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The Effects of Emerging Trade Patterns in Agikuyu Women's Indigenous Food Crops on Food Security in Nyeri County from 1902 To 1980

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*Agikuyu Women,
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Food Security.*

The purpose of this paper was to assess the effect of emerging trade patterns in women's indigenous food crops on food security from 1902 to 1980. This study was conducted in three sub-counties: Kieni East, Mathira East, and Nyeri Central. Data was collected from both primary and secondary sources. The research employed a historical research design based on qualitative procedures. The design enabled the researcher to explain, describe and give a historical analysis of the findings. This being a historical study, non-probability sampling procedures were used such as purposive and snowball sampling techniques to gather relevant information. A sample size threshold of 54 respondents was interviewed and the main research instruments were the interview guide and focus group discussion. Data for this study was analyzed qualitatively using documentary content analysis, description and narration of the historical events. Data was also corroborated and both context and content analysis were done to ensure the reliability and validity of the information. Interpretation was done within the framework of Marxist feminist theory and articulation theory. The study established that the women's local food crops trade system has not been static. The colonial capitalist economic practices brought about profound changes in the economic and social fabric of Nyeri County and significantly undermined the women's local trade. This resulted in both positive and negative influences on the dimensions of food security in the study area. It was established that the indigenous food crops that women exchanged in the local markets were well adapted to local conditions, sustainably available and provided essential nutrients necessary for the health and well-being of the community. The findings of this study illustrate the pivotal role of Agikuyu women in local trade systems and a substantial contribution to food security in Nyeri County. The study concludes that the Ministry of Trade should come up with deliberate measures that will integrate women's local trade into the country's economic policies and practices and also consider the valuable contribution of women's local trade in mitigating food shortage and ensuring eradication of extreme poverty and hunger.

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INTRODUCTION

Trade on indigenous food crops has been vital because indigenous food crops serve as a symbol of heritage, trademark, and culture in many societies. Besides offering an important opportunity to diversify the food base, it also enhances the socioeconomic status of many societies in the world. Nevertheless, there has been increasing suffering from food shortages from time to time. According to UN reports, women's participation in trade has often been ignored denying them access to resources, credit and training. Also, it can be argued that women work for longer hours as compared to men but earn less and their work and opinions are undervalued (UN, 2019). On the other hand, women face obstacles to holding positions of authority and may be exposed to threats of violence.

The research on the women's trade in indigenous food crops and its effect on food security has attracted the attention of different scholars for a long time; thus, there has been research on different geographical regions and times. According to Kuczynski (1983), one of the most celebrated indigenous crops of the Americas is the potato, renowned for its origin in the Andean region of South America. Indigenous women in the Andes played a pivotal and multifaceted role in the

cultivation, preservation, and trade of various potato varieties. Their expertise in selecting, breeding, and safeguarding diverse potato strains not only contributed to food security but also upheld cultural traditions and biodiversity in the region. Additionally, these women engaged in local and regional trade networks, enhancing the exchange of knowledge and resources across the Andean highlands. The enduring legacy of indigenous women in the Andes continues to underscore the significance of the potato as a vital cultural emblem in the Americas (Kuczynski, 1983).

In India which was a colony of Britain, women were considered physically and intellectually weaker yet morally superior to men, which meant that they were best suited to the domestic sphere. Not only was it their duty to counterbalance the moral taint of the public sphere in which their husbands laboured all day, but they were also preparing the next generation to carry on this way of life in the pre-colonial era where women in India were dependent on men (Shepherd, 1999). Their religious practices and traditions ascribed their subordination to men in all matters. They were denied access to trade, education, and access to social justice and equality. The Indian women surrendered meekly to the supremacy of the patriarchal system and accepted

the roles assigned by traditions and allowed themselves to be dominated in the past (Atieno-Odhiambo, 1972). However, Indian women today have greater exposure to trade with education and economic independence which has put them in a conflicting state where though they desire independence, they also dread their traditional role and are hesitant to courageously walk out of the situation (Meena, 2016). This has enhanced their social- economic status which has always ensured food security in their community the same applied to African women before colonization (Berger, 2018).

In Yoruba societies, women are offered the greatest opportunities to participate in economic activities such as manufacturing and trade. Among the Yoruba, the responsibility of a woman is to provide material resources and care for her family. Similar to the practice among the Yoruba, the Agikuyu women traded in indigenous food crops which helped to improve the status of their society. This information detailing how many women were involved in trade has not been well documented beyond the locality of homes. Yoruban women, for example, were the central figures in long-distance trade. They amassed enormous wealth and held prominent titles (Hafkin, 2018).

As scholars of Africa continue to challenge the place and role of Africa in world history, shedding light on women as valid historical actors in postcolonial Africa within the last three decades remains an ongoing and much-needed endeavour. African women in the past and the present have used their position as breadwinners, mothers, and community leaders to influence their social, economic, and political worlds and to assert their power (Oyewùmí, 2015). Women had numerous important roles and functions to carry out, many of which conferred a great deal of power and respect to them. The erosion of the status of women occurred gradually but was significantly exacerbated and hastened by foreign invasions, particularly colonialism which affected the role that

women played in provision for their families through economic activities such as trade.

Statement of the Problem

In many African societies, women organized themselves as key participants in the socio-economic development of their societies through trade in different indigenous food crops. Colonialism brought new trade patterns to the local trade systems which led to the abandonment of some important aspects of traditional women's local trade on indigenous food crops and others were incorporated into the modern economic system. This alteration may have also undermined women's role in elevating food security in Nyeri County. It is for this reason therefore that the research examined and documented these changes overtime on the Agikuyu women's local trade in indigenous crops in Nyeri County and also assessed how the new pattern of the Agikuyu women's trade in indigenous food crops affected the food security in the area. This makes a key contribution to the economic history of Kenya and also helps to understand the role that women play in enhancing food security in their society.

Purpose of the Study

To assess the effects of emerging trade patterns in Agikuyu women's indigenous food crops on food security in Nyeri County from 1902 to 1980

Research Questions

How did the change in the trade pattern of Agikuyu women's local trade in indigenous food crops affect food security in Nyeri County from 1902 to 1980?

LITERATURE REVIEW

Under colonial rule in Africa, the Caribbean and Asia many farmers were coerced into growing a few crops for export – such as cotton, wheat, sugar, tobacco and groundnuts, for which they received low prices. Roads and railways were built – such as the Kenya-Uganda railway built by the East Africa Company that linked Mombasa at the coast with

Lake Victoria. This enabled the export of these products to European countries, bringing economic benefits to the colonial powers. This focus on a limited number of export crops resulted in serious food shortages as trade was redirected away from diverse crops and meeting local needs Wakefield (1980).

The key task of states is to guarantee adequate food for their citizens. Food is recognized as a basic need and a human right. It is enshrined in various international resolutions and in the constitutions of many countries. But despite the renewed global commitment to fight hunger in the last decade, massive technological developments worldwide, and relative progress in achieving the first Millennium Development Goal (MDG) in many regions, especially Asia and Africa food insecurity persists as a challenge for the international community. Overcoming food insecurity remains a dream that never seems to materialize for many food-insecure households and national governments.

More renewed commitments by states on food security have been made during the Rome Declaration of 1975, among other international gatherings of states (FAO, 1997). There are important country-level actions mentioned by Heisman (1984), including setting up strong food security and nutrition approaches policies and programmes which are coordinated at high levels of government. This also includes consolidation of these policies in national law, multi-sectoral involvement, rolling out and implementation at local levels for improved implementation, evaluation and monitoring of strategies, legislation, policies and programmes. Finally, long-term engagement of public and private stakeholders for economic development is required by the Food and Agriculture Organization (FAO, 1997).

According to FAO (2020), women across the globe are disproportionately affected by food insecurity, with the gender gap in accessing food continuing to increase, particularly in Latin America and Africa.

These inequalities are grounded in complex economic, social, cultural, and political conditions. The far-reaching ramifications of gender inequality on food insecurity are well recognized and the extant evidence indicates that a reduction in gender inequality is associated with improvements in global hunger and food insecurity (Clement et al., 2019). In the broader context of gender equality, enhancing women's autonomy broadly defined as "a woman's ability to have control or influence over choices that affect herself and her family within her own particular context underscores the role of women in the trade of indigenous food crops and how it can influence food security is not discussed.

Since the 1980s, there has been an increase in research writings about food security and its relation to policy MacRae (2016). In the year 2000, the Millennium Development Goals aimed to reduce hunger in the world. In September 2008 the United Nations member states made a commitment to end hunger achieve food security, improve nutrition and promote sustainable agriculture by 2030 (FAO, 2016). However, there are very few policies that touch on the role of trade in indigenous food crops and the role it plays in curbing food shortage in Africa.

Despite these findings, scholars do not fully understand the pathways linking women's autonomy and food security. The uncertainty is partly due to the difficulty of defining and measuring women's autonomy, a highly contextual and culturally specific trait and the lack of representation of marginal populations within the field. To date, there is no universally agreed-upon definition and the varying degrees of attention across global regions have largely neglected majority populations Carlson (2015). This exclusion is problematic given that women are far from a homogenous demographic group and the generalizability and transferability of the extant research findings are limited.

For a better response to global challenges, states and international organizations are also committed to

additional global funding at the regional and country levels through specific and integrated methods that ensure global food security. These methodologies have included the adoption of country-led strategic and programmatic strategies (WFP, 2016). Another approach is the technical collaboration that amplifies synergies including institutional capacity expansion, transfer of skill and knowledge and growth of productivity (Wakefield, 1980).

Colonialism pushed women into cash crop production and other non-income-generating activities as a means of raising cash for the purchase of food. For instance, apart from owning more than half of the staple food and vegetable farms, women in Ghana own one-third to one-fourth of the cash crop farms (Clark, 1985). United Nations Economic Commission for Africa (1996) recorded that women provided 73 percent of the labour force in tea estates in Rwanda while in Cameroon about 90 percent of the labour force in tea estates and 50 percent in rubber estates have been predominantly women. Though women earned relatively lesser income than men, even in circumstances where they work more, their additional income serves as a proximate determinant of food security. However, this study looks at how women traded indigenous food crops, how they ensured food security in their homestead and the disruptions caused by colonialism.

Huho and Mugalavai (2010) noted that Kenya had exhibited 28 severe droughts in the last 100 years and the rate is even expected to increase as climate change continues to prevail. As drought incidents increase, the food productivity in Kericho County and other regions of the country continues to decline. The researchers found that over 70% of Kenya's land had succumbed to frequent droughts and it may be unable to produce food sustainably (Huho & Mugalavai, 2010). Their research does not talk about the trade of indigenous food crops as a solution to food security in the country.

The current study argues that during the pre-colonial period, the Agikuyu women of Nyeri had a

regular intra and inter-community trade network with their neighbours involving the exchange of different items of trade in various designated places. The mode of exchange was mainly barter trade. However, the advent of colonialism and the inauguration of economic structures affected the nature of trade by restructuring and modifying the pre-existing trade patterns and exchange to align with the new mode. New needs especially European merchandise were created as new market systems based on monetarized exchange modes were brought forth. These interruptions affected Agikuyu women's trade leading to food Insecurity in the region.

After independence, new economic policies such as the Africanization of the economy were introduced to enhance economic equilibrium in Kenya. This enabled women from Nyeri to take advantage of the existing trading opportunities as they started to operate businesses which were initially controlled by non-Africans. However, this change made them abandon the trade of indigenous food crops which always ensured food security in their society.

Women trade in Indigenous food crops is a very important part of the development and therefore it must be gathered and documented rationally and systematically. The trading system has not to a larger extent been used, documented and stored in an orderly way and therefore it is in danger of extinction McGregor (2004). The desire to use modern and new technologies is threatening the traditional role that women played especially in the trade of indigenous food crops and how it ensured food security.

The main contribution of this study is two-fold. First, it provides an overdue analysis of the significant changes in trade practices which took place among the Agikuyu women of Nyeri over a period of time and its impacts on food security in the community. Second, it is to disclose information about the economic aspects of the Agikuyu women of Nyeri and their reaction towards colonial economic policies during the colonial period. The

process of colonialism ushered in the integration of the culture of colonialists and Africans which led to a process that ushered in the modification, destruction and marginalization of the role of women in trade and trade in Africa (Omwoyo, 2015).

The major gap which arose from a number of relevant literature reviewed is that most scholars researching the Agikuyu of Kenya were mainly concerned with their economic organization. Other scholars have also discussed their economy in a more general way by principally focusing on economic changes experienced during different periods. However, this study takes a historical perspective on changes in women's trade practices among the Agikuyu of Nyeri from the pre-colonial period to the post-colonial period. Most studies on economic history focus on counties, regions, countries or continents but this study takes a different approach by focusing on the role that women played in the trade of indigenous food crops. The study is unique in that it focuses on an economic set-up covering a smaller geographical area and also women's trade as a unit of discussion which has not been given much scholarly attention. This work provided a systematic study of changes in women's trade of indigenous food crop practices among the Agikuyu of Nyeri in the period between 1902 and 1980 cutting across all the periods. In light of the relevant literature reviewed above, there is scanty published research which has been undertaken in this area, specifically in the field of exchange of indigenous food crops by women.

METHODOLOGY

Location of the Study

The study was conducted in Nyeri County, in Central Kenya and it is bordered to the north by Laikipia, to the northeast by Meru, to the east by Kirinyaga, to the south by Muranga, and to the west by Nyandarua districts. Currently, it has six electoral constituencies, all of them in the Nyeri County. It is found in the central highlands making

it endowed with fertile crop-producing soils, a higher annual rainfall, and moderate temperatures. It also boasts of Mount Kenya and Aberdare National Parks, which is a plus to the tourism industry. Moreover, the region is endowed with other factors that give a booster to tourism. Mount Kenya is the biggest mountain in East Africa and the second biggest mountain in Africa. The current headquarters of the county is Nyeri Central, which is by all standards the largest town in the entire county. The immediate neighbours to the Agikuyu at the time they occupied the area of study, included the Athi and Gumba communities. The Agikuyu were mixed farmers and hence required land for farming and thus negotiated with Athi and Gumba who were hunters and gatherers.

Research Design

The historical research method that comprised of qualitative approach was used in this study to analyze change in the Agikuyu women's local trade in indigenous food crops from 1902 to 1980 in Nyeri County. This study design was useful and it helped the researcher to obtain data by contacting key informants to come up with the best summarized, interpreted, and clarified in-depth analysis of the subject. This design was mainly based on the primary and secondary data collection methods and played a major role in achieving the chronologizing objective. The study employed a historical research design which entails the gathering of data and evidence regarding events that have occurred in the past to establish facts that support or deny the assumptions that are held Creswell (2008).

Target Population

The total population for the entire Nyeri County is 759,164 according to the Kenya National Bureau of Statistics (KNBS) 2019 while the sample for the study was from three sub-counties; Kieni East, Mathira East, and Nyeri Central. The informants were selected from elderly people, that is, from a population of 55 years and above from the three

sub-counties. The targeted persons included political and religious authority, farmers, traders and former administrators i.e., the colonial chiefs and headsmen. This group of the population was very important since they were bearing the most relevant information to the study.

Sampling Procedures

The study targeted three sub-counties from Nyeri County including Mathira East sub-county, Kieni East sub-county, and Nyeri Central Sub-county. The three sub-counties have been sampled purposively because Mathira East had the largest open-air market in East and Central Africa which had been in existence since the colonial period and most of the items of trade were local food stuffs as they are to date. Kieni East being a semi-arid area, had an early experience of common food insecurity since the colonial times; women had to engage in local trade on indigenous foods for their families while Nyeri Central was the main colonial administrative area, and to date, it is a centre of administration and business for Nyeri County. The study adopted both purposive and non-probability sampling techniques where purposive sampling and snowballing or chain techniques were used to identify the respondents.

Sample Size

When conducting historical research that is within a time frame of far past years like the proposed study, what matters most is the quality and reliability of the information given by the respondents. Hence, the respondents were sampled mainly due to their knowledge of the research topic. Given this, Kathuri and Pals (1993) state that the minimum thresholds of 100 cases in major subgroups and 54 cases in minor subgroups are appropriate sample sizes. Given that the total population of Nyeri County is 759,164 people and the specific population of the sampled area of the study is 339,239 (KNBS, 2019), the study area represents the minor group of Nyeri County. Therefore, the threshold of 54 respondents was used for this study.

Research Instruments

Interview Guide

All interviews were done in the Gikuyu language which is understood by the people in the catchment area and language informants are most comfortable to use. Vicarious participation was not strictly followed since the researcher was not restricted to following the interview schedule. All the sampled population comprised of individuals aged fifty-five years and above and the interview involved questions which were of the open-ended type. It also helped the researcher gain deeper and richer data information which might have been difficult if the researcher had to rely on close-ended questions. The questions helped the researcher to gain greater depth of the answers and encouraged informants' feelings in the course of the conversation. Where the respondents were not available to give oral information especially information about the pre-colonial women's trade on indigenous food crops activities, their response was corroborated with secondary sources.

Data Collection Procedures

The data for this study was collected as per the objectives from different sources of history and was categorized as Primary or secondary data.

i. Primary Data

The primary data was obtained from oral interviews that involved the respondents as well as the archival records. The primary source was mainly and to a great extent gathered from the Kenya National Archives and Nyeri County Archives. These main documents that were considered included Local Native Councils (LNC), colonial government publications, confidential reports on trades, correspondence on trades, housing, education; intelligence reports; the native affairs report; trade report; letters; handing over reports and diaries. Secondly, an interview schedule was developed, and in this process, the study item was orally presented to the informants. The interviewees were

asked and interviewed again to get more augmented information. Structured interviews were conducted with the respondents and before the interview, they were asked similar questions to enhance comparability of responses. Interviews were done with the informants and other observations were done in notes and even taped on voice recorders. Data collection was done when personnel reached the point where the informants gave the same response to the same question (Saturation point).

ii. Secondary Data

Secondary data which were written documents formed the next data type and these included; books, seminar papers, journals, theses, dissertations, and periodicals which were obtained from the National Library and various university libraries in Kenya. These libraries contained vital secondary data for this study in form of the written materials. Secondary data was also employed to enhance the primary sources because there were some level of gaps that could not be sufficiently met by the primary sources.

Data Analysis and Interpretation

Interview material gathered orally from Agikuyu informants was recorded digitally and transcribed from Agikuyu to English. To facilitate the process of categorization of the oral information gathered, it was considered necessary to look for similarities and differences in the data to group the next (sub) themes by the objectives of the study and the historical period under consideration. Like the secondary data, similar information was treated to textual criticism to determine their accuracy. It entails description, narration, comparisons, and critical evaluation of the findings from the themes and sub-themes. Before concluding, a relationship between the themes was looked for. First, all the material gathered was subjected to exploratory reading. This afforded a way of handling the first research question revolving around the study, whether it still stands the way it was going by the data already collected. The data collected was

examined at two levels; that is the descriptive and thematic levels because it was qualitative and critically appraised, checked, and confirmed by using checklists where appropriate. The data collected was analyzed and interpreted according to the historical method. This method is a rigorous study of history to explain the present through reliance on data on events that are beyond one's control.

Ethical Considerations:

The researcher got research permission from Chuka University, the National Commission for Science Technology and Innovation, the Ministry of Education State Department for Early Learning and Basic Education, and the County Commissioner of Nyeri County. The authorization helped the researcher in conducting research work in this study in Nyeri and other relevant institutions. The researcher asked all the interviewed informants for their verbal consent since most of them were willing participants in the interviews. The informants were informed of the purpose of the research that was being done in a bid to ensure that there were no fears as a result of the exercise.

RESULTS AND DISCUSSIONS

Traditionally, the Agikuyu women viewed food security through the lens of self-sufficiency and sustainability. Roy (2006) argues that food security was deeply embedded in their local trade practices, which were designed to ensure that every household could meet its nutritional needs throughout the year. Central to this system was the trade in a variety of crops, including staple foods such as maize, beans, yams, millet, and indigenous vegetables (Kamau-Rutenberg, 2008). These crops were carefully selected and traded according to the season, ensuring a continuous supply of food. This diversification was crucial, as it provided a buffer against crop failures due to pests, diseases, or adverse weather conditions, thereby safeguarding the community's food security as one of the respondents from Kieni affirmed.

New Emerging Trade Patterns in Nyeri by 1980

The market dynamics in Nyeri County experienced significant transformations from the early 20th century through to the post-colonial era. These changes were driven by a range of factors, including colonial influence, economic policies, shifts in agricultural practices, and socio-cultural developments. This discussion explores the noticeable changes in the market in terms of items of trade, market structure, medium of exchange, and the participants involved. Additionally, it considers how these changes reflect broader socio-economic shifts in Nyeri County during this period.

One of the most significant changes in the market in Nyeri County was the diversification of items of trade. Traditionally, the Agikuyu people of Nyeri traded primarily in indigenous food crops such as yams, sorghum, millet, and various root vegetables (Ng'endo, P. 2002). These crops were not only staples of the local diet but also formed the basis of barter trade within and between communities. However, with the advent of colonial rule and the introduction of a cash economy, there was a noticeable shift in the types of commodities traded (Felister Wambugu, O.I., 2024).

Mwangi Edwin (O.I., 2024) asserts that the market also saw the introduction of new consumer goods, particularly those imported from Europe and India. Items such as textiles, utensils, spices, and processed foods became common in the market. The presence of these goods was indicative of the changing consumer preferences, influenced by the colonial economy and the increasing availability of foreign products. This shift was further supported by the growing network of trade routes and the establishment of trading centers, which facilitated the distribution of these new goods.

With the establishment of colonial rule, there was a push towards formalizing these markets. Permanent market structures began to emerge with designated areas for different types of trade. The colonial administration introduced regulations that dictated

where markets could be held, the types of goods that could be sold and the times at which trading could take place. These changes were part of a broader effort to control and tax trade as well as to impose order on what was perceived as chaotic and informal trading practices (Mwaniki Fundi O.I., 2024)

Permanent market buildings complete with stalls and storage facilities were constructed in key trading centres within Nyeri County. These structures not only provided a more organized trading environment but also reflected the increasing commercialization of trade in the region (Goheen, 1996). The establishment of these markets was often accompanied by the development of infrastructure such as roads and railways, which facilitated the movement of goods and people to and from the market centers.

Wairimu, a respondent, explained that the medium of exchange in the markets of Nyeri underwent a fundamental transformation during the colonial period. Traditionally, trade among the Agikuyu was largely based on barter with goods being exchanged directly for other goods of equivalent value. This system was well-suited to a largely subsistence-based economy where money played a minimal role. The introduction of colonial taxation and the cash economy, however, necessitated the use of currency as the primary medium of exchange. The British colonial administration introduced the East African shilling, which became the standard currency for transactions. This shift from barter to cash transactions had far-reaching implications for the local economy (Wairimu Joan O.I., 2024)

Muchoki also explained that another area of change was that the composition of market participants in Nyeri also changed significantly during this period. Traditionally, the market was dominated by local traders primarily women who played a central role in the exchange of food crops and other goods. The market was a social space where people from different communities came together to trade, socialize and maintain social bonds, Muchoki David (O.I.,2024) states that.

The entry of Indian traders brought about significant changes in the market dynamics. They introduced new goods, currencies like Rupee and new trading practices. Their presence contributed to the commercialization and diversification of the market. The Indian traders also played a crucial role in the development of retail trade in Nyeri moving away from the traditional barter system to a more cash-based economy (Nzioki, 2000).

Ochieng (2014) noted that children also became more active participants in the market, particularly in urban areas. As the economy became more commercialized, families increasingly involved their children in trading activities both as a means of supplementing household income and as a way of instilling business skills from a young age. This change reflected the broader shift in the economy where trade was no longer just a means of subsistence but also a commercial enterprise.

There were also changes in market regulations and governance. The colonial administration introduced new laws and regulations to control trade including licensing requirements for traders, price controls and measures to ensure the quality of goods sold in the market. These regulations were part of the broader effort to formalize and commercialize the market economy in Nyeri (Benjamin, 2024).

The changes in market dynamics also had cultural and social implications because the market became a space where different cultures and communities interacted leading to the exchange of ideas, practices and goods. These cultural exchanges were facilitated by the presence of diverse market participants including local traders, Indian merchants and colonial officials. The market thus became a microcosm of the broader social and economic changes taking place in Nyeri during this period (Gakaria, 2015).

Emerging Pattern on Women's Local Trade and Food Accessibility.

David wa Muchoki (O.I., 2024) states that the economic landscape resulting from colonial policies

had a significant impact on market accessibility for Agikuyu women who engaged in local trade. Prior to colonial intervention, women played a central role in local trade networks, facilitating the exchange of indigenous food crops and other goods within the community. However, colonial policies often prioritized European settlers and their economic activities, leading to the marginalization of local markets that had traditionally been vital for Agikuyu women's livelihoods (Chabeda-Barthe & Haller, 2018). As European settlers established large-scale plantations and commercial enterprises, they often controlled key market spaces limiting access for local traders, particularly women.

The emphasis on cash crop farming under colonial rule reshaped the composition of local markets, with cash crops such as coffee and tea dominating trade transactions (KNA/CP/4/29, 1940-1950). This shift marginalized indigenous food crops as local markets became increasingly focused on the exchange of cash crops for export rather than indigenous food crops for local consumption. Agikuyu women, who relied on the local trade of indigenous food crops to support their families, found themselves marginalized within these transformed market dynamics. A respondent from Nyeri, Wanjiku Peris (O.I., 2024) explains that reduced demand for indigenous food crops in local markets further constrained women's economic opportunities and contributed to food insecurity within the community. She further states that.

This lack of market accessibility constrained women's ability to diversify their income sources and exacerbated existing economic vulnerabilities, particularly for women-headed households and those with limited access to transportation (Berhanu, 2016). The concentration of economic activities and market spaces in urban centres further intensified market accessibility challenges for rural Agikuyu women. Many women were located in rural areas with limited infrastructure and transportation networks, making it difficult for them to access distant markets to sell their produce or

purchase goods. James Muthee (O.I., 2024) explains that the lack of adequate transportation infrastructure and high transportation costs further restricted women's mobility and economic opportunities, perpetuating their marginalization within the colonial economy. Muthee further states that-

To summarize, the changing economic landscape under colonial rule significantly impacted market accessibility for Agikuyu women involved in local trade. With colonial policies favouring European settlers and cash crop farming, local markets were marginalized, dominated by cash crops, and inaccessible to many women (Ingabire, 2019). This situation led to economic vulnerability and food insecurity among Agikuyu women, particularly those in rural areas with limited access to urban markets (Altieri et al., 2012). To address these challenges, there is a need for inclusive economic development initiatives, improved market infrastructure and empowerment programs aimed at enabling women's full participation in local trade networks.

Traditionally, Agikuyu diets were diverse and nutritious, drawing from a wide array of indigenous traded within the community. This diversity in food sources ensured that essential nutrients were readily available contributing to overall health and well-being. Women, as primary caregivers and traders, played a central role in maintaining these traditional consumption patterns (Ng'endo, 2002). They possessed extensive knowledge in the trade of indigenous food crops and preservation techniques, ensuring that meals were not only appetizing but also balanced and nutritious. The traditional practices of the Agikuyu women supported the cultivation of various food crops, including staples like cassava, wheat, maize, yams, and millet alongside a range of vegetables and fruits (Felister Wambui, O.I., 2024).

Traditional Agikuyu cuisine reflected cultural values and practices with certain foods holding symbolic significance in rituals and ceremonies.

Women preserved these culinary traditions passing down recipes and cooking techniques from generation to generation. Food preparation was often a communal activity bringing together women and families to share knowledge, stories and experiences while preparing meals. This communal aspect of food preparation fostered social bonds and reinforced the interconnectedness of the community. Traditional Agikuyu consumption patterns were characterized by diversity, nutritional adequacy, and cultural significance. Kamu Wanjiku (O.I., 2024) states that women's roles were pivotal in preserving these patterns, ensuring that dietary traditions remained central to the community's identity and well-being.

Effects of Emerging Patterns of Women's Local Trade on Food Nutrition

The transition to cash crop farming brought about significant changes in the traditional consumption patterns of the Agikuyu women (KNA/CP/4/29, 1940-1950). With families increasingly prioritizing the cultivation of crops for sale rather than household consumption, the availability of diverse and nutritious food for domestic use declined (Smalle'y, 2013). The shift towards cash crops such as coffee and tea, meant that agricultural land that was previously utilized for growing food crops was now dedicated to cash crop production, reducing the land area available for food production. As a result of this shift, Agikuyu households began to rely more heavily on purchased food from markets to meet their dietary needs (KNA/HAK/1/14, 1930-1940). However, the food available in markets was often less diverse and nutritious compared to the traditional foods grown and consumed within the community. This change in dietary composition had implications for the overall health and nutritional status of households as they had less access to the vitamins, minerals and dietary fibre provided by indigenous food crops (Martha, 2019),

The economic pressures associated with cash crop farming exacerbated these dietary changes. Families focused on generating cash income to meet

financial obligations such as taxes, school fees and household expenses often at the expense of prioritizing food consumption (Chabeda-Barthe & Haller, 2018). In times of economic hardship, or market fluctuations, households may have even sold their food crops rather than consuming them, further reducing the availability of food for domestic use. The shift towards cash crops also altered the dynamics of food procurement within households. Traditionally, women played a central role in food production and preparation, ensuring that meals were nutritious and culturally significant (Alons'o, 2015). However, with the increased emphasis on cash crop farming, women may have had less time and resources available for food preparation, leading to changes in cooking practices and meal composition (KNA/CP/4/29, 1940-1950). Additionally, the reliance on purchased food meant that women had to navigate market conditions and prices to secure the necessary ingredients for meals adding another layer of complexity to food procurement.

Indigenous food crops cultivated by the Agikuyu community in Nyeri County offered a wealth of nutritional benefits that were crucial for maintaining the health and well-being of the population (Altieri et al., 2012). These crops, which were well-adapted to the local climate and soil conditions, provided a diverse array of essential nutrients, including carbohydrates, proteins, vitamins, and minerals. Staple crops such as millet and sorghum were rich sources of carbohydrates, providing energy for daily activities and supporting metabolic functions. Traditional vegetables like amaranth, cowpeas, and indigenous greens were abundant sources of vitamins A, C, and K, as well as minerals such as iron, calcium, and potassium which were essential for overall health and immune function (KNA/CP/4/29, 1940-1950). Women played a central role in the cultivation, harvesting, and trade of indigenous food crops drawing upon their knowledge of agricultural practices and trade traditions to ensure that these crops were utilized to their fullest nutritional potential.

Akinola et al., (2020) state that the nutritional benefits of indigenous food crops extended beyond their direct consumption, as these traded crops were often integrated into traditional food preparation practices and culinary rituals that reinforced social bonds and cultural identity within the community. For example, communal meals prepared with indigenous ingredients served as occasions for social gatherings and celebrations, strengthening interpersonal relationships and fostering a sense of belonging among community members. Additionally, traditional food preservation techniques such as drying, fermenting, and pickling allowed surplus produce to be stored for extended periods, ensuring a stable food supply throughout the year and mitigating the effects of seasonal fluctuations in crop availability (David Muchoki, O.I., 2024).

Wambugu Bibian, O.I 2024 also explains that the growing of indigenous food crops promoted environmental sustainability and resilience within the agricultural ecosystem. Many indigenous crops were well-adapted to local soil and climatic conditions, requiring minimal input such as water and chemical fertilizers. Their cultivation also supported biodiversity by providing habitats for beneficial insects and microorganisms, enhancing soil fertility, and reducing the risk of pest and disease outbreaks. Additionally, the diverse cropping systems associated with indigenous food production helped to maintain soil structure and prevent erosion mitigating the effects of climate change and supporting long-term agricultural productivity. Muraya (2019) says that indigenous food crops played a critical role in supporting the nutritional health, cultural heritage, and environmental sustainability of the Agikuyu community in Nyeri County. Women's central role in the cultivation, preparation and preservation of these crops ensured that their nutritional benefits were maximized and that traditional dietary practices were upheld (KNA/HAK/1/14, 1930-1940). However, the transition to cash crop farming and the erosion of traditional agricultural

knowledge and practices threatened the continued availability and utilization of indigenous food crops, highlighting the need for concerted efforts to preserve and promote these valuable resources for future generations.

Post-colonization, the shift towards cash crop farming and the decline in the trade of indigenous food crops had profound implications for the nutritional health of the Agikuyu community in Nyeri County (KNA/CP/4/29, 1940-1950). With the emphasis on cash crops such as coffee and tea, agricultural land that was previously used for growing diverse food crops was converted to monoculture plantations reducing the availability of nutritious foods for local consumption (Smalle'y, 2013). As a result, the dietary diversity of the community decreased and traditional staples rich in essential nutrients were increasingly replaced by cash crops that were less nutritious and often exported for profit. Gitonga a respondent affirms that.

According to Aphane (2002), the decline in the consumption of indigenous food crops had significant health consequences, particularly for vulnerable members of the community such as children, pregnant women, and the elderly. Indigenous crops such as millet, sorghum, and traditional vegetables were rich sources of vitamins, minerals, and dietary fibre, which were essential for growth, development, and overall health. However, with the decline in their cultivation and consumption, the community's intake of these vital nutrients decreased, leading to an increased risk of malnutrition, micronutrient deficiencies, and related health problems (Chabeda-Barthe & Haller, 2018). Children, in particular, were susceptible to the adverse effects of the nutritional decline, as their diets lacked the essential vitamins and minerals necessary for healthy growth and development. Malnutrition and stunted growth became more prevalent, impairing children's physical and cognitive development and perpetuating a cycle of poverty and ill health. Additionally, pregnant and

lactating women, who had increased nutritional requirements during pregnancy and breastfeeding, faced heightened risks of maternal and infant mortality due to inadequate diets lacking in essential nutrients.

The Emerging Pattern of Women's Local Trade and Food Utilization

According to Maina (2015), trade in traditional indigenous food played a crucial role in maximizing the nutritional value of food crops within the Agikuyu community in Nyeri County. Susan Njeri (O.I., 2024) states that women were the primary caregivers and food providers and were responsible for employing these techniques to ensure that meals were not only safe to eat but also nutritious and flavorful. Fermenting, drying, and boiling were among the most commonly used methods, each serving specific purposes in food preservation and enhancement. Fermentation was a traditional method employed to preserve food and enhance its nutritional value (Smalle, 2013). Indigenous foods were fermented to extend their shelf life and increase their digestibility. Fermented foods were rich in probiotics and enzymes, which supported gut health and aided in nutrient absorption. Fermentation increases the bioavailability of certain nutrients, making them more accessible to the body. Women mastered the art of fermentation, using techniques passed down through generations to produce a variety of fermented foods such as sour porridge, fermented vegetables, and yoghurt-like dairy products (Hunter, 2008).

Drying was another widely used method of food preservation and preparation for foods such as millet, cassava and yams. Dried foods could be stored for extended periods without refrigeration, making them valuable assets during times of scarcity or hardship. Shephard (2006) argues that women carefully prepared and dried surplus food crops during harvest seasons and also items obtained through trade, ensuring a steady supply of preserved foods throughout the year. Dried indigenous foods were versatile ingredients that

could be rehydrated and incorporated into various dishes, providing essential nutrients and flavour to meals. Boiling was a fundamental cooking method used to prepare a wide range of foods, from grains and legumes to meats and vegetables (Chabeda-Barthe & Haller, 2018). Traditional methods of preparing and preserving food helped to make the most of what they had. These practices were essential for survival and trade, especially during difficult times (Susan Njeri O.I., 2024).

Susan Njeri (O.I., 2024) states that apart from fermentation, drying, and boiling; other traditional food preparation methods were also employed to maximize nutritional benefits. Techniques such as soaking, sprouting, and pounding were used to enhance the digestibility and nutrient content of foods. For example, soaking grains and legumes before cooking helped to reduce anti-nutrients and improve their nutrient bioavailability. Sprouting seeds and grains increased their nutrient density and made them easier to digest. According to Ndirangu, N. (2009), pounding or milling grains into flour allowed for the preparation of nutritious staple foods such as ugali (maize meal), porridge and chapati (flatbread). Traditional food preparation methods were integral to the Agikuyu community's food utilization practices, ensuring that meals were not only safe and palatable but also nutritionally adequate. Women's expertise in these techniques was essential for maintaining the nutritional well-being of their families and communities, contributing to overall health and resilience in the face of socio-economic challenges and environmental constraints.

From the foregoing, the colonial period brought profound changes to the Agikuyu women's conceptualization of food security. The imposition of taxes and the promotion of cash crops disrupted traditional trade practices and increased dependence on market systems for food (Chabeda-Barthe & Haller, 2018). Changes in land tenure, labour dynamics, and trade techniques further challenged the community's ability to ensure food security.

Addressing the long-term implications of these changes requires a nuanced understanding of the historical context and ongoing effects of colonial policies on gender dynamics, trade practices, and food security.

CONCLUSION

Before colonialism in Kenya, the Agikuyu women ensured food security in their homesteads. Through trade in indigenous food crops, they had mastered the trade patterns, and commodities of trade were always available. They also mastered the seasons and various trading commodities associated with each season. These women had good familiarity with local trade dynamics and these skills were passed from one generation to another and it ensured the availability of food crops. However, the depletion, disregard and marginalization of the local trade activities by European colonialists led to the emergence of new trade patterns like the introduction of horticulture crops. In the market, permanent structures were constructed and monetization of the economy was experienced. Consequently, the Agikuyu people in Nyeri experienced severe food insecurity resulting from the lack of enough indigenous food supply in the market. In the long run, this affected the communities' nutrition access and utilization which had been maintained by indigenous food crops.

Recommendation

The study recommends that the relevance of trade in indigenous food crops should be integrated into the modern exchange pattern. This could go a long way towards the realization of Sustainable Development Goals (SDGs) on maintaining food security, Kenya's Vision 2030 and the Constitution of Kenya 2010 that guarantees every person's right to be free from hunger, and to have adequate food of acceptable quality in the modern society.

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