

A Development Narrative of a Rural Economy: The Politics of Forest Plantations and Land Use in Mufindi and Kilimanjaro, Tanzania; 1920s to 2000s

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Abstract: Forest plantations started in Tanzania during the German period and were further developed during the British colonial period and postcolonial period. Forest plantation was carried out on both a large scale owned by the government for commercial purposes and a small scale run by Native Authorities for use by African communities surrounding them. The establishment of forest reserves involved the alienation and demarcation of large portions of land that in effect resulted in changing land use habits of land formerly used for other activities, like peasant farming and livestock herding. The adjustments made in pastoralism, peasant subsistence farming and human settlements were unavoidable outcomes of the establishment of forest plantations. This paper uses archival, oral and secondary sources to show the dynamics in land use change in the studied areas. We argue in this paper that, forest plantations in both colonial and post-colonial Tanzania, created new forms of land use that could not be sustained in the older practices of land use. We use Sao-Hill Forest Plantation (SHFP) located in Mufindi–Iringa region and Kilimanjaro Forest Plantation (KFP) including West, North and South Forest Plantations located in Kilimanjaro region to show the impacts of the establishment of forest plantations on land use practices by societies surrounding them.

Keywords: Forest Plantations, Land Acquisition, Land Use, Squatting System, Local Communities, Sao-Hill Forest Plantation, Kilimanjaro Forest Plantations.

1. INTRODUCTION

Rural economies have always been perceived as being in a position of decline and total collapse without interventions from outside the communities. Its people are perceived to be unconscious of the impacts of whatever activity they are engaged in on their environments and their local environmental knowledge is rarely recognised to equal or supplement expatriate knowledge.¹ Governments and experts have always been busy to devise mechanisms of proper rural developments as they regard themselves as ‘know all’ fellows with obligatory responsibility of preparing guidelines for those who know nothing about their environments in rural areas. The rural development narrative in Africa started with

¹ Discussion on the conflict of interest between local knowledge and government interventions on resources use can be found in David M. Anderson. 2002. *Eroding the Commons: The Politics of Ecology in Baringo, Kenya 1890 – 1963*. James Currey – Oxford, East African Educational Publishers – Nairobi and Ohio University Press, Athens, read chapter one and Shane Doyle. 2006. *Crisis and Decline in Bunyoro: Population and Environment in Western Uganda, 1860 – 1955*. James Currey – Oxford, Fountain Publishers – Kampala and Ohio University Press – Athens, see especially the introduction and chapter one.

the introduction of colonial rule that introduced new culture, ideals and values on resources and most importantly new development approaches. Development narratives are relative and depend on prevailing circumstances on the ground at a particular time. Conservation and preservation of natural resources was at the centre of all colonial development projects in Africa. In many cases, they were one sided, as local people with subsistence activities were labelled as more engaged in irresponsible resource uses than settlers who carried out large scale farming and ranching activities. Similar preventive approaches continued in the postcolonial period where peasants and herders continued to be treated as 'irresponsible groups' when it came to resources use. This paper uses the case of forest plantations to examine the implementation of the 'rural development narrative' in line with land acquisition, distribution and use that resulted from the introduction of forest plantations in Mufindi and Kilimanjaro. While the plantations were not primarily intended to benefit the local communities surrounding them, the impact that their establishment in Mufindi and Kilimanjaro brought about had much to contribute to people's livelihoods and development at large.

2. A BRIEF HISTORIOGRAPHY OF FOREST PLANTATIONS IN AFRICA

The history of forest plantations can be traced as far back as 1765 and 1800 when it was first established in Prussia and Saxony respectively. From Prussia and Saxony it spread to France, England, United States of America and throughout the world.² Forest plantations were introduced in Africa in the early 1900s³ in response to the global increase of the demand for forest products and the colonial ideological pre-occupations of conservation of natural resources, forests and the environment at large against reckless and irresponsible colonial subjects.⁴ Much establishment of forest plantations in colonial Africa occurred between 1900 and 1945. It was also after the Second World War that conservation campaigns in Africa intensified and consequently catalysed the establishment and development of forest plantations in the colonial continent.⁵ In South Africa, for instance, 520,000 ha of exotic trees were planted by 1938.⁶ In Nyasaland (Malawi) forest plantations were established in 1906.⁷ In Northern Rhodesia it started in 1920s.⁸ In East Africa, forest plantations were first established in the 1890s.⁹

In Tanganyika, forest plantations were first established in 1893 by the German colonial government starting with an experimental nursery garden of 2.5ha that was established in Dar es Salaam. The nursery experimented, produced and distributed ornamental and forest trees for the township and some were distributed to other areas.¹⁰ Later in 1902, Dr. Frans Stuhlmann established the Agricultural Research Station at Amani in Tanga that aimed at experimenting the growth of various exotic tree species for timber production, medicine and ornamental purposes. This would help reforestation of degrading lands, especially in West Usambara.¹¹ After a few years of trials, many exotic species proved successful in

² James C. Scott, *Seeing Like a State*, (London: Yale University Press, 1998), p. 14.

³ Shabani Chamshama, Patrice Savadogo and Crispin Marunda, 'Plantations and Woodlots in Africa: Dry Forests and Woodlands.' in Emmanuel N. Chidumayo and Davison J. Gumbo, (Eds.). *The Dry Forests and Woodlands of Africa: Managing for Products and Services*, (London: Earth Scan, 2010), p. 207.

⁴ Studies on forest conservation in Africa during the colonial period include, David M. Anderson. 1984. 'Depression, Dust Bowl, Demography and Drought: The Colonial State and Soil Conservation in East Africa During the 1930s.' *African Affairs*, Vol. 83, pp. 321 – 343, David M. Anderson and Richard Grove. 1995. 'The Struggle for Eden: Past Present and Future in African Conservation.' in David M. Anderson and Richard Grove (Eds.). *Conservation in Africa: People, Policies and Practice*. Cambridge University Press, Cambridge, pp. 1 – 10, Richard Grove. 1995. 'Early Themes in African Conservation: The Cape in the Nineteenth Century.' In David M. Anderson and Richard Grove (Eds.), pp. 21 – 37, Andrew Millington. 1995. 'Environmental Degradation, Soil Conservation and Agricultural Policies in Sierra Leone, 1895 – 1984, in David M. Anderson and Richard Grove (Eds.), pp. 229 – 246 and David M. Anderson. 1995. 'Managing the Forest: The Conservation History of Lembus, Kenya, 1904 – 1963.' In Anderson and Grove, pp. 249 – 265.

⁵ See David M. Anderson. 1984, pp. 321 – 343.

⁶ Chamshama, Savadogo and Marunda, p. 208.

⁷ R. S. Troup, *Colonial Forest Administration*, (London: Oxford University Press, 1940), p. 347.

⁸ Ibid, p. 342.

⁹ Frans Bongers and TimmTennig Keit. 2010. *Degraded Forests in Eastern Africa: Management and Restoration*. Earth Scan Publishers Limited, London, p.174.

¹⁰ Hans G. Schabel, 'Tanganyika Forestry under German Colonial Administration. 1891-1919', *Forest and Conservation History*, Vol. 34, No. 3, p. 135.

¹¹ URT. 1992. Ministry of Tourism, Natural Resources and Environment, Tanzania Forestry Research Institute (TAFORI) Master Plan 1993-2002, Morogoro, p. 5.

many areas, and this marked the beginning of commercial forest plantations in Tanganyika. However, in some areas, trees were planted for conservation purposes and were not directly linked with generation of income or forest products.¹²

Forest plantations were further extended in the British period following the introduction of the Forestry Department in 1921, which dealt with the conservation of natural forests and planting of exotic species for commercial purposes.¹³ The British endeavour to invest in forest plantations was predisposed by the world's high demand for timber and forest resources starting in the 1920s.¹⁴ In response to the availability of market for timber and the worldwide depletion of forest resources, the British government in Tanganyika introduced forest plantations in different areas, including North Kilimanjaro in 1926, Mufindi in the 1930s, Meru in 1950, Ukaguru in 1950, Rubya in 1951 and West Kilimanjaro in 1954, to mention but a few.¹⁵ All these forest plantations and reserves were to conserve, protect and prevent resource depletion by African populations, at the same time produce commercial timber for both local and export purposes.

3. LOCATING THE STUDY IN MUFINDI AND KILIMANJARO

Sao-Hill Forest Plantation (SHFP) is among the sixteen forest plantations owned by the government of Tanzania. It is in Mufindi District that is 100 Kilometres from Iringa Municipal and 15 Kilometres from Mafinga town. Its history dates back to the 1930s following the trial of different exotic species and the establishment of 'Mufindi Afforestation Scheme' in Mufindi District for environmental conservation and economic purposes.¹⁶ It is the largest forest plantation in Tanzania and covers more than half of the total area of government forest plantations in Tanzania. Records for the year 2014 showed that SHFP covered a total area of 135,903 ha, whereby 52,070 ha were planted with trees, 48,200 ha were set aside for natural forests on catchment areas, 1,700 ha were used for residential houses and offices while 33,933 ha were annexed to the forest for miscellaneous purposes.¹⁷ SHFP is spread in four divisions of Mufindi District, namely, Kibengu, Ifwagi, Kasanga and Malangali. Also about 1,700 ha of the plantation is found in Kilombero District of Morogoro region.¹⁸ This comparative study covered only Mufindi District because it occupied the largest share of the plantation and has had a long history of forest plantation in Tanzania.

North and West Kilimanjaro Forest Plantations (KFP) are also among the sixteen government forest plantations established by the British government and later developed by the post-colonial government. North Kilimanjaro Forest Plantation was established in 1926 while West Kilimanjaro Forest Plantation was established in 1954. The two plantations form the Kilimanjaro Forest Plantation (KFP) and occupy a total of 12,774 ha.¹⁹ Kilimanjaro Forest Plantation was detached from other forms of land use with a buffer created by the establishment of the Native Half-Mile Strip that separated activities on the forest reserve and those on the peasant plots. It demarcated the plantation from its closely adjoining land uses by the Chagga on the *vihamba*²⁰ land. This buffer reserve protected the KFP by providing forest products for the Chagga and acted as a barrier to fire occurrences that could affect the plantation. The two case studies were used to compare land use changes that occurred as a result of the establishments of forest plantations. The motive for the two cases emanated from the intention to compare land use change in societies that had different opportunities of access, ownership and use of land in their areas. This enabled us to show how specific were the impacts and the adaptations of the affected population.

¹² Schabel, "Tanganyika Forestry under German Colonial Administration. 1891-1919," *Op. Cit.* p. 135.

¹³ Hans G. Schabel. 2006. *Forest Entomology in East Africa: Forest Insects of Tanzania*, Springer, Netherlands, p. 30, Also see Troup, p. 357.

¹⁴ *Ibid.*, p. 196.

¹⁵ Yonika M. Ngaga. 2011. *Forest Plantation and Woodlots in Tanzania*. African Forest Forum Nairobi, p. 18.

¹⁶ TNA 270/Y/6: Iringa Forests, Letter from the Assistant Conservator of Forests-Bukoba to the Forest Department-Lushoto, dated 14th February 1927.

¹⁷ SHFP, File No. MU/9.04/B: Annual Reports Correspondence.

¹⁸ *Ibid.*

¹⁹ Ngaga, p. 18.

²⁰ *Kihamba* (sing.) *vihamba* (pl.) is a traditional land tenure of the Chagga where the upper most slopes of the mountains were traditionally owned and passed on to male members of the clans. They were fertile lands where banana groves, coffee and vegetables were intercropped. It started from approximately 1000m above the sea level.

4. FOREST PLANTATIONS AND THE CHALLENGE OF LAND USE IN MUFINDI AND KILIMANJARO, 1920S TO 2000S

In most cases, forest plantations were established on alienated lands, the lands that prior to the establishment of forest plantations were used or owned by the local people in those environments. The acquisition of land was simplified after the 1923 Land Ordinance, which declared all occupied and unoccupied land as public land and gave power to the government to alienate land for various purposes. Under the Land Ordinance, local communities lost their rights over traditional land tenure that existed since the pre-colonial period where land was a common property owned and used by members of ethnic groups, inhabitants of a village, family or clan. Traditional and customary laws governed Land and its resources under the traditional land tenure systems that varied across communities.²¹ The 1923 Ordinance affected the traditional land tenure systems and made its laws obsolete as all the powers over land distribution, use and ownership came under the control of the central government.

Land tenure and land use are twin sisters. The kind of land tenure that exists in a particular area affects the way that land can be used, and the extent to which certain land is used has a direct contribution to its land tenure system.²² In Kilimanjaro land use was divided into the *kihamba* and the *shamba*²³ areas and each form of land use had its tenure system. The *shambas* were owned seasonally, and their tenure was not guaranteed to individuals as they could change in the next growing season. It was only the highlands that had a strong tie to the Chagga culture and society because land ownership was traditionally defined as different from land on the *shamba* areas. The alienation of land for forest plantation in Kilimanjaro forced peasants to intensify their remaining plots of land and concentrate on smaller areas to avoid moving to other areas or engaging in squatting labour on the forest reserve and estates.²⁴ Their counterpart in Mufindi moved to other areas that were also fertile and provided opportunities for the production of food crops because there was enough land and there was no strong cultural and traditional affiliation to a particular landscape. Mufindi experienced low population pressure for a long time that allowed expansion to new areas through shifting cultivation. However, as population increased, it changed into rotational farming and later permanent farming. It is important therefore to note that the kind of land tenure is vital in the development of agriculture, be it subsistence or commercial farming on small or large scales. Communities are more likely to diversify production in the landscape when they feel they are directly attached to and may easily move to other areas if they do not have a feeling of belonging to a defined landscape.

During the British period all alienated forest areas were sectioned for rotational planting of exotic trees. Such plantings inferred that the African peasantry sector had to find alternative means of survival when their lands were taken either for forest plantations or when their land use was limited by the demarcations made in favour of natural resources protection in terms of forest plantation and wildlife conservation. The responses towards this change of land use varied from one

²¹ Part of the discussion on land tenure in Tanzania can be found in D. W. Malcom. 1938. *Sukumaland: An African People and their Country, A Study of Land Use in Tanganyika*. Oxford University Press, London, Hans Cory and M. M. Hartnoll. 1971. *Customary Law of the Haya Tribe: Tanganyika Territory*. Frank Cass & Co Ltd, (First published in 1945), S. R. Charsley. 1969. *The Princess of Nyakyusa*. East African Publishing House, Nairobi and P. H. Gulliver. 1963. *Social Control in an African Society: A Study of the Arusha Agricultural Maasai of Northern Tanganyika*. Routledge & Kegan Paul, London, Amina Akida and Rosina Blomley. 2006. *Trends in Forest Ownership, Forest Resources Tenure and Institutional Arrangements: Are they Contributing to Better Forest Management and Poverty Reduction? A Case Study from the United Republic of Tanzania*, p. 6.

²² C. K Meek. 1949. *Land Law and Custom in the Colonies*. Oxford University Press, London. pp. 1 – 3.

²³ This was the marginal land on the slopes of mount Kilimanjaro. It lied approximately from 1000masl going downwards. It was used for seasonal crop cultivation to produce maize and other cereal crops that were not grown on the highlands.

²⁴ TNA 5/22/3: Moshi: Forest Produce, Transfer of Part of Kilimanjaro Forest Reserve to the Native Authority, Wattle Bark: Letter from the Forester Moshi to the District Commissioner – Moshi, dated 1st March 1950, Letter from the Divisional Forestry Officer – Northern Province to the District Commissioner – Moshi, dated 22nd July 1952, Letter from the Divisional Forestry Officer – Northern Province to the District Commissioner – Moshi, dated 21st March 1952, Letter from the Assistant Conservator of Forests, Moshi District to the District Commissioner – Moshi, dated 1st November 1952. All these archival documents show that the Chagga did not wish to move from the alienated areas to other areas and likewise it was hard for them to provide squatting labour on the forest reserves.

society to another depending on the environmental particularism of the affected societies.²⁵ The variation had several causes but it mainly depended on the availability of land to expand to and the nature of engagement with the environment in that society. Where the alienated land was the only survival means for the peasant sector, peasants suffered immediately and had to turn the plantation as a temporal means to earn their livelihood either through engaging themselves into wage labour or squatting in forest reserves. However, when just portions of land were taken, expansion to new areas was the obvious alternative.

Expansion into new areas and use of the forest plantations as squatters was not without limitations. Land use on the forest reserves was limited by the Forestry Department that provided guidelines on how to use. Freedom over land use was limited and the type of crops to be grown was dictated by the department. All activities carried out in the forest reserve were not a choice of the squatters but the plantation management. For example, during the British colonial period Kilimanjaro Forest Plantation and Sao Hill Forest Plantation had different rules governing the use of forest reserves. In SHFP, the forest reserves could be used partly for grazing and farming of some crops while other crops were not allowed. Crops such as beans and vegetables that were prevented in the SHFP were allowed in the KFP and the grazing that was allowed in the SHFP was strictly prohibited in the KFP.²⁶ The point here is not to offer a detailed account of what was allowed and what was prohibited on the two study areas, but rather to provide anecdotal information on the impacts that forest plantations had on land use by the local people. Local people had to adjust their means of survival, their forms of engagement with land, productions, and sometimes their preferences of the crops produced.

Sometimes alienated lands were to be compensated to their former owners. In the case of Mufindi, during the British colonial period, traditional leaders held *barazas*²⁷ with their villagers to discuss the fate of alienated lands and the possibilities for compensations. Available information shows that local people from ten villages namely Gurusilu, Lupembe, Sawala, Mtwango, Mgeluka, Ilunda, Ikwega, Mkalala, Nyalubusi and Lukosi where the plantation was established during the British period were assessed subsequent to their registration in 1944 and were paid in 1947.²⁸ The compensation provided did not include market value of their properties since all claims were paid a flat rate of Shs. 50/= each. Compensation of this amount covered the cost of a hut only regardless of its value. Compensation for interruption and loss of other properties such as bamboo trees and fruit trees that were permanent crops was not considered.²⁹ While some payments were made as compensations to those who lost land in Mufindi during the British period, there were no records of compensations to the people of Kilimanjaro who faced a similar situation.

Some changes occurred in the post-colonial period where in Mufindi and some other areas of Tanzania the alienation of land for game fortification, forest plantations and conservation campaigns continued.³⁰ The most important activity that took place in KFP was the inclusion of the 'Native Half Mile Strip'³¹ into the Central Government Forest Plantation.³²

²⁵ The concept of environmental/ecological particularism was used in studies such as James L. Gibling. 1992. *The Politics of Environmental Control in Northeastern Tanzania*. University of Pennsylvania Press, Philadelphia, David M. Anderson. 2002. *Eroding the Commons*, see the introduction and Christopher Conte. 2004. *Highland Sanctuary: Environmental History in Tanzania's Usambara Mountains*. Ohio University Press, Athens.

²⁶ TNA 5/22/3: Moshi: Forest Produce, Transfer of Part of Kilimanjaro Forest Reserve to the Native Authority, Kilimanjaro Native Forest Reserve Monthly Report for December 1947. The file contains cases on illegal grazing on the forest reserves in Kilimanjaro.

²⁷ This is a Kiswahili word for the local meetings that involved local leaders and villagers. They were designed as platforms where leaders and villagers could exchange and pass information to each other on matters related to their developments.

²⁸ TNA 336/IR/2: Afforestation, Iringa Forest Division Letter from the District Commissioner to Mtwanga Adam Sapi, dated 18th June 1953.

²⁹ TNA 336/IR/2/2: A Report to the Conservator of forests on the Mufindi Re-afforestation Scheme) by Divisional Forest Officer, Mbeya, dated 28th February, 1953.

³⁰ Some work has been done about conservation practices and their impact on the surrounding communities. Michael Stocking and Scott Perkin. 1992. 'Conservation with Development: An Application of the Concept in the Usambara Mountains, Tanzania.' *Transactions of the Institute of British Geographers, New Series, Vol. 17, No. 3*, pp. 337 – 349, Dan Brockington. 2004. 'Community Conservation, Inequality and Injustice: Myths of Power in Protected Areas Management'. *Conservation and Society*, pp. 411 – 432, Dan Brockington, Paige West and James Igoe. 2006. 'Parks and Peoples: The Social Impact of Protected Areas.' *Annual Review in Anthropology, Vol. 35*, pp. 251 – 277.

³¹ This was a buffer strip that separated the KFP from the peasant activities. Local authorities controlled it until its inclusion into the KFP later in the postcolonial period.

During this period, there was no possibility of alienating new areas in Kilimanjaro because the Chagga who also had serious problems of land shortage and rapid population growth occupied most land. As a solution to shortage of land, KFP exercised rotational planting and harvesting of the existing forestland without expansion into new areas. Nonetheless, given the availability of large areas of land in Mufindi District, land acquisition for the extension of the forest plantation continued up to the 1980s, making the total grabbed land from the colonial to the post-colonial period at about 135,903 ha. Throughout the post-colonial period, the alienated land in Mufindi District was declared forest reserve and the boundaries were made by the Forest Division without fulfilling its important procedures as stated in the Forest Ordinance of Tanzania Cap. 387 of 1957. The Ordinance instructed the government to investigate the rights of the local people and make proper assessment to determine compensation to the affected people.³³

The post-colonial government did not prefer the existing squatting policy in forest plantations in both Mufindi and Kilimanjaro. Thus, squatters were ordered to surrender the forest reserves and settle in nearby villages. In Mufindi, the renounced squatters did not get enough land for crop production because of the intensive land alienation that continued in the post-colonial period in favour of the extension of forest plantation. They survived through renting from fellow villagers and relatives. These local and individual arrangements did not give them the amount of land they required for farming, so they had to sell their labour in forestry works in order to be able to supplement their livelihoods.³⁴ While this was happening in Mufindi it was somehow different in Kilimanjaro. Squatters continued to work on the forest reserve and grew vegetable crops. Former workers of west Kilimanjaro estates, who fell jobless after the nationalisation of farms in the 1970s, found squatting in the forest reserve as an unavoidable option.³⁵ The post-colonial government introduced *taungya* system of using forest reserve land by the local people. *Taungya* system was first used in Burma in 1856³⁶ when the government of Burma decided to encourage a more sustained land use by promoting the cultivation of both forest and food crops. The government of Tanzania continued with *taungya* system that was introduced during the colonial period soon after independence in order to address land use challenges to the local people who lost their land in favour of forest plantations or other government coordinated development initiatives. In *taungya* system, farmers were given temporal rights to clear, cultivate and grow agricultural crops in forest lands under the close supervision of foresters. In return, they provided free labour to forestry related activities. *Taungya* system was practised on harvested areas in Mufindi while it was allowed in both new and harvested areas in Kilimanjaro. Farmers preferred cultivating on harvested areas because it involved burning of forest residues before farming that was a good source for base nutrients for their crops.

The uses of *taungya* by the local people surrounding forest plantations were not homogeneous. In SHFP, farmers were allowed to cultivate only in one harvesting season. However, in other government forest plantations like those of North and West Kilimanjaro farmers cultivated agricultural crops until canopy closure of trees that would take between two to three years.³⁷ After canopy closure farmers moved to other areas that required land preparation for new planting.³⁸ The post-colonial regulations over the use of the *taungya* to the people of Mufindi differed from the regulations that were applied during the British colonial period that allowed squatters to cultivate for three years in the same area before moving to new areas. Despite the increasing demand of land needs in Mufindi District during the post-colonial period, the government endorsed farmers to cultivate only in one harvesting season. One agricultural Officer at SHFP commented that they allowed farmers to cultivate in one harvesting season because of the nature of the soil in Mufindi which is less fertile, thus, cultivating for three years or more in the same plot may diminish soil fertility which, in turn, will affect the

³² Interview with Mzee Beda Luka on 29, 17th 02, 2015 at Moshi-Mbomai Juu.

³³ URT, The Forest Ordinance of Tanzania of 1957, p. 2.

³⁴ Interviews with Gastoni Mahanga on 15th January 2015, Vikula Village, Kalikenya Kivaula Chengula on 21st January 2015, Sawala Village.

³⁵ Milline Jethro Mbonile. 2006. 'Population Dynamic and Mobility on the Slopes of Mount Kilimanjaro.' In Francois Bart et al (Eds.) *Mount Kilimanjaro: Mountain, Memory, Modernity*. Mkuki na Nyota Publishers Ltd, Dar es salaam, pp. 117 – 130, Chambi Chachage and Richard Mbunda. 2009. 'The State of the Then NAFCO, NARCO and Absentee Landlords Farms/Ranches in Tanzania.' LARRI/HAKIARDHI, pp. 12, 16 – 59, also see HAKIARDHI. 2009. 'The Changing Terrain on Land use Conflicts in Tanzania and the Future of A Small Producer.'

³⁶ S. A. O. Chamshama et al. 1992. 'Suitability of the *Taungya* System at North Kilimanjaro Forest Plantation, Tanzania', *Agroforestry Systems* Vol. 17, p. 1. Also see Victor A. J. Adekunle and Yekini Bakare. 2004. 'Rural Livelihood Benefits from Participation in the *Taungya* Agroforestry System in Ondo State of Nigeria.' *Small Scale Forest Economics, Management and Policy*, Vol. 3, No. 1, p. 132.

³⁷ Interview with Mzee Beda Luka on 29th February 2015, Mbomai Juu, Also see Chamshama et al, p. 1.

³⁸ Ngaga, p. 25.

growth of tree seedlings.³⁹ *Taungya* system, however, did not benefit the local people both in Mufindi and Kilimanjaro. It always benefited those in power who distributed and influenced the distribution of the forest areas available for cultivation.⁴⁰ Usually, politicians, government leaders, plantation officers and employees enjoyed cultivating in fertile areas and at some points left the less fertile areas for the local people.

Land alienation went closely with the creation of squatting labour to ensure constant and reliable supply of labour for the plantations. For Kilimanjaro, it was hoped to provide labour in estates owned by foreign settlers. The people who remained in their alienated land were required to live in the reserves as squatters and were allowed to apply to be squatters where forest administrators selected families and individuals to be retained as squatters.⁴¹ Squatting on forest plantations can be regarded in different dimensions when Kilimanjaro Forest Plantation and Sao Hill Forest Plantation are compared. Squatting served as both a source of labour and a source of free land for the local people. While in Mufindi there was a lot of land for local people's use, the British government had to use squatting by convincing the Wahehe to stay as squatters on forest plantations. In Kilimanjaro, staying in the forest reserves was a temporal relief from land shortage because squatters struggled to get out of the system. The provision of squatting land in KFP depended much on the requirements by the forestry department to get labour. When the forest demanded labour, it was the only time that squatters were allowed. The demand for land by peasants in Kilimanjaro was not seasonal to wait for land preparations for planting of trees in order that they can get land. It was always increasing and thus the Chagga were all the time vigilant to hear from the Forestry Department about any availability of land in the forest reserve. In addition, during the time when they had no access to the forest they devised alternative means of survival, including producing coffee and maize in their areas. In September 1946 the Assistant Conservator of Forest observed,

There is still a lot of land in reserve and I will hold it, subject to my labour requirements, as you request. I am almost out of funds; my future requirements for squatters for the rest of this year will depend on this work remaining to be done when the present new have once completed their free labour.⁴²

The availability of land in Mufindi was a threat for the development of forest plantation. The local people could engage with production in their areas and forfeit the chance to work in forest plantation. The distance from people's settlements to the plantations and the availability of land could discourage the participation of the local people in plantation works. In the case of Sao Hill Forest Plantation, squatting was an unavoidable undertaking to ensure a reliable supply of labour. In Kilimanjaro things were a little bit complicated. By 1940s and 1950s there was a problem of land shortage in Kilimanjaro. It was expected in this case that forest work would get reliable squatters on the forest reserves from among those people who had no land. The reality on the ground was that squatting became the last option after intensification of the smaller land plots they had become unrewarding and, in most cases, squatters in Kilimanjaro Forest Plantation contravened with the rules that allowed them to squat and were evicted from the reserves several times.⁴³ They were not a reliable source of labour for plantation work despite the fact that the forestry department considered them as an available cheap labour source to reduce the costs of planting trees when the areas are cultivated before planting trees.⁴⁴ It was also during the

³⁹ Interview with Agricultural Officer of SHFP, Agness, on 17th December 2014 at Sao-Hill Headquarters.

⁴⁰ Interviews with Mzee Corinery January Kitanga'ati on 28th February 2015, Kingachi Village – Usseri, Gastoni Mahanga on 15th January 2015, Vikula Village, Kalikenya Kivaula Chengula on 21st January 2015, Sawala Village, Shaibu S. Lyuvale and Paul Y. Ukulula on 20th January 2015, Mwitikilwa Village.

⁴¹ TNA 336/IR/2/2: Southern Highland Land Utilization Committee, TNA 5/418: Moshi: Cultivation in Forest Southern Slopes, Letter from Gullamseni Meralli (settler farmer) to the District Commissioner – Moshi, dated 12th February 1947, Letter from the Assistant Conservator of Forests to the District Commissioner – Moshi, dated 10th February 1947.

⁴² TNA 5/418: Letter from the Assistant Conservator of Forests to the District Commissioner – Moshi, 27th September 1946 – This was a reply letter to the letter from the Liwali of Moshi who wanted more areas in the forest reserve to be allocated for the Chagga cultivation, see also Letter from Liwali wa Moshi to the Assistant Conservator of Forests – Moshi dated 18th October 1946.

⁴³ TNA 5/22/7: Moshi: Forests, Cultivation in Rau Forest Reserve, Press Release from the Assistant Conservator of Forests, dated 22nd November 1950, Letter from the Assistant Conservator of Forests to the District Commissioner – Moshi, dated 14th January 1958, Letter from Njoro Rau Forest to the Senior Forest Officer, Headquarters – Morogoro, dated 5th September 1958, Letter from the District Commissioner – Moshi to the Acting Mangi of Old Moshi, dated 10th December 1958.

⁴⁴ TNA 5/22/7: Moshi: Forests, Cultivation in Rau Forest Reserve, Letter from the Divisional Forest Officer – Northern Province to the District Commissioner – Moshi, dated 18th August 1952, TNA 5/22/3: Moshi: Kilimanjaro Forest

years when coffee and maize declined that some Chagga participated in wage labour in forest plantation as a supplementary activity. Given the geography of the region, east Kilimanjaro provided more squatters than west Kilimanjaro because the former was a dry area while the latter was a fertile rain fed area and allowed intensification of land.⁴⁵

The persuasion by the British government for the local people of Mufindi to squat on the forest reserve was essential since local people were shifted to new areas located far from the plantation, and thus they would not be available and it was unlikely for them to respond to the call for labour service. This would affect the afforestation scheme since its success depended largely on adequate labour force being available in the vicinity. Following this, 510 squatters were given permanent squatting licenses in the SHFP and were dispersed in Gurusilu, Lupembe, Sawala, Mtwango, Mgeluka, Ilunda, Ikwega, Mkalala, Nyalubusi and Lukosi villages where the plantation spread across. Squatting system led into new forms of land use becoming available to squatters. These new forms of land use were inevitable since squatters lived in the reserve and had to use the reserved land in limited terms. For instance, in order to ensure proper utilization of the reserved land by the squatters, each squatter was given half an acre only to establish a hut and for growing green vegetables. Agricultural activities were to be carried out in the reserves where squatters were allowed to cultivate even in the newly planted areas and left for fresh areas after trees reached the age of three years.⁴⁶ This arrangement aimed to make villagers remain in the reserves for a long time because they did not want to leave their huts and cropland.

In the case of grazing land, squatters in Mufindi were permitted to domesticate one or two cattle per family.⁴⁷ However, Chief Adam Sapi and other sub-chiefs of Kasanga and Kalinga villages did not accept this proposal. They argued that the Wahehe would not accept living with such a limited number of cattle. Considering the argument raised by Chief Adam Sapi, the District Commissioner-Iringa District noted that,

Livestock are not desired in the forest reserve, but on the other hand Chief Adam thinks, and I fully agree with him, that it is very unlikely that Wahehe would agree to live without livestock. Even if all 510 families have not got livestock it is still their ambitious to obtain them⁴⁸

As a solution to this, squatters' villages were located closer to the reserves and not too far from other villagers' settlements to allow them to domesticate the number of animals they wanted outside the forest reserve. Moreover, due to the need to send cattle to a more favourable grazing area, squatters were permitted to graze their cattle in forest plantations with trees older than ten years that were unlikely to be damaged.⁴⁹

5. LOCAL FOREST RESERVES AND THE CONSERVATION IDEOLOGY

The Establishment of government forest plantation in Mufindi and Kilimanjaro went together with the introduction of the 'Native Afforestation Schemes.' Under this programme, the local people were allowed to plant trees for their own use. Villages under their sub-chiefs established forest plantations that were managed by local authorities to address the demands of forest products and obtain revenues through selling poles and fuel woods.⁵⁰ The idea of having local people planting trees was in place from the early days of the introduction of forest plantations in Tanzania and its intensifications were good. The Provincial Commissioner of the then Iringa Province noted that to teach local people how trees were grown would eventually make them realize the importance of growing them by themselves and thus reduce encroachment

Reserve, also see Tanganyika Territory. 1946. Annual Report of the Provincial Commissioner on Native Administration for the year 1945. Dar es Salaam, pp. 54 – 56.

⁴⁵ See Tanganyika Territory. 1956. Annual Report of the Provincial Commissioner on Native Administration for the Year 1955. Dar es Salaam, p. 91, Tanganyika Territory. 1955. Annual Reports for of the Provincial Commissioners on Native Administration for the Year 1954. Dar es Salaam, p. 95.

⁴⁶ TNA 336/IR/2/2.

⁴⁷ TNA 336/IR/2/2: A Report

⁴⁸ TNA 336/IR/2/2: Notes on the Discussion about the Re-afforestation Mufindi Forest Reserve (1953).

⁴⁹ TNA 336/IR/2/22: Forest Villages. Letter from the Assistant Conservator of Forests Mufindi to the District Commissioner – Iringa District, dated 11th April 1953.

⁵⁰ TNA 24/19/4: Forestry: Native Afforestation Schemes.

into natural forests.⁵¹ Tree nurseries were established so that a large number of young trees would be reared and replanted elsewhere under supervision of forestry instructors. Native afforestation schemes benefited from these nurseries.

The Half Mile Strip – Native Authority Forest reserve in Kilimanjaro was in a constant battle between the Native Authority, the government and the local people. While the Chagga wanted it to be used for cultivation of crops other than trees, the native Authority and the government emphasized that it was to remain a forest reserve. The assistant conservator of Forests in 1952 warned, With reference the Mangi of Mashati's letter 3/52/25 of 24-11-52 to the District Commissioner, copy to me, applying for *vihamba* in the squatter area at Mashati, I feel that *vihamba* should not be granted. I would remind you that the N.A. 'half mile strip' was created to provide forest products for the Wachagga, and not agricultural land, and any reduction of the land reserved for forestry means a reduction in forest produce for the Wachagga. I also feel that if permission to create *vihamba* is granted in one locality, it is very difficult to refuse permission in others, and this would greatly decrease the reserved forest area.

In 1928 the British government allocated £144 to support the Native Afforestation Scheme in Mufindi.⁵² Forestry knowledge was disseminated through chiefs and sub-chiefs. The pamphlet titled "*Elimu ya Kupanda na Kutunza Miti ili Faida Ipatikane*" was distributed to the Chief of Wahehe, Adam Sapi Mkwawa, who also distributed other copies to his sub-chiefs. These pamphlets provided knowledge of how to identify areas for tree planting, spacing and other necessary information.⁵³ A total of 8,644 trees of eucalyptus species were issued free to the local people in 1939.⁵⁴ Wattle and eucalyptus species were the main types considered for local communities as they could mature early to provide poles and wood fuel for the local people.⁵⁵

A five-year plan for the 'Native Afforestation Scheme' in Mufindi commenced in 1939 and ended in 1943. In this plan, the Forest Department encouraged planting of trees by the local people in their respective villages for at least four acres each year per village. The villages of Kasanga, Kalinga and Malangali in Mufindi benefited from the plan since plantations were established in their villages to meet the demands for fuel woods and building poles.⁵⁶ Encouragement on local people's afforestation scheme aimed at meeting local people's demands for fuel, poles and other related needs. A Memorandum prepared for Native Afforestation in the Southern Highland Province stated that;

The production of poles and fuel is really the concern of individual natives but it is the duty of the authorities to provide, without charge, the necessary seeds or plants and to establish small demonstration plantations. These plantations may have to be maintained for many years before the individual can be persuaded to raise his own trees.⁵⁷

This implied that the Forest Department was committed to support local people's afforestation campaign. To some extent, the 'Native Afforestation Scheme' helped the Forest Department to achieve its mission of conserving the environment as the local people started to obtain poles and fuel wood from their established plantations. The programme also reduced illegal cutting of trees in forests owned by the government. The sustainability of government plantations could have been impossible if afforestation by the local people had not been encouraged. This, in the long run, encouraged the local people to embark on forest plantation not only to meet their domestic needs, but also for sale. The negative impacts of the native afforestation scheme were its land alienation tendencies. Despite the absence of exact number of hectares alienated for the scheme, in Mufindi District, the land was alienated for planting exotic trees in the scheme. Moreover, the scheme did not help much to stop deforestation to the naturally occurring forests because the local communities were not given trees for poles and for fuel woods freely but they bought them from their respective native authorities.⁵⁸ Some of the local people were reported to have continued to engage in cutting naturally occurring forests and exotic trees illegally because they did not have enough money to afford buying poles from the native authority.

⁵¹ TNA/270/Y/6: Iringa Forests, Letter from the Provincial Commissioner – Iringa Province to the Conservator of Forests Tanganyika Territory, dated 5th February 1928.

⁵² Ibid.

⁵³ TNA 24/19/4: Forestry: Native Afforestation Schemes.

⁵⁴ TNA 24/19/4: Letter from the Forester Mufindi-Iringa to the District Officer-Iringa, dated 7th March 1939.

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ Ibid.

6. CONCLUSION

The paper shows changes and continuities that resulted from the introduction of forest plantations in Mufindi and Kilimanjaro. It shows that the introduction of forest plantation was not a one-sided venture; on the one hand, it created some conditions through land alienations that forced local people's adaptations to the new forms of land use but on the other hand, it provided sanctuaries for landless people who could depend on squatting as a form of livelihood earning. The variations in the reactions of the local people from Mufindi and Kilimanjaro emanated from the way each society interacted with land resources. Land was not a problem in Mufindi while it was an acutely mounting problem in Kilimanjaro. This diversity of land use and ownership also reflected on the local people's involvement in forest activities. In Mufindi, for instance, squatters were to be convinced to work on forest plantations as most people worked on their lands, in Kilimanjaro, squatters were neither convinced nor showed up reliably for forest activities. The Chagga found it easier to intensify their small plots on cash crops than to sell their labour on forest works. They were only reliable during those years when coffee and maize did not do well. These differences contributed a lot to the future development and differentiation of the two areas. The Chagga intensified participation in cash cropping that made them the most entrepreneurial group in Tanzania. At the same time, the local people of Mufindi continued to negotiate their land use with the forest reserve and, due to population increase in Mufindi, disputes arose between local communities and the forest management as the former wanted to increase use of forest reserve land and the later struggled to limit expansion.

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