoba,
University of Nigeria ,Nnsuka ,Nigeria

Prof J.O. Oguejiofor,
Nnamdi Azikwe University ,Akwa

Prof. Zacharys Anger Gundu,
University Mkar, Mkar, Benue State-Nigeria.

Prof Aghogho Akpome,
University of Zululand ,South Africa

Prof Omedy Mweene,
Supersshine University ,Lusaka ,Zambia

Prof Angela Roothaan,
Vrije Unveriteit Amsterdam

Oghenekaro M. Ogbinaka,
University of Lagos ,Nigeria

CONTACT

National President, Association of Philosophy Professionals
of Nigeria - APPON, Department of Philosophy, Benue State University,
Makurdi ,Nigeria .

shrubs which harbored tsetse flies,⁶ made the district vulnerable to animal trypanosomiasis infections.

Incidences of tsetse flies increased markedly from the mid-1920s Sukumaland, mainly because of the destruction of pre-colonial socio-economic order brought by colonial economy. The introduction of capitalist economy made Africans to lose their control over ecology leading to tsetse flies encroachment on areas which were previously under African control. By mid-1920s approximately two-thirds of Sukumaland was infested with tsetse flies,⁷ and the epidemic of trypanosomiasis resulted⁸ infecting large number of cattle in the region. The advent of British colonialism in Sukumaland after the First World War was accompanied by the need to tap livestock raw materials in the region, it therefore became necessary for the British to wage a war against tsetse flies in Sukumaland and Kwimba district in particular. For example, it was becoming clear to the British that it was only by reclaiming land through anti-tsetseflies campaign that cattle-herding could blossom among the Sukuma.⁹

⁶. Hubertus Catharina Christiana Meertens, *Dynamics in Farming Systems: Changes in Time and Space in Sukumaland, Tanzania*, (Amsterdam: KIT Press, 1995), 21.

⁷. Jonas Leonard, "Development Interventions and environmental Change in Maswa District, 1920 to 1960," *Tanzania Zamani* 13, 2(2021):89.

⁸. Meertens, *Dynamics in Farming Systems*: 22.

⁹. Goran Hyden, *Beyond Ujamaa in Tanzania: Underdevelopment and an Uncaptured Peasantry*, (California: California University Press, 1980), 57.

A HISTORICAL DECONSTRUCTION OF ANIMAL TRYPANOSOMIASIS IN KWIMBA DISTRICT, TANZANIA 1920s-1970s.

Victor Itule, Ph.D. Candidate, University of [Dodoma-
victorwaitule@yahoo.com](mailto:victorwaitule@yahoo.com)

Dr. Mussa Sadock, Senior Lecturer-Department of History,
University of Dar es Salaam

Dr. Victor Mtenga, Lecturer-Department of History and
Archaeology, University of Dodoma

Abstract

The historiography of African trypanosomiasis is featured by a lopsided relationship between studies on human and animal trypanosomiasis. There exists too much leaning in historical scholarship towards the study of human trypanosomiasis while there is a handful studies on animal trypanosomiasis. Studies on animal trypanosomiasis have focused at national and regional levels, covering colonial period while lacking local people's response. These studies provide a room for historical analysis of animal trypanosomiasis control and local people's response at a local level and over a long historical period from colonial to post-colonial periods. This paper constructs the history of animal trypanosomiasis control and local people's responses in Kwimba district from the 1920s to the 1970s. The paper argues that bush clearing in Kwimba district was an important veterinary intervention in controlling animal trypanosomiasis under the period of study though local people's response varied from acceptance to rejection at different times. The paper contributes knowledge on understanding African governments' initiatives to control animal trypanosomiasis at a local level over a long historical period from colonial to post-colonial period. Furthermore, the paper is crucial in redressing knowledge

gap between human and animal trypanosomiasis since historians have focused more attention on human than animal trypanosomiasis.

Key words: Tsetse Flies, Kwimba, Bush clearing, Trypanosomiasis

Introduction

Tsetse fly is the vector of trypanosomes, the causative organisms of trypanosomiasis, *nagana*, in animals. Animal Trypanosomiasis is a parasitic protozoan disease caused by trypanosome species such as *T. brucei*, *T. vivax* and *T. congolense* which are transmitted by the bite of tsetse fly. These species are not pathogenic to humans but can cause death and/or production losses in most species of livestock.¹ The overwhelming feature in the study of cattle-keeping in East Africa is the presence of the tsetse flies. This has become a less important problem with the development of effective drugs combating trypanosomiasis. Historically, however, the presence of tsetse fly has meant absence of cattle, and even today, cattle are normally not found in the so-called fly belts.² This implies that tsetse fly have been one of the major factors hindering livestock development from time immemorial making their eradication crucial for the benefits of animal health and survival.

¹ Rachael Sarah Lea, "Ecology and control of Tsetse at the Interface of Conservation and Farming Areas in Tanzania", (Ph.D. Thesis: University of Liverpool, 2019), 6.

² Helge Kjekshus, *Ecology and Economic Development in East African History: The Case of Tanganyika 1850-1950*, (Ohio: Ohio University Press, 1996), 51.

The existence of tsetse flies in Sukumaland³ (Lake Province) was first reported by Speke and Stanley who traversed the region between the 1860s and 1870s mentioning that the plains of this land were inhabited by tsetse flies and that the local people understood that tsetse flies lived in the bush and carried a disease fatal to cattle.⁴ The fact that Kwimba district⁵ was located on the western part of Sukumaland, an area covered by different types of

³ A geographical area in British colonial Tanganyika that comprised the area South of Lake Victoria. The area was made up of the five districts of Geita, Mwanza, Kwimba, Maswa and Shinyanga and covered an area of 17,000 square miles which supported a human population estimated at 1.4 million. For detailed description of the region, see, for example, Hubertus Catharina Christiana Meertens, *Dynamics in Farming Systems: Changes in Time and Space in Sukumaland, Tanzania* (Amsterdam: KIT Press, 1995), 11-13, Brad McCulloh, "Overstocking in Sukumaland, Tanganyika," *East African Agricultural and Forestry Journal* 30, 3 (1965): 219; Gottfried and Martha B. Lang, "Problems of Social and Economic Change in Sukumaland, Tanganyika," *Anthropological Quarterly* 35, 2 (1962) : 86; Samuel N. Chipungu, "Social Stratification In Relation to Cattle Marketing in Rural Sukumaland, 1951 To 1961," *Eastern African Research And Development*, 12 (1982): 57.

⁴ Martin Birley, "Resource Management in Sukumaland, Tanzania," *Journal of the International African Institute* 52, 2 (1982): 2.

⁵ During British colonial period Kwimba district belonged to Lake Province (Sukumaland region), a geographical area that comprised the area South of Lake Victoria. The area was made up of the five districts of Geita, Mwanza, Kwimba, Maswa and Shinyanga. After independence in 1961, Kwimba district belonged to Mwanza Region which comprised of seven districts namely Ukerewe, Geita, Mwanza, Kwimba, Sengerema, Magu, and Misungwi (formed in 1996). The local people in the district are called the Sukuma.

reducing trypanosomiasis infections and mortality in cattle while opening large grazing lands which provided sufficient pasture and therefore increased livestock nutritional level. The local people accepted bush clearing to control animal trypanosomiasis at the initial stage of British rule in Kwimba district due to voluntary nature of the campaign. However, bush clearing was strongly resisted by the local people in the district when it became compulsory from the closing dates of the 1930s to the 1950s. After the independence of Tanganyika in 1961, the new African government abolished all compulsory agricultural rules and regulations including those related to bush clearing. Bush clearing became voluntary again and it was fuelled by villagization policy of the 1970s. The paper contributes knowledge on understanding African government initiatives to control animal trypanosomiasis at a local level over a long historical period from British colonial to post-colonial period. Furthermore, the paper is crucial in redressing knowledge gap between human and animal trypanosomiasis since historical studies have focused on human than animal trypanosomiasis.

Bush Clearing Campaigns against Animal Trypanosomiasis in Kwimba District

Intense veterinary campaigns against the tsetse flies to eradicate animal trypanosomiasis in Kwimba district began following Charles Swynnerton efforts.¹⁴ Swynnerton was a game warden of

¹⁴. Daniel Headrick, "Sleeping Sickness Epidemics and Colonial Response in East Africa and Central Africa, 1900 – 1940," *Journal of Tropical Neglected Diseases* 8, 4(2004): 5.

The historiography of African trypanosomiasis is featured by a lopsided relationship between historical studies on human and animal trypanosomiasis. This lopsided relationship has been attributed to the fact that from the beginning of colonization onwards Human African Trypanosomiasis had tremendous impact on populations and societies and the disease was closely tied to the development of Africa. Human African trypanosomiasis hampered the colonization of the continent as the diseases caused dramatic logistic problems to the invaders since horses were highly susceptible to trypanosomes.¹⁰ As a result, evidence suggests that there exists too much leaning in historical

¹⁰ Christian Burri, *Human African Trypanosomiasis (Sleeping Sickness): The Road to Elimination Revisited-Achievement and Remaining Challenges*, (Basel:MDPI, 2020), 1.

scholarship towards the study of human trypanosomiasis¹¹ while there is a handful studies on animal trypanosomiasis. For example, Karen Brown discusses the control of animal

trypanosomiasis in Zululand between 1894 and 1953.¹² The study was conducted at a regional level while covering colonial period. Another study by David Patterson tangentially discusses the control of animal trypanosomiasis in the Gold Coast between 1909 and 1955.¹³ The study provides a general outline of animal trypanosomiasis control in Gold Coast at a national level in the colonial period as well. The two studies provide room for a historical analysis of animal trypanosomiasis control and people's response at a local level and over a long historical period from British colonial to post-colonial periods. Building on previous studies, this paper constructs the history of animal trypanosomiasis control and people's responses at a local level, over a long historical period from British colonial period to post-colonial period using Kwimba district as a case study from the 1920s to the 1970s.

The paper argues that bush clearing (Swynnerton) campaign in Kwimba district was an important veterinary intervention in controlling animal trypanosomiasis under the period of study. The campaign was responsible in increasing the number of livestock in the district throughout British colonial period by

^{11.} Maryinez Lyons, 'From "Death Camps" to cordon Sanitaire: The Development of Sleeping Sickness Policy in the Ulele District of the Belgian Congo, 1903-14,' *The Journal of African History*, 26 (1985); Maryinez Lyons, " *The Colonial Disease: A Social History of Sleeping Sickness in Northern Zaire, 1900 – 1940* (Cambridge, 1992); Eileen Fisher, "Forced Resettlement, rural Livelihoods and Wildlife Conservation along the Ugalla River in Tanzania," in D. Chatty and M. Colchester (eds.), *Conservation and Mobile Indigenous Peoples: Displacement, Forced Settlement, and Sustainable Development* (Oxford, 2002), 119-41; Luice White, *Speaking with Vampires: Rumor and History in Colonial Africa* (Berkeley, 2000); Luice White, "Tsetse Visions: Narrative of Blood and Bugs in Colonial Northern Rhodesia," *The Journal of African History* 36, 2 (1995), Julie Weiskopf, "Resettling Buha: A Social History of Resettled Communities in Kigoma Region, Tanzania, 1933 – 1975," (Ph.D. thesis, University of Minnesota, 2011); Julie Weiskopf, "Living in Cold Storage: An Interior History of Tanzania's Sleeping Sickness Concentrations, 1933-1946," *International Journal of African Historical Studies* 49, 1 (2016); Guillaume Lachenal, *The Lamidine Files: The Untold story of Medical Disaster* (Baltimore, 2014); Samuel Coghe, "Sleeping Sickness Control and the Transnational Politics of Mass Chemoprophylaxis in Portuguese Colonial Africa," *Portuguese Studies Review* 25, 1 (2017); David Bannister, "The Sorcerer's Apprentice: Sleeping Sickness, Onchocerciasis, and Unintended Consequences in Ghana, 1930 – 60," *The Journal of African History* 62, 1 (2021); Jonathan Jackson, *Coercion and Dissent: Sleeping sickness 'Concentrations' and the Politics of Colonial Authority*, *The Journal of African History* 63, 1 (2022).

^{12.} Karen Brown, "From Ubombo to Mkhuzi: Disease, Colonial Science, and the Control of *Nagana* (Livestock Trypanosomiasis) in Zululand, South Africa, c.1894-1953," *The Journal of the History of Medicine and Allied Sciences* 63, 3 (2008).

^{13.} David Patterson, "The Veterinary Department and the Animal Industry in the Gold Coast, 1909-1955," *The International Journal of African Historical studies* 13, 3 (1980), 478-479.

the Nindo flat plain, *mbuga*. On the East, the area was bounded by cultivation at Upamwa and the West was defined by an arm of *mbuga* extending from Ilangafipa to Mhande.²⁸

Bush cutting in the Buhungukira area commenced in earnest on 11th May 1933 when 3,600 men were drafted into camps at Upamwa and Mhalo. Work progressed under the directives of the Tsetse Flies Research Department and Forestry Department officers aided by a casually employed European working in conjunction with the Provincial and Native Administration who provided two more European supervisors.²⁹ Members of Veterinary and Forestry Departments provided technical guidance while the chiefs and headmen were critical in mobilizing large turn outs to support the campaign. The role of the Native Administration especially the chiefs and headmen in mobilizing and supervising the manpower for bush clearing was also observed in the nearby Sukumaland district of Shinyanga.³⁰ This suggested that British indirect rule system which involved the integration of indigenous political systems into the British

²⁸. TNA Kwimba District Book I, Reclamation South of Buhungukira and Nera, 173.

²⁹. TNA Kwimba District Book I, Reclamation South of Buhungukira and Nera, 174.

³⁰. Mikidadi Hamisi Alawi, "An Assessment on the Effects of Environmental Conservation Policies in Colonial and Post-Colonial Tanzania, 1922-2000: The Case of Morogoro and Shinyanga Regions," (Ph.D. thesis: Open University of Tanzania, 2014): 114-115.

Tanganyika involved in small-scale tsetse flies research since 1923.¹⁵ Under his leadership, tsetse flies control through bush clearing became the focus for combating trypanosomiasis in Tanganyika.¹⁶ Before coming to Tanganyika, Swynnerton had settled in the Gaza Empire of Mozambique where he learnt how to deal with tsetse flies. In the Gaza Empire, Swynnerton recorded how the chiefs in the area located their people in closer settlement from which wildlife, as well as the thickets which provided shelter for the tsetse flies, were removed.¹⁷ Thus, the destruction of vegetation as advocated by the Gaza chiefs became the basis for Swynnerton's campaign against tsetse flies in British Tanganyika. Swynnerton's decision to invest his energy in bush clearing was guided by the principles that bush clearing ensured complete destruction of the resting haunt of the adult tsetse flies, but also bush clearing created a barrier zones that restricted and prevented the migration of adult tsetse flies from one place to another.¹⁸

¹⁵. Helen Tilley, "Ecologies of Complexity: Tropical Environments, African Trypanosomiasis, and the Science of Disease control in the British Colonial Africa, 1900-1940," *Osiris* 19, (2004): 28-30.

¹⁶. Pascal James Imperato, "Lords of the Fly: Sleeping Sickness Control in East Africa, 1900-1960 (Review)," *African Study Review* 48, 1 (2005): 168.

¹⁷. William Beinart, Karen Brown and Daniel Gilfyle, "Experts and Expertise in Colonial Africa Reconsidered: Science and the Interpretation of Knowledge," *African Affairs* 108, 432 (2009): 430.

¹⁸. Edward Offori, "The Scourge of Tsetse," *IAEA Bulletin* 23, 3 (1981): 43.

Swynnerton began his campaign against tsetse flies and animal trypanosomiasis in Sukumaland by setting up a station at Shinyanga.¹⁹ From Shinyanga, this campaign made its way to other parts of Sukumaland including Kwimba district. In Kwimba district, the campaign began by focusing on the heavily infested belt of Swynnerton fly that existed along the Ididi and Simiyu Rivers on the east boarder of the district, extending in an easterly direction through the large expanse of uninhibited bush and beyond.²⁰ The advance of the tsetse flies in this region necessitated people to withdraw from a number of villages in early 1922.²¹ Though small isolated clearings were made in the interval to combat the tsetse flies, work on a big scale in this area only commenced in 1928, when a an area of about 14 square miles (22.4 square kilometres) south of the Ididi River to its confluence with the Simiyu was cleared.²² In 1929 clearing continued north of the Ididi River and a belt of about 800 yards (0.7 kilometre) was cleared along the Simiyu River and later on about 22 square miles (35 kilometres) of bushes were further cleared²³ in efforts to intervene against animal trypanosomiasis.

From the Ididi and Simiyu River belts, the campaign headed to Ndagalu block along the Simiyu River where an area of approximately 12 square miles (19 kilometres) was cleared in

^{19.} Brown, "From Ubombo to Mkhuzi," 305.

^{20.} TNA, Kwimba District Book III, A Sheet, No. 1.

^{21.} TNA, Kwimba District Book III, A Sheet, No. 1.

^{22.} TNA, Kwimba District Book III, A Sheet, No. 1.

^{23.} TNA, Kwimba District Book III, A Sheet, No. 1.

1930. This bush clearing completed the main work in that area by which over 40 square miles (64 kilometres) which linked up with the open country to the west and north of fertile and well watered country was made available for livestock²⁴ and by 1930 a large part of the district had been set free from animal trypanosome and had been occupied by livestock.²⁵ The successes indicated that state interventions against tsetse flies in Africa during the early twentieth century were not restricted to dealing with human sleeping sickness, but also included efforts to control animal trypanosomiasis in domestic animals in order to improve human diets but also increase commercial output.²⁶

Ndagalu work was followed by bush clearance of the tsetse flies infested and half forest which comprised the greater part of Buhungukira. This part of the district had failed to support cattle because of tsetse flies infestations and the Veterinary Department concluded that, for this part to be used for cattle keeping, tsetse flies had to be removed.²⁷ Following this conclusion, the Director of Tsetse Flies Department toured the area in 1931 and his report recommended tsetse flies reclamation to begin in 1933 covering that area bounded on the north by the Mhalo-Nyamhanga-Ilangafipa range of hills and extending south to Mhande hill and

^{24.} TNA Kwimba District Book III, A Sheet No. 1.

^{25.} TNA Kwimba District Book I, Reclamation South of Buhungukira and Nera, 172.

^{26.} Brown, "From Ubombo to Mkhuzi," 288.

^{27.} TNA Kwimba District Book I, Reclamation South of Buhungukira and Nera, 172.

After the Second World War, the British colonial government revamped bush clearing campaign. During this period, tsetse flies eradication campaigns in Kwimba district as it was in other Sukumaland districts, became part and parcel of the Ten-Year Sukumaland Development Scheme which was initiated in 1947-48. The scheme among other aims, meant to continue bush clearance and establish a better balance between the number of cattle and the capacity of grazing land⁴⁴ in order to maintain livestock health.

In 1952 the Sukumaland Federation⁴⁵ resolved that the Sukumaland Development Officers should be sufficiently trained to carry out further surveys of tsetse flies infested areas in efforts to end animal trypanosomiasis.⁴⁶ The officers were intended to assist District Tsetse Flies Departments in the Sukumaland Federation to identify areas that were threatened by animal trypanosomiasis. This resolution fueled the Post-Second World War tsetse flies eradication campaigns in Kwimba as in other districts of the Federation. By 1954 the British officials had made regular visits to Sukumaland Development Organization

^{44.} John De Wilde, *Experience with Agricultural Development in Tropical Africa Vol. II: The Case Studies*, (Maryland: The John Hopkins Press, 1967), 418-419.

^{45.} Sukumaland Federation was a rural union of Sukumaland ethnic chiefdoms formed in 1946 which functioned as an administrative unit with its headquarters in Malya-Kwimba district.

^{46.} TNA T/5/13/2, Letter from Sukumaland Federation and Development Officer, Malya – Kwimba to Provincial Commissioner, Lake Province, 12 November 1952.

administration³¹ greatly favoured bush clearing campaign in the Sukumaland districts in efforts to control animal trypanosomiasis. British indirect rule was officially launched throughout the colony in 1926 and the policy made the chiefs into salaried officials of the central government.³²

The end result of Buhungukira campaign was that the entire bush to the east of a line from Nyamhanga to Mhande were cleared but remained the dense bush at the base of Nyamhanga hill and the light bush extending some six miles (9.6 kilometres) from Nyamhanga via Dodoma to Mhande hill.³³ It was unfortunate that bush clearing in this area was not completed mainly because of water shortage which caused considerable anxiety; however, over three quarters of the original program was carried out, with the result that the animal trypanosomiasis threat was removed and a large area became open for cattle keeping.³⁴

In implementing bush clearing campaign, the British administration incurred less cost which made it possible to free

^{31.} Lene Buchert, "Politics, Development and Education in Tanzania 1919-1985: An Historical Interpretation of Social Change", (Ph.D. Thesis: University of London, 1991), 56.

^{32.} Reea Hinkkanen, *Someone to Welcome you Home: Infertility, Medicines and the Sukuma-Nyamwezi*, (Helsinki: Helsinki University Print, 2009), 43.

^{33.} TNA Kwimba District Book I, Reclamation South of Buhungukira and Nera, 174.

^{34.} TNA Kwimba District Book I, Reclamation South of Buhungukira and Nera, 175.

large parts of the district from animal trypanosomiasis. Less expenses incurred in implementing bush clearing in the district was attributed to several reasons. Firstly, large turnout of the local people had the advantage of lessening bush clearing and administrative costs as large areas were cleared within a short period of time. Secondly, workers who worked using axes and *pangas*, and apart from being given meat and salt, were not paid at all.³⁵ In lieu of cash payments, the local government slaughtered cattle on the basis of three head per one hundred men for ten days' work. All the costs for the activities came from the Native Treasury. For example, the cost of 1929 bush clearance stood at Shs. 1/97 per acre.³⁶ The traditional meal for the workers consisted of meat and *ugali* (stiff porridge made of grain flour). The same meal was also used in the Shinyanga district where Swynnerton first founded the bush clearing campaign.³⁷ The Sukuma believed that meat and *ugali* supplied the necessary energy for them to perform heavy duties including bush clearing. In understanding the advantages of the campaign to their cattle, large stockowners sometimes provided beer and meat to further motivate the workers and ensure that large areas of bushes were cleared.³⁸

³⁵. TNA Kwimba District Book I, System of Government – Native Administration in Practice, B 262, Sheet No. 1.

³⁶. TNA Kwimba District Book III, A Sheet No. 1.

³⁷. Alawi, "An Assessment on the Effects of Environmental Conservation Policies," 114.

³⁸. Alawi, "An Assessment on the Effects of Environmental Conservation Policies," 114.

The outbreak of the Second World War retarded tsetse flies eradication campaigns in Kwimba district as elsewhere in the territory due to several reasons. Firstly, settlement became nucleated for security reasons leading to widespread vegetation regeneration in the abandoned areas.³⁹ Secondly, the war resulted in the closure of research stations and environmental development schemes⁴⁰ including those which organized bush clearing in the Kwimba district, particularly the Mpwapwa Tsetse Flies Research Center established in 1927⁴¹ which coordinated bush clearing in Kwimba. Thirdly, during the war, Africans were recruited to meet military demands, creating shortage of labourers for bush clearing campaigns.⁴² Consequently, during this time, the areas that had been previously rehabilitated from the tsetse flies regenerated into bush lands, creating new habitats for tsetse flies. This was followed by an upsurge in the tsetse flies, which threatened neighbouring areas.⁴³

³⁹. Idris Kikula, *Policy Implications on Environment: The Case of Villagization in Tanzania*, (Dar Es Salaam: Dar Es Salaam University Press, 1996), 133.

⁴⁰. Gufu Oba, *African Environmental Crisis: A History of Science for Development*, (New York: Routledge, 2020), 172.

⁴¹. Helen Tilley, "Ecologies of Complexity: Tropical Environments, African Trypanosomiasis, and the Science of Disease control in the British Colonial Africa, 1900 – 1940," *Osiris* 19, (2004): 30.

⁴². Leonard, "Developmental Interventions and Environmental," 94.

⁴³. Oba, *African Environmental Crisis*: 172.

animal trypanosomiasis was increased number of livestock in Kwimba district.

For example, bush clearing campaign which was implemented in the Kwimba district was important in controlling tsetse flies and lowering both, trypanosomiasis infections and livestock mortality while providing sufficient grazing lands which all together contributed to increased number of livestock in the district. Bush clearing did not only destroy tsetse flies habitats, but also improved the quantity and quality of grass for grazing,⁵⁹ thus providing sufficient pasture for livestock in the district. Bush clearing campaign was vital in improving nutritional levels of livestock in the district. From the veterinary vantage point less-fed animals are prone to livestock diseases⁶⁰ and low conception rate particularly among cows⁶¹ and vice-versa is also true. The impact of bush clearing campaign on increased number of livestock in Sukumaland districts has also been observed by Shashen in Maswa⁶² district and by Alawi in Shinyanga district.⁶³

^{59.} Birley, "Resource Management in Sukumaland, Tanzania," 13.

^{60.} Lughano Kusiluka et al, *Diseases of Small Ruminants in Sub – Saharan Africa: A Handbook*, (Midlothian: VETAID, 1996): 109.

^{61.} Titus Lunyasunya, et al, "Effects of Poor Nutrition on Reproduction of Dairy Stock on Small Holder Farms in the Tropics," *Pakistan Journal of Nutrition* 4, 2(2005): 117.

^{62.} Shashen, "Development Interventions and Environmental Change," 96.

^{63.} Alawi, "An Assessment on the Effects of Environmental Conservation," 114-115.

headquartered at Malya in Kwimba district and in all Sukumaland districts to assess the status of tsetse flies and animal trypanosomiasis eradication campaigns. During the visits, general aspects and problems of tsetse flies work in Sukumaland districts were discussed.⁴⁷ The visits and meetings ended up in producing plan of actions for clearing areas threatened by animal trypanosomiasis in Sukumaland districts.

It was out of this grand plan of action that in 1957 a grand scheme was considered to reclaim a large area of bush running from the north of Maswa, North West of Mwanza district down to Shishiyu and Kwimba district to free this area from animal trypanosomiasis.⁴⁸ The implementation of the scheme was expected to open new lands for cattle free from trypanosomiasis. Funds were to be availed by the government and used under the guidance of the Tsetse Flies, Agriculture and Medical Departments,⁴⁹ since the three departments were all essential components of tsetse flies control work.⁵⁰ The scheme was to be headquartered at Malya in Kwimba district on grounds that Malya appeared to be a very convenient centre because of the

^{47.} TNA T/5/14/19, Letter from Provincial Tsetse Officer to Director of Tsetse Survey and Reclamation; 12th January 1954.

^{48.} TNA T/5/19/1, Letter from Provincial Commissioner, Lake Province to Assistant Director of Veterinary Services; 7 March 1957.

^{49.} TNA T/5/19/1, Letter from Provincial Commissioner, Lake Province to Assistant Director of Veterinary Services; 7 March 1957.

^{50.} Alawi, "An Assessment on the Effects of Environmental," 114.

availability of office, garage and staff housing facilities.⁵¹ This scheme was expected to last approximately one year. The reclamation intended to cover Mwanza, Maswa, and Kwimba districts covering almost 600 square miles (960 kilometres) and involving two, if not three species of tsetse flies,⁵² and the estimated cost for the whole project stood at 4,440£.⁵³

However, the proposed project was not implemented because by 1957 nationalism among the Sukuma peasants was so high resulting in widespread peasant grievances against rules and regulations that accompanied the implementation of the Sukumaland Development Scheme. Agricultural policies created all kind of rural grievances, which in turn, led to the rise of rural discontents and radicalism.⁵⁴ Peasants' discontents with the colonial government's agricultural orders became peasant discontents with the colonial government⁵⁵ and ended up in fueling nationalistic struggles in the Sukumaland districts. As a result, the local Sukuma in Kwimba district were not ready to cooperate with the colonial government in implementing

^{51.} TNA T/5/19/11, Telegram from Provincial Tsetse Officer to Provincial Commissioner, Lake Province; 30 April 1957.

^{52.} TNA T/5/19/8, Letter from Provincial Tsetse Officer, Lake Province to Provincial Commissioner, Lake Province, 1 April 1954.

^{53.} TNA T/5/19/4, Sleeping Sickness, Sukumaland Districts Reports, 1957.

^{54.} Martin Kaniki, *Tanzania Under Colonial Rule*, (Dar Es Salaam: Dar Es Salaam University Press, 1980), 345 – 46.

^{55.} Dean McHenry, "The Utility of Compulsion in the Implementation of Agricultural Policies: The Case Study from Tanzania," *Canadian Journal of African Studies* 7, 2(1973): 306.

development projects such as bush clearing to control animal trypanosomiasis.

Despite the fact that bush clearing campaign in Kwimba district was crucial in the eradication of animal trypanosomiasis; the campaign was criticized on environmental grounds. It was argued that the campaign turned to be a major cause of environmental changes some of which threatened ecological sustainability.⁵⁶ However, it should be emphasized that the British were so determined to fight against cattle trypanosomiasis throughout their African colonies right from the late 1920s. For example, in the 1930 British colonial authorities waged a similar bush clearing campaign solely to eradicate animal trypanosomiasis in the Valley of Naboggo River in Gold Coast, a campaign which lasted for 17 years and succeeded to free this area from animal trypanosomiasis allowing large scale cattle keeping.⁵⁷ Generally, the Sukuamaland campaign was successful in reclaiming about 39.8 percent of tsetse flies infested area of Sukumaland between 1925 and 1946,⁵⁸ making it vital in the control of animal trypanosomiasis particularly in Kwimba district as large tracts of land were set free from animal trypanosomiasis. The end result of bush clearing to control

^{56.} Leonard, "Developmental Interventions and Environmental," 94.

^{57.} David Patterson, "The Veterinary Department and the Animal Industry in the Gold Coast 1909 – 1955," *The International Journal of African Historical Studies* 13, 3(1980), 479.

^{58.} Chipungu, "Constraints in the Commercialization of Sukuma Livestock," 31.

the eradication of tsetse flies and animal trypanosomiasis in Africa has also been noted by Brown who attests that tsetse flies eradication campaign to free cattle from trypanosomiasis involved a mixture of measures including villagization.⁷⁷ From September 1973 to June 1975 over seven million people were resettled, and from June 1975 to the end of 1976 a further four million were moved to new settlements in the country. The total population in the new villages at the end of the program was approximately thirteen million.⁷⁸ The policy also impacted Kwimba district by resettling human population and their livestock. By 1975, the implementation of villagization policy in Kwimba district had created 177 new villages, resettling 49, 931 families and making the district to have a total population of 288,809.⁷⁹

The implementation of villagization policy, apart from being blamed for destruction of people's properties in Kwimba district,⁸⁰ accelerated deforestation, which in turn played a

^{77.} Brown, "From Ubombo to Mkhuzi: Disease," 292.

^{78.} John Shao, "The Villagization Program and the Disruption of the Ecological Balance in Tanzania," *Canadian Journal of African Studies* 20, 2(1986): 221.

^{79.} John Moore, "The Villagization Process and Rural Development in the Mwanza Region of Tanzania," *Human Geography* 61, 2 (1979): 74

^{80.} Navuri Lameri, "Investigation of Contribution of Cooperative Unions Towards Improvement of Peasants' Welfare in Magu and Kwimba Districts in Mwanza Region, Tanzania from the 1920s to 2000s," *International Journal of Innovative Research & Development* 9, 3(2020), 120.

Evidence for increased numbers of livestock in Kwimba district following bush clearing was glaring. For example, by 1929 Kwimba district had a population of 319,000 herds and 266,000 sheep and goats.⁶⁴ Livestock census of the 1950s showed that the district had 400,756; 377,694; 338,467; and 351, 464 cattle in 1952; 1953; 1954; and 1955 respectively.⁶⁵ The district also had 255,483; 289,022; 23,054; and 205, 529 sheep in 1952, 1953, 1954 and 1955 respectively⁶⁶ while the number of goats was 111,493; 120,788 and 164, 385 in 1953, 1954 and 1955 respectively.⁶⁷ Livestock figures from 1953 showed a slight decrease in the number of cattle mainly because of the implementation of destocking policy which became formal in Kwimba district from 1953.⁶⁸ This slight declining trend in the number of cattle was attributed to a situation where by Native Authority clerks took bribe from stockowners in the district in order to record lower figures than those actually counted⁶⁹ as a

^{64.} Chipungu, "Constraints in the Commercialization of Sukuma Livestock," 37.

^{65.} TNA V/1/29/120, Cattle Census Sukumaland Districts, Letter from Provincial Commissioner, Lake Province to all District Commissioners Sukumaland, 16 November 1955.

^{66.} TNA V/1/29/121, Cattle Census Sukumaland Districts, Letter from Provincial Commissioner, Lake Province to all District Commissioners Sukumaland, 16 November 1955.

^{67.} TNA V/1/29/122, Cattle Census Sukumaland Districts, Letter from Provincial Commissioner, Lake Province to all District Commissioners Sukumaland, 16 November 1955.

^{68.} TNA, 483.

^{69.} TNA V/1/29/131, Telegram from Kwimba District Commissioner to Provincial Commissioner, Mwanza, 12 March 1956.

way of evading destocking. Despite this slight decrease, the numbers of cattle recorded in the 1950s were far higher than those recorded in the district in the 1920s. In a nearby Sukumaland district of Maswa for example, the number of cattle increased from 342,545 in 1930 to 687,716 in 1956.⁷⁰

Increased number of cattle was also reflected by massive expansion of cattle markets and sales. African stockowners were loath to sell their cattle because they constituted wealth and prestige.⁷¹ However, with increased number of cattle in Kwimba district, Sukuma stockowners sold their cattle in various cattle markets of the district such as Nyambiti, Ngudu, Mabuki, Hungumalwa, and Kahangara.⁷² In May 1947 it was reported that there was a slight increase in the total number of cattle brought to markets throughout the territory owing to the condition of the cattle having improved and in Kwimba district 644 cattle were sold in the cattle markets.⁷³ Kwimba livestock market report for the month of October, 1951 indicated that cattle markets were well attended by Bukoba and Tanganyika Packers Limited buyers where by 441 herds were sold at an average price of

^{70.} Shashen, "Development Interventions and Environmental Change," 96.

^{71.} Robert Tignor, "Kamba Political Protest: The Destocking Controversy of 1938," *African Historical Studies* 4, 2(1971): 242.

^{72.} TNA E/3/V/3, Telegram from Kwimba Stock Inspector to all Chiefs Kwimba District, 7 July 1950.

^{73.} TNA E/3/V/67, Letter from Provincial Commissioner, Lake Province to Kwimba District Commissioner, 7 May 1947.

shillings 159.26.⁷⁴

Efforts to eradicate animal trypanosomiasis continued in Kwimba district as elsewhere in the country after the attainment of independence in 1961. In addition to bush clearing, the new African government focused on other approaches such as the use of chemicals, the Sterile Insect Technique, Traps and Targets, and use of baits.⁷⁵

It has been argued that tsetse flies distribution in post-colonial Tanzania had been greatly altered due to changes in land cover and usage, driven mainly by the expansion of human settlement which significantly contributed to the destruction of tsetse flies habitat ecology and their decline in numbers.⁷⁶ The impact of human settlement expansion on the destruction of tsetse flies ecology and decline of animal trypanosomiasis in Kwimba district as elsewhere in post-colonial Tanzania began to be felt after the government of Tanzania began implementing a villagization policy, the largest resettlement effort in the history of Africa. The role of the government-led villagization policy in

^{74.} TNA E/3/V/11, Livestock Market Report for the Month of October, 1951 - Kwimba; Letter from Livestock Marketing Officer to Regional Veterinary Officer, Western Region, Mwanza, 1 November 1951.

^{75.} Imna Malele, "Fifty Years of Tsetse Control in Tanzania: challenges, and Prospects for the Future," *Tanzania Journal of Health Research* 3, 1(2011): 4.

^{76.} Elinigaya Kweka et al, *Major Disease Vectors in Tanzania: Distribution, Control and Challenge*, (London, Intech Open Access Publishers, 2017), 265.

subjects on behalf of the British colonial authority.⁸⁸ Under this political atmosphere, the local people willingly shared their efforts and energy in eliminating tsetse flies in their localities in order to control animal trypanosomiasis infections in the district. It should be noted that, the Sukuma valued their independence and freedom.⁸⁹ Therefore, in the absence of compulsion and presence of maximum freedom, the Sukuma fully accepted and participated in bush clearing campaigns in efforts to control animal trypanosomiasis.

Secondly, at the initial stage of bush clearing campaigns, the locals in the district accepted the campaign because they recognised its rationales. For example, the campaign had a direct impact of removing the bushes, opening more agricultural and pasture land, destroying tsetse flies habitats and thereby reducing tsetse flies infections which constantly mowed down their cattle.⁹⁰ The rationales of bush clearing campaign to the local Sukuma was also vivid in other Sukumaland districts. For example, in a nearby Sukumaland district of Maswa, bush clearing campaign was accepted and viewed as a golden chance

^{88.} TNA Kwimba district Book I, Reclamation south of Buhungukira and Nera, 174; Mikidadi Hamisi Alawi, "An Assessment on the Effects of Environmental Conservation Policies," 114-115.

^{89.} Franz Jozef Wijssen, *There is only One God: A Social-Scientific and Theological Study of Popular Religion and Evangelization in Sukumaland, Northwestern Tanzania*, (Nijmegen: Uitgeverij Kok – Kampen, 1993), 59.

^{90.} Didas Manumbu, Interview at Mwamashimba, 27 April 2023.

significant role in destroying tsetse flies habitat ecology and thus curbing animal trypanosomiasis in the district. Villagization intensified deforestation in order to acquire new areas for settlement, building materials, domestic wood fuel and agricultural lands.⁸¹ The clearance of vegetation to meet human needs was critical in the eradication of tsetse flies and animal trypanosomiasis infections during and after villagization in Kwimba district. Raikes viewed the development of new settlements which encouraged bush clearing as the most effective and cheapest means to clear areas infested by tsetse flies and animal trypanosomiasis since farmers performed jobs which otherwise would have been done by large quantities of imported equipment and/or chemicals,⁸² or human labour as the case of colonial Kwimba district. Thus, the decline in the number of tsetse flies in newly-cleared areas had a positive effect on curbing animal trypanosomiasis in Kwimba district.

The decline of tsetse flies and animal trypanosomiasis in Kwimba district after villagization was further supported by the district veterinary reports of the mid-1970s which showed no incidences of animal trypanosomiasis. Instead the reports showed incidences of other livestock diseases mainly tick borne but not animal trypanosomiasis. For example, in January 1977

^{81.} Idris Kikula, *Policy Implications on Environment: The Case of Villagization in Tanzania*, (Dar Es Salaam: Dar Es Salaam University Press, 1996), 130-133.

^{82.} Philip Raikes, *Livestock Development and Policy in East Africa*, (Uppsala: Scandinavian Institute of African Studies, 1981), 158-159.

the district veterinary report indicated 3 incidences of East Coast Fever,⁸³ report for March 1977 indicated 67 East Coast Fever and 12 Heart-water cases,⁸⁴ and the report for April 1977 showed 19 cases of East Coast Fever.⁸⁵ None of these reports showed animal trypanosomiasis cases in the district. Even the most common veterinary chemicals that the government supplied in the district in 1976 were acaricides such as N/Pfizer, Atlic, and Cooparton for ticks control⁸⁶ and not trypanocides for tsetse flies control. The relationship between villagization and decline of animal trypanosomiasis infections after the 1970s was also recalled by the local people of Kwimba district in the following words:

The post-colonial period was followed by government's villagization policy which increased the demand for settlement, agricultural and grazing lands in the new villages of Kwimba district. The demands contributed to rampant clearing of vegetation and opening up of new lands for agriculture, grazing and human settlements. This widespread clearance of vegetation resulted to significant decline of tsetse flies and animal trypanosomiasis in many parts of the district. Thus, after the 1970s Kwimba district never experienced tsetse flies eradication campaign

⁸³. TNA V/10/2/32, Mwanza Region Monthly Veterinary Report, January 1977.

⁸⁴. TNA V/10/2/34, Mwanza Region Monthly Veterinary Report, March 1977.

⁸⁵. TNA V/10/2/38, Mwanza Region Monthly Veterinary Report, April 1977.

⁸⁶. TNA, V/ 1/30/ 55, Mwanza Region Monthly Veterinary Report, November 1977.

because many parts of the district had been opened up making them free from tsetse flies infestations.⁸⁷

Though tsetse flies eradication campaigns in Kwimba district were never witnessed after the 1970s, the problem still existed in other parts of the country.

Local People Responses to Bush Clearing Campaigns

Tsetse flies elimination in the form of bush clearing to control animal trypanosomiasis as advocated by Charles Swynnerton began to be implemented in the district at the end of the 1920s as already noted. From the end of the 1920s to the closing dates of the 1930s, the campaign was well accepted by the local people in the district. The acceptance of this campaign within that time frame could be explained in three different grounds.

In the first place, bush clearing campaign was implemented at the nascent stage of the British indirect rule system. The stage was marked by less coercion in the implementation of British development projects in Tanganyika and Sukumaland in particular. At this stage, the British administration did not compel, but persuaded the Sukuma in the district to take part in development projects such as bush clearing campaign to control animal trypanosomiasis. In the early bush clearing campaigns to control animal trypanosomiasis, the local chiefs and village headmen in the district were in the frontline in mobilizing their

⁸⁷. Didas Manumbu, Interview at Mwamashimba, 27 April 2023.

Sukumaland districts massively supported bush clearing campaign to control animal trypanosomiasis. A case in point was where such stock owners volunteered to provide beer for enjoyment and slaughtered their animals in order to provide sufficient meat as food for the labourers involved in the campaign.¹⁰³ It is known that Sukuma stockowners were generally loath to slaughter their cattle except for genuine grounds such as getting food in case of shortage or for an important social function such as death or marriage of a family member.¹⁰⁴ Therefore, at a point where such stockowners willingly slaughtered their cattle for bush clearing labourers was another important indication that the Sukuma accepted the campaign and realized its benefits on the health of their cattle. The willingness of stockowners to support colonial veterinary interventions at the initial stages was also noted in other parts of British Tanganyika. For example, at the nascent stage of the development of the Iringa Dipping Scheme in the Southern Highlands, local stockowners who were the beneficiaries of the scheme volunteered in digging up pits for dip construction while the livestock officers and technicians would finally finish other settings of the dip.¹⁰⁵

for opening up new areas of land for farming and grazing.⁹¹ It was against this background that bush clearing campaign gained confidence of the local people in Kwimba district. The campaign was warmly welcomed and thousands of acres were cleared while some parts of the district such as Buhungikira which had failed to support cattle for quite a long time in the past were now opened up for cattle keeping.⁹² With the acceptance of bush clearing campaigns among the Sukuma of Kwimba district, Ruthenberg reminds us that, despite the fact that the Sukuma were slow to respond to new ideas, however, if they accepted a change, a considerable effect could be achieved in an amazingly short period of time.⁹³ This was the case with bush clearing to control tsetse flies and animal trypanosomiasis in Kwimba district where a considerable work was done by the Sukuma within a short time.

Thirdly, bush clearing campaign to control animal trypanosomiasis was well accepted in the district because it had an added advantage of controlling human trypanosomiasis. Human trypanosomiasis was one of the medical problems to human health which scourged the local people in the district apart

¹⁰³. Alawi, "An Assessment on the Effects of Environmental Conservation Policies," 114.

¹⁰⁴. Mathias Magoye Kumalija, Interview at Kiliwi, 24 April 2023.

¹⁰⁵. Julius Mgaya and Osmund Kapinga, "Iringa Dipping Scheme in Mufindi 1940s to 1958; 'Development' Resisted by Peasants," *Journal of Humanities and Cultural Studies* 4, 2(2022): 6.

⁹¹. Leonard, "Developmental Interventions and Environmental Change," 93.

⁹². TNA Kwimba district Book I, Reclamation south of Buhungukira and Nera, 172.

⁹³. Hans Ruthenberg, *Agricultural Development in Tanganyika*, (New York: Heidelberg, 1964), 58.

from Bilharzia,⁹⁴ Syphilis and Gonorrhoea.⁹⁵ For example, the invasion of tsetse flies in the areas along the Ididi and Simiyu rivers compelled the local people to withdraw from a number of villages in these areas in 1922.⁹⁶ From medical vantage point, there was no objection from the local people in the district to fully support Swynnerton campaign in efforts to control animal trypanosomiasis.

The acceptance of bush clearing campaign to control animal trypanosomiasis among the local people in the district was not hard to prove since myriad evidence existed. In the first place, the Sukuma turn out in bush clearing campaign against animal trypanosomiasis in the district was reasonable. For example, the campaign along the Ididi and Simiyu River drew 18,000 people who cleared about 14 square miles in 1928 making a total of cleared area in this part of the district to score 40 square miles.⁹⁷ In 1930 a similar campaign covering the Ndagalu block drew 14,000 local people who cleared approximately 12 square miles⁹⁸ while bush clearing campaign that covered Buhungukira area in 1933 was attended by 3,600 people.⁹⁹ A similar response was

⁹⁴. Vivian Usborne, "The Symptoms of Urinary Bilhaziasis in the Kwimba District of Tanganyika," *South African Medical Journal* 28, 31 (1954).

⁹⁵. TNA Kwimba District Book I, Medical: General Matter, Prevalent Diseases and Medical, sheet No. 1, 126.

⁹⁶. TNA Kwimba District Book III, A Sheet, No. 1.

⁹⁷. TNA Kwimba District Book III, A Sheet, No. 1.

⁹⁸. TNA Kwimba District Book III, A Sheet, No. 1.

⁹⁹. TNA Kwimba district Book I, Reclamation south of Buhungukira and Nera, 172.

noted in the nearby Sukumaland district of Shinyanga where a total of 86 square miles had been cleared by 1926.¹⁰⁰ There is no doubt that, this high turnout of the local people in the district to support bush clearing revealed their acceptance and approval of the campaign.

Secondly, bush clearing campaign in Kwimba was voluntary and turned to be a communal work. Labourers were paid nothing apart from meat and salt¹⁰¹ which formed the basis of their meals. The fact that bush clearing was voluntary and communal strongly indicated that the local people in the district accepted this veterinary intervention. For example, bush clearing was both time intensive and physically demanding. Beyond that, the campaign involved many risks such as bites from snake and other poisonous insects. Despite all the difficulties and risks that accompanied bush clearing campaign, the local people volunteered.¹⁰² This was an important justification that the local people accepted bush clearing against tsetse flies and animal trypanosomiasis.

Thirdly, another evidence for the acceptance of bush clearing campaign in Kwimba district emanated from large stock owners. The evidence suggests that the wealthy stockowners in

¹⁰⁰. Alawi, "An Assessment on the Effects of Environmental Conservation Policies," 114.

¹⁰¹. TNA, Kwimba District Book I, System of Government-Native Administration in Practice, B 262, Sheet No. 1.

¹⁰². George Ng'wanasengerema, Interview at Bupamwa, 6 April 2023.

general reluctance, and, in fact, in some cases refusal, of the local people to turn out once a year to do some communal work-usually tsetse flies clearing for the common good.¹¹² Thus, the policy of issuing ordinances through local authorities and the implementation of these regulations by an army of instructors who levied fines for non-observance, gave rise to opposition¹¹³ where the Sukuma of Kwimba refused to participate in the bush clearing campaign.

However, with independence in 1961 all compulsory colonial rules and regulations were abandoned by the new formed African government. Vries argues that when Tanganyika became independent in 1961 it abandoned the enforcement of by-laws and instead focused on the one hand on transforming agriculture through resettling people in a series of capital and management intensive village settlement schemes and on the other on 'improving' traditional agriculture through extension and credit programmes.¹¹⁴ The abandonment of compulsory rules and regulations by the newly formed government made bush clearing voluntary in the new 172 village settlements which had been established in the district by 1972.¹¹⁵ As already noted, tsetse eradication campaigns in Kwimba district were never witnessed

^{112.} TNAT/5/9/17, Tsetse Eradication Annual Report 1959.

^{113.} Ruthenberg, *Agricultural Development in Tanganyika*: 58.

^{114.} James de Vries, "Agricultural Extension and Development – Ujamaa Villages and the Problems of Institutional Change," *Community Development Journal* 13, 1(1978), 12.

^{115.} TNAR/1/9/14, Mwanza, Annual Report-Kwimba District 1972.

The Sukuma protests against the campaign were attributed to the British change of administrative and economic policies. British colonial history of Tanganyika shows that the period after 1930 was characterised by three important aspects. Firstly, a gradual shift from indirect rule to a more active and interventionist strategy of administration; secondly, there was an increased British interest in the patterns and methods of African agrarian production in order to increase productivity, and thirdly, there was a need to conserve natural resources of the colony.¹⁰⁶ The three aspects laid a basis for the development and formulation of coercive rules and regulations that accompanied the implementation of conservation and developmental interventions particularly in respect to agricultural production including veterinary measures in Sukumaland. The implementation of these agricultural interventions made Sukumaland a place where "the genius of European knowledge and technology could usefully confront the most typical and pervasive problems of African life and development."¹⁰⁷

For example, from the mid-1930s the British believed that force was necessary to make small farmers change their agricultural techniques. Rounce, an influential British Agricultural Officer in

^{106.} David Anderson, Depression, "Dust Bowl, Demography, and Drought: The Colonial State and Soil Conservation in East Africa during the 1930," *Journal of African affairs* 83, 332 (1984): 322.

^{107.} Grace Carswell, "Multiple Historical Geographies: Responses and Resistances to Colonial Conservation Schemes in East Africa," *Journal of historical Geography* 32, (2006): 412.

Sukumaland for example attested that the African must be compelled-and forcibly too-to improve the conditions under which he lives, with his own hands.¹⁰⁸ In line with this British thinking, in 1937, for example, the Native Authorities Ordinance was amended to allow by-laws to be passed for the enforcement of agricultural practices including veterinary interventions and those who 'offended' could be taken to a Native court, at which the chief presided, and be fined or imprisoned.¹⁰⁹ However, the use of compulsion in the implementation of British agricultural interventions in the colony, particularly in Sukumaland had the effect of changing local peoples' attitudes from acceptance to rejection of such interventions as evidenced by compulsory bush clearing campaign in Kwimba district.

For example, in 1939 a Native Authority Ordinance was passed in Kwimba district which compelled the local people in the cleared areas to prevent bush regeneration, arranging for communal clearing, and prohibiting entry of cattle into the country north of Nyanhanga area.¹¹⁰ This ordinance had far reaching impact on the local peoples' response towards bush clearing campaign in the district. The passing of this ordinance

^{108.} Goran Hyden, *Beyond Ujamaa in Tanzania: Underdevelopment and an Uncaptured Peasantry*, (California: California University Press, 1980), 57.

^{109.} Andrew Culson, *Tanzania: A Political Economy*, (Oxford: Oxford University Press, 1982), 82.

^{110.} TNA Kwimba District Book I, System of Government – Native Administration in Practice, B 262, Sheet No.1.

made bush clearing in the district compulsory and enforced by state laws while previously the campaign was voluntary and implemented by the local people free of charge. The Sukuma of Kwimba district who initially enjoyed independence and freedom in their daily life and in carrying out government agricultural interventions such as bush clearing were now introduced into coercion which contravened their freedom and independence. The ordinance laid the foundation for Sukuma's negative attitude and protest towards bush clearing campaign to control animal trypanosomiasis in the district.

The use of coercion in the implementation of bush clearing campaign in Kwimba district further intensified following the inauguration of the Sukumaland Development Scheme in 1947/48 which, among other objectives, aimed at continuing bush clearance in the Sukumaland districts including Kwimba. The implementation of the scheme was accompanied by more rules and regulations including those for bush clearing and by the early 1950s the Sukuma peasants were over legislated and they simply ignored or rejected them.¹¹¹ The tendency of the Sukuma peasants to ignore and reject such rules and regulations was an important indication of protests.

The Sukuma's protests against colonial ordinances that enforced bush clearing campaign was vivid in Kwimba district after the mid-1950s. For example, it was noted in 1959 that there was a

^{111.} Hyden, *Beyond Ujamaa in Tanzania*: 58.

- Africa, c.1894-1953,” *The Journal of the History of Medicine and Allied Sciences* 63, 3 (2008): 285-322.
- Coghe Samuel. “Sleeping Sickness Control and the Transnational Politics of Mass Chemoprophylaxis in Portuguese Colonial Africa.” *Portuguese Studies Review* 25, 1 (2017): 57-89.
- Headrick Daniel. “Sleeping Sickness Epidemics and Colonial Response in East Africa and Central Africa, 1900-1940.” *Journal of Tropical Neglected Diseases* 8, 4 (2004): 1-8.
- Imperato JamesPascal. “Lords of the Fly: Sleeping Sickness Control in East Africa, 1900-1960 (Review).” *African Study Review* 48, 1 (2005):166-169.
- Jackson Jonathan.“Coercion and Dissent: Sleeping sickness 'Concentrations' and the Politics of Colonial Authority.” *The Journal of African History* 63, 1 (2022): 1-18.
- Lameri Navuri. “Investigation of Contribution of Cooperative Unions Towards Improvement of Peasants' Welfare in Magu and Kwimba Districts in Mwanza Region, Tanzania from the 1920s to 2000s.” *International Journal of Innovative Research & Development* 9, 3 (2020): 171-186.
- Lang Gottfried and Lang Martha. “Problems of Social and Economic Change in Sukumaland, Tanganyika.” *Anthropological Quarterly* 35, 2 (1962): 86-101
- Leonard Jonas. “Developmental Interventions and Environmental Change in Maswa District, 1920 to 1960.” *Tanzania Zamani* 13, 2 (2021): 86-113
- Lunyasunya Titus et al. “Effects of Poor Nutrition on Reproduction of Dairy Stock on Small Holder Farms in the Tropics.” *Pakistan Journal of Nutrition* 4, 2 (2005):117-122.
- Lyons Maryinez. 'From “Death Camps” to cordon Sanitaire: The Development of Sleeping Sickness Policy in the Ulele District of the Belgian Congo, 1903-14.” *The Journal of African History*, 26 (1985): 69-91.
- Malele Imna. “Fifty Years of Tsetse Control in Tanzania: challenges, and Prospects for the Future.” *Tanzania Journal of Health Research* 3, 1 (2011):1-10.

after the 1970s.

Conclusion

This paper is a contribution to African historical debate on government initiatives to control animal trypanosomiasis. The paper concludes that bush clearing campaign that was introduced in Kwimba district by British colonial government in the 1920s played an important role in controlling animal trypanosomiasis. The decline of trypanosomiasis infections and cattle mortality resulted to more grazing lands and increased number of cattle in the district. With the attainment of independence in 1961 bush clearing remained to be an important aspect of animal trypanosomiasis control where villagization policy of the 1970s played an important role fast tracking bush clearing which was important in destroying tsetse flies habitats leading to further decline of animal trypanosomiasis infections in the district. Local people's response varied between rejection and acceptance. The paper has demonstrated that between the 1920s and the mid-1930s bush clearing campaign was accepted since it was voluntary while the local people rejected the campaign from 1939 when bush clearing was made compulsory and this tendency continued through the 1950. However, after independence, the new government abolished all colonial coercive rules and regulations and bush clearing in the new villages became voluntary.

Bibliography

Archival Sources

- TNA E/3/V/11, Livestock Market Report for the Month of October, 1951 - Kwimba; Letter from Livestock Marketing Officer to Regional Veterinary Officer, Western Region, Mwanza, 1 November 1951
- TNA E/3/V/3, Telegram from Kwimba Stock Inspector to all Chiefs Kwimba District, 7 July 1950.
- TNA E/3/V/67, Letter from Provincial Commissioner, Lake Province to Kwimba District Commissioner, 7 May 1947
- TNA Kwimba District Book I, Reclamation South of Buhungukira and Nera
- TNA Kwimba District Book I, System of Government-Native Administration in Practice, B 262,
- TNAR/1/9/14, Mwanza, Annual Report-Kwimba District 1972.
- TNA T/5/13/2, Letter from Sukumaland Federation and Development Officer, Malya-Kwimba to Provincial Commissioner, Lake Province, 12 November 1952.
- TNA T/5/14/19, Letter from Provincial Tsetse Officer to Director of Tsetse Survey and Reclamation; 12th January 1954.
- TNA T/5/19/1, Letter from Provincial Commissioner, Lake Province to Assistant Director of Veterinary Services; 7 March 1957.
- TNA T/5/19/1, Letter from Provincial Commissioner, Lake Province to Assistant Director of Veterinary Services; 7 March 1957
- TNA T/5/19/11, Telegram from Provincial Tsetse Officer to Provincial Commissioner, Lake Province; 30 April 1957.
- TNA T/5/19/4, Sleeping Sickness, Sukumaland Districts Reports, 1957
- TNA T/5/19/8, Letter from Provincial Tsetse Officer, Lake Province to Provincial Commissioner, Lake Province, 1 April 1954.
- TNA T/5/9/17, Tsetse Eradication Annual Report 1959.
- TNA V/1/29/120, Cattle Census Sukumaland Districts, Letter from Provincial Commissioner, Lake Province to all District Commissioners Sukumaland, 16 November 1955.
- TNA V/1/29/121, Cattle Census Sukumaland Districts, Letter from Provincial

- Commissioner, Lake Province to all District Commissioners Sukumaland, 16 November 1955.
- TNA V/1/29/122, Cattle Census Sukumaland Districts, Letter from Provincial Commissioner, Lake Province to all District Commissioners Sukumaland, 16 November 1955
- TNA V/1/29/131, Telegram from Kwimba District Commissioner to Provincial Commissioner, Mwanza, 12 March 1956.
- TNA V/10/2/32, Mwanza Region Monthly Veterinary Report, January 1977.
- TNA V/10/2/34, Mwanza Region Monthly Veterinary Report, March 1977.
- TNA V/10/2/38, Mwanza Region Monthly Veterinary Report, April 1977.
- TNA, 483.
- TNA, Kwimba District Book III, A Sheet, No.1.
- TNA, V/ 1/30/ 55, Mwanza Region Monthly Veterinary Report, November 1977.

Interviews

- Didas Manumbu, Interview at Mwamashimba, 27 April 2023
- George Ng'wanasengerema, Interview at Bupamwa, 6 April 2023.
- Mathias Magoye Kumali, Interview at Kiliwi, 24 April 2023.

Journal Articles

- Anderson David. "Depression, "Dust Bowl, Demography, and Drought: The Colonial State and Soil Conservation in East Africa during the 1930." *Journal of African affairs* 83, 332 (1984): 321-343.
- Bannister David. "The Sorcerer's Apprentice: Sleeping Sickness, Onchocerciasis, and Unintended Consequences in Ghana, 1930-60." *The Journal of African History* 62, 1 (2021): 29-57.
- Beinart William, Brown Karen and Gilfyle Daniel. "Experts and Expertise in Colonial Africa Reconsidered: Science and the Interpretation of Knowledge." *African Affairs* 108, 432 (2009): 413-433.
- Birley H. Martin. "Resource Management in Sukumaland, Tanzania." *International African Institute* 52, 2 (1982): 1-30
- Brown Karen. "From Ubombo to Mkhuzi: Disease, Colonial Science, and the Control of *Nagana* (Livestock Trypanosomiasis) in Zululand, South

- McCulloh Brad. "Overstocking in Sukumaland, Tanganyika." *East African Agricultural and Forestry Journal* 30, 3 (1965)
- Mgaya Julius and Kapinga Osmund. "Iringa Dipping Scheme in Mufindi 1940s to 1958; 'Development' Resisted by Peasants." *Journal of Humanities and Cultural Studies* 4, 2 (2022):1-12.
- Moore John. "The Villagization Process and Rural Development in the Mwanza Region of Tanzania." *Human Geography* 61, 2 (1979): 219-239.
- Offori Edward. "The Scourge of Tsetse." *IAEA Bulletin* 23, 3 (1981): 43-46
- Patterson David. "The Veterinary Department and the Animal Industry in the Gold Coast 1909 – 1955." *The International Journal of African Historical Studies* 13, 3 (1980): 457-491.
- Shao John. "The Villagization Program and the Disruption of the Ecological Balance in Tanzania." *Canadian Journal of African Studies* 20, 2 (1986):
- Tignor Robert. "Kamba Political Protest: The Destocking Controversy of 1938." *African Historical Studies* 4, 2 (1971): 237-251.
- Tilley Helen. "Ecologies of Complexity: Tropical Environments, African Trypanosomiasis, and the Science of Disease control in the British Colonial Africa, 1900-1940." *Osiris* 19, (2004): 21-38.
- Usborne Vivian. "The Symptoms of Urinary Bilhaziasis in the Kwimba District of Tanganyika." *South African Medical Journal* 28, 31 (1954): 641-642.
- Weiskopf Julie. "Living in Cold Storage: An Interior History of Tanzania's Sleeping Sickness Concentrations, 1933-1946." *International Journal of African Historical Studies* 49, 1 (2016): 1-22.
- White Luice. "Tsetse Visions: Narrative of Blood and Bugs in Colonial Northern Rhodesia." *The Journal of African History* 36, 2 (1995): 219-45

Published Secondary Sources

- Burri Christian. *Human African Trypanosomiasis (Sleeping Sickness): The Road to Elimination Revisited-Achievement and Remaining Challenges*. Basel: MDPI, 2020.
- De Wilde John. *Experience with Agricultural Development in Tropical Africa*

- Vol. II: The Case Studies.* Maryland: The John Hopkins Press, 1967.
- Fisher Eileen. "Forced Resettlement, rural Livelihoods and Wildlife Conservation along the Ugalla River in Tanzania," in D. Chatty and M. Colchester (eds.), *Conservation and Mobile Indigenous Peoples: Displacement, Forced Settlement, and Sustainable Development.* Oxford, Oxford University Press, 2002.
- Helge Kjekshus. *Ecology Control and Economic Development in East African History: The Case of Tanganyika 1850-1950.* Ohio: Ohio University Press, 1996.
- Hinkkanen Reea. *Someone to Welcome you Home: Infertility, Medicines and the Sukuma-Nyamwezi.* Helsinki: Helsinki University Print, 2009.
- Hyden Goran. *Beyond Ujamaa in Tanzania: Underdevelopment and an Uncaptured Peasantry.* California: California University Press, 1980.
- Kaniki Martin. *Tanzania Under Colonial Rule.* Dar Es Salaam: Dar Es Salaam University Press, 1980.
- Kikula Idris. *Policy Implications on Environment: The Case of Villagization in Tanzania.* Dar Es Salaam: Dar Es Salaam University Press, 1996.
- Kusiluka Lughano et al. *Diseases of Small Ruminants in Sub-Saharan Africa: A Handbook.* Midlothian: VETAID, 1996.
- Kweka Elinigaya et al. *Major Disease Vectors in Tanzania: Distribution, Control and Challenge.* London, Intech Open Access Publishers, 2017.
- Lachenal Guillaume. *The Lamidine Files: The Untold story of Medical Disaster.* Baltimore, Hopkins Press, 2014.
- Lyons Maryinez. *"The Colonial Disease: A Social History of Sleeping Sickness in Northern Zaire, 1900 – 1940.* Cambridge: Cambridge University Press 1992.
- Meertens Catharina Christiana Hubertus. *Dynamics in Farming Systems: Changes in Time and Space in Sukumaland, Tanzania.* Amsterdam: KIT Press, 1995.
- Oba Gufu. *African Environmental Crisis: A History of Science for Development.* New York: Rutledge, 2020.
- Raikes Philip. *Livestock Development and Policy in East Africa.* Uppsala: Scandinavian Institute of African Studies, 1981.
- White Luice. *Speaking with Vampires: Rumor and History in Colonial Africa.*

- Berkeley: University of California Press, 2000.
- Wijzen Jozef Franz. *There is only One God: A Social-Scientific and Theological Study of Popular Religion and Evangelization in Sukumaland, Northwestern Tanzania.* Nijmegen: Uitgeverij Kok-Kampen, 1993.

Unpublished Secondary Sources

- Alawi Hamisi Mikidadi. "An Assessment on the Effects of Environmental Conservation Policies in Colonial and Post-Colonial Tanzania, 1922-2000: The Case of Morogoro and Shinyanga Regions." Ph.D. thesis: Open University of Tanzania, 2014.
- Buchert Lene. "Politics, Development and Education in Tanzania 1919-1985: An Historical Interpretation of Social Change." Ph.D. Thesis: University of London, 1991.
- Lea Sarah Rachael. "Ecology and control of Tsetse at the Interface of Conservation and Farming Areas in Tanzania." Ph.D. Thesis: University of Liverpool, 2019.
- Samuel Chipungu. "Constraints in the Commercialization of Sukuma Livestock, 1919-1961." M.A. Thesis: University of Zambia, 1981.
- Weiskopf Julie. "Resettling Buha: A Social History of Resettled Communities in Kigoma Region, Tanzania, 1933-1975." Ph.D. thesis, University of Minnesota, 2011.