

How British Socio-Economic Policies of the Colonial Past Catalyzed Food Insecurity in Present-day Kenya

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SWS 6905

submitted 21 November 2014

Abstract

Today 1 in 8 people in the world are hungry. In the sub-Saharan nation of Kenya, 50% of the country's 44 million people do not have enough (if anything) to eat. Despite decades of research focused on identifying, measuring and addressing the causes of hunger, food security has actually worsened in Kenya over the last half century. The question then is *why?* It's easy to observe factors influencing hunger—gender inequalities, low agricultural production due to drought and limited access to inputs, minimal infrastructure and poor access to markets, to name a few. But are these issues *causing* hunger, or are they just perpetuating (or exacerbating) conditions previously created? This paper argues the latter, proposing *the socio-economic policies of the colonial past catalyzed food insecurity in the present*. The argument is supported by observing Kenya's pre-colonial history, examining socio-economic policies imposed by the British rulers during the colonized period, discussing the outcomes of those policies, and finally revealing how those outcomes catalyzed the state of food insecurity in Kenya today. The implications of these findings are useful in plotting the course of development programs in Kenya (or anywhere), questioning, *is it wise to continue promoting agricultural intensification and commercialization as the necessary first steps toward development?* Additional research is suggested to address that question, and also to consider policies which better favor subsistence farming and small scale innovations, since 70% of Kenyans survive on subsistence agriculture.

Introduction

Today 1 in 8 people in the world are hungry, including 25% of all people living in sub-Saharan Africa (Food and Agriculture Organization's *State of Hunger* 2012). In addition to more obvious consequences on health, lack of food reduces one's ability to be productive, thereby exacerbating economic insecurity at the household level (Sutherland 1999), further decreasing the household's access to food, creating a cycle of poor health and dependency on aid. What's more, food insecurity leads to violence—a lesson observed many years ago when starving masses launched the French Revolution. According to Jose' Graziano da Silva, Director-General of Food and Agriculture Organization ("FAO") of the United Nations, "There is a clear linkage between hunger and conflict; food security and peace in Africa". Ending hunger, therefore, is imperative—not only for the health and well-being of individuals, but for the economic security and peace of entire nations.

But what factors influence “food security”, and why are 25% of all people living in Sub-Saharan Africa lacking it? Existing research takes several approaches: It identifies some “magic bullet” (such as correcting economic models to be market-based/capitalist, or improving productivity--see Tweeten 1999, and Woodhouse 1989, respectively), which, if successfully completed, would magically end hunger. The alternative approach is more well-rounded, examining the labyrinth of factors *influencing* food security (see Fullbrook 2009, Kiome Min of Ag 2009, and Hickey et al. 2012), yet does so without fully considering how most of those factors (excluding climate change) *came to be*. Post-colonial Africa nations, however, did not develop food insecurity *organically*, hence observing “what is” is insufficient to remedy their problems. It did not result from gender inequalities, did not emerge due to low production rates, will not be the result of the land’s inability to support life—though each of these factors *exacerbates* hunger. Instead, these nations were colonized by Europeans, robbed of resources and enslaved, uprooted and impoverished. As such, Africans were forever altered, traditional practices lost, cultural norms destroyed—a history different from other regions which have overcome widespread hunger. Therefore, this paper argues that ***the socio-economic policies of the colonialist past catalyzed food insecurity in the present***. While previous literature examines some of the detriments caused by colonialism (Ndege 2009, and Campbell 2002), this paper specifically links those detriments to today’s food security crisis. To illustrate this argument, the sub-Saharan nation of Kenya is presented as case study.

This paper begins by constructing a foundation. The ***Background*** section defines food security, its terms and measures, and illustrates briefly how environmental, social, economic and political factors can affect it. The background also includes a brief overview of today’s Kenya and delineates why Kenya was chosen as the case study. The background is followed by a brief section describing ***Methods*** used to identify, collect and analyze data in the production of this paper. ***Section 1*** examines the socio-economic culture of the region’s people prior to colonization—***The People Who Would be “Kenyans”***. ***Section 2*** begins the

inquiry into colonial socio-economic policies that emerged once occupation had occurred, specifically focusing on **Land Management**. **Section 3** continues that inquiry delineating colonial methods of **Economic Oppression** on the natives. **Section 4** concludes the inquiry by discussing policies of **Social Degradation** which prevented natives from flourishing. Finally, the connections between these policies and the state of food security in the present are illustrated in the **Discussion** section.

Background

Defining food security is not so simple as asking, “does everyone have enough to eat?”. FAO defines food security as, “A condition that "exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (Boon 2002, FAO 2006). As demonstrated in this definition, there are layers of considerations. Enough to eat when? Today? All year? What if there is “enough” but people can’t physically get to it (perhaps because there are no roads connecting the hungry to food which is available), or can’t purchase it? What if the only food available has spoiled or become otherwise contaminated or infested? And what defines “enough”? Enough to barely stay alive, or enough that the body can perform work?? These are but a few of the considerations in determining if a region (or a household) is “food secure”, hence in order to observe what contributes to that security we must more fully comprehend what food security is, and what metrics are used to establish its absence.

At the World Food Summit in 1996, FAO furthered their definition to include “4 pillars” of food security (see Maxwell & Smith 1993, and Pinstrup-Andersen 2009 for foundations of defining and addressing food security; and Republic of Kenya 2009 for concurrence on using the 4 pillars as guidelines), the absence of any one of which leads to hunger. Food **availability** relates to the supply of food through production,

distribution, and exchange (UN World Health Organization “Food Security” website 2014). Crop failure resultant of low rainfall, or the need to forego eating crops to sell them for cash, are examples of why food is scarce. It should be noted (and this paper will demonstrate), that producing sufficient food is *not* synonymous with attaining food security, even for farmers growing food directly (Mwaniki 2006). Food **access** refers not only to the presence of food, but its affordability and people’s ability to buy it. Access also refers to preferences of individuals and households, often based in culture or religion (WHO “Food Security” website 2014, Maxwell & Smith 1993). The UN Committee on Economic, Social, and Cultural Rights noted that the causes of hunger and malnutrition are often not a scarcity of food but an inability to access available food, often due to poverty (United Nations “Declaration” 2009). Food **utilization** refers to the metabolism of food by individuals. In order to utilize food obtained, what’s ingested must be safe (i.e., unspoiled, uncontaminated by disease or toxins, and not causing life-threatening allergic reactions), and must be enough to meet the physiological requirements of each person (Tweeten, 1999). Finally, food **stability** refers to the ability to obtain food over time, as food security can be transitory, seasonal, or chronic. Wherever any one of these pillars is absent, people are experiencing hunger and/or undernourishment.

With parameters defining food security in place, we can now examine various measures of those parameters. Note: It is not the objective of this paper to collect data to determine *if* Kenya is food insecure. It is widely established that Kenya has not attained food security as a nation, and (so far as I have read) is not disputed. Instead, the following discussion of metrics is offered to lend further understanding to examining hunger. Measuring the 4 pillars can illustrate shortcomings in a given food system thereby helping to focus plausible solutions.

Boon (2002) indicates the “main indicator in the world” is “*per caput*” consumption data acquired from FAO. This is derived by comparing the average dietary energy supply (DES) received, to a minimum threshold of calories consumed by the human body while at rest (this varies with body size and sex—Boon 2002). If the calories needed is too close to (or exceeds) the DES, there is a state of undernutrition. He further states that “if calories/day is less than 1.55 times the basal metabolic rate (BMR), the individual may be classified as chronically undernourished”. These figures can be calculated for individual households, or at the national level using data from national food balance sheets (FBS) and population counts. Food balance sheets present a comprehensive picture of the pattern of a country's food supply (accounting for production, imports and exports), during a specified reference period. Boon's method falls somewhat short, however, as this approach can't identify where shortages *originate* or why—it's based on what *is* consumed-- meaning food *is* available and accessible--but doesn't indicate for how long or if it is utilized once consumed. Disintegrating food security into the component parts, the 4 pillars, helps decipher where shortages fall, and what influences those shortages.

Accounting for *availability* and *stability* of food is widely practiced. Numerous sources compile data on crop yields and calories, animal numbers, and exports versus imports of agricultural products by country. The US Dept. of Agriculture, for example, surveys US agricultural production and produces the Census of Agriculture tabulating both yield and dollar amounts. For most other countries, the FAO collects and synthesizes data for FBSs which can be accessed on-line through FAO STAT (<http://faostat.fao.org/site/339/default.aspx>). From data such as these one can deduce the abundance (or lack thereof) of food in a given nation (determining food security at very local levels depends, in part, upon records maintained within that country; or records maintained by relief agencies). By comparing these data across time (i.e., by comparing several years or seasons), one can deduce stability of the supply.

Access to food is more difficult to monitor, as factors influencing access are often specific to individuals and local communities. Despite these challenges, the US Agency for International Development (USAID) has funded the Food and Nutrition Technical Assistance (FANTA) project (Swindale & Bilinsky 2006a; and Swindale & Bilinsky 2006b), with four measures to determine Household Food Insecurity: Access Scale (HFAS), measuring access (i.e., ability to purchase or otherwise obtain food), in the household in the previous month; Household Dietary Diversity Scale (HDDS), measuring the number of food groups consumed over a given period (to determine whether people are gaining nutrient-rich foods versus empty calories; and proteins versus cereals); and a Coping Strategies Index (CSI), created from responses to the interview question, “What do you do when you do not have enough food, and do not have enough money to buy food?” (Ballard et al., 2011; and Maxwell, 1996). The data used to determine these measures of access to food is gained directly from households.

Utilization of food is determined by observing factors indicating general health and mortality. FAO considers the physical condition of children to be indicative of food utilized:

Food utilization...is captured by anthropometric indicators affected by undernutrition that are widely available for children under five years of age. These include wasting (being too thin for one's height), stunting (being too short for one's age) and underweight (being too thin for one's age). *Measurements of children under five years of age are considered effective approximations of the nutritional status of the entire population* (italics added; FAO 2013)

Therefore, to decipher between food being available or eaten versus being used successfully to promote health and growth, we can look to statistics indicating child health and vigor.

With an overview of food security in place, factors that can hinder security can now be examined.

In Sub-Saharan Africa, food security is an intricate matrix of political, social, economic and environmental factors. Angela Mwaniki (2006) offers: “Food security issues include unstable social and political environments that preclude sustainable economic growth, war and civil strife, macroeconomic imbalances in trade...gender inequality, inadequate education...and the absence of good governance”. Boon (2002) adds, “[R]ecurrent droughts and floods have serious devastating socio-economic and ecological impacts...poor land policies and management practices...lead to land degradation and deforestation, [in turn] increas[ing] flood disasters”. When conflict and instability cause people to flee their homes, crops-in-progress and livestock are lost. If people have no long-term legal rights to a parcel of land they are not inclined to perpetuate its natural resources. Where women lack rights to own land or have incomes of their own, they lack ability to purchase food. All of these factors catalyze economic instability, and without economic stability education cannot be completed. Food security is a complex issue perpetuated by many political, social, economic and environmental factors, but what brought these factors into play in Kenya? Were the people of the region always poor and food insecure? This paper will reveal that the answer is, *no*.

“Africa can neither be explained nor understood without first unraveling the continent’s colonial experience (Ndege, 2009)”. In the case of Kenya, the foundations of poor development and food insecurity rest deeply in colonialism (Fahnbulleh 2006)—a claim explored throughout this document. First, an overview of today’s Republic of Kenya will provide a glimpse at their current state.

Kenya is a land of contradictions and challenges to growth. A nation where, despite 84% literacy (matching the global average), 50% of the 44 million people live below the poverty line (which in Kenya was, in 2004,

\$1.46 per day in urban areas and \$0.68 in rural; Poverties Org 2012). Though 75% of the labor force is sustained by food they grow themselves, only 29% of GDP results from their work (CIA, 2014). Kenya is a net importer of food, yet exports foods for cash (World Trade Organization 2012). Only 16% of Kenya's land is considered to have agricultural potential, whereas the remaining 84% is arid or semi-arid. While the drier lands support 70% of the country's livestock, these areas are unsuitable for rainfed agriculture. Droughts are frequent, and in these areas crops of cereals, pulses, roots and tubers fail, on average, one out of three seasons (where 2 seasons per year are the norm, meaning 25% of crops fail; Hickey et al., 2012). This large, dry section of the country is also home to much of the wildlife which draws tourists to Kenya (tourism dominates the services sector of the economy at 63% of GDP; CIA 2014).

Hickey et al. (2012), delineate some specific challenges to attaining food security in Kenya, including, "inadequate budgetary allocations, low absorption of modern technology, pre- and post-harvest losses, low and declining soil fertility, increasing incidence of disease, inappropriate legal and regulatory framework, lack of coherent land policy, and inadequate markets and market infrastructure"—a labyrinth of political, economic, social and environmental issues. But again, where did these problems originate? Can understanding the origins help lead to solutions? I believe so.

Kenya was selected as a fitting case study for several reasons. First, the country has a diverse land mass ranging from tropical to arid. Diversity of land and climate offers the potential for diverse production functions (i.e., the country is not limited in opportunities nor constrained by climate). Second, 75% of the work force survives via subsistence agriculture. Much research has therefore suggested that improving food security is as simple as improving agricultural output (Tester & Langridge 2010 among them). However this was proven incorrect in the 1970's, when Kenya actually produced sufficient volumes of maize to meet the caloric requirements of all Kenyans, yet still suffered widespread hunger (Kiome, 2009).

Third, despite being the largest economy in eastern Africa (Hickey et al., 2009), 50% of the people lack sufficient food; and despite 75% of their work force actually *growing food*. Finally, among developing nations, Kenya is considered to be relatively stable (e.g., not engulfed in civil war, having representative, elected officials for set terms; Hickey et al., 2009), hence current violence is eliminated as a leading factor preventing food security. In sum, Kenya offers diversity and stability needed for food security, yet widespread contradictions to seeing it materialize. As such, this paper looks beyond the present to the past to account for these inconsistencies.

Methods

In order to examine connections between colonial socio-economic policies and modern-day food insecurity in Kenya, literature was sought by using both *Google Scholar* (<http://scholar.google.com/>) and the University of Florida's Library *OneSearch* (<http://www.uflib.ufl.edu/>). Data collection was limited to refereed journal articles, reports found in the gray literature, and information published on websites maintained by major food security-focused governmental and non-governmental organizations (e.g., UN FAO). Key trends were identified where similar claims were documented in multiple sources (by diverse authors).

Research began with a review of literature on (3) foundational topics. The first was *food security* (Sub-Saharan Africa), with search terms including "definitions", "indications", "influences on", "measurement of", and "statistical data". The second: *Kenya*. Country profile data for 2013 was surveyed for "economic statistics", "division of economic sectors", "imports" vs "exports", "percentage of population living in poverty", and political stability as indicated by the CIA's annual data. The third topic was *colonial occupation in Kenya*--baseline data regarding timeframe of occupation, governance structure, and

economics. Results of these inquiries enable description of the current state of food security in Kenya, and also provide an overview of the 68-year British colonial rule.

After gathering foundational information, I pursued more specific data seeking connection between colonial policies of the past, and the current state of food crisis in Kenya. I gathered data by asking four questions:

1) What policies did the British implement in Kenya regarding land management, economics, and society in general? 2) Did policies prove equally beneficial for white settlers and black natives? 3) Did policies create and/or encourage discrimination or marginalization of natives? If so, 4) did this interfere with native households' ability to support themselves, either by earning livable wages, by producing sufficient food, or both? In response to each of these queries came examples of specifically-designed policies and outcomes illustrating the undermining of natives' ability to flourish or even survive.

To demonstrate the results of the aforementioned policies as *influential* in the demise of Kenyans and not just coincidental, I also examined literature describing pre-colonial socio-economic conditions in the region which would later be called "Kenya". The objective here was to reveal that *significant changes occurred* subsequent to the institution of colonial rule—in other words, their demise was not the continuation of pre-existing socio-economic patterns of the natives, it was imposed from external sources. Traditions of large and highly-mobile livestock herds, social interdependence across regions, land use practices, power, wealth, and determination of land rights all converged to support a "fertile land occupied by prosperous people" (Rocheleau et al. 1995).

Finally, the results of these inquiries are analyzed in the Discussion section to reveal support for the argument of this paper—that today's food security crisis in Kenya was fostered by British colonial policies.

Section 1--The People Who Would be “Kenyans”

Prior to colonization of the southeast African territory (made “Kenya” by the British in 1894), native people led healthy lives on healthy lands, in a socio-economy which served communities instead of individuals.

From the early/mid-18th century until colonialism disrupted it, the land’s inhabitants flourished as a pastoralist system (Waller & Sobania 1994). Of key importance is that “pastoralism” was not merely a mode of agricultural production: Merriam-Webster Dictionary (2014) defines pastoralism (and Waller 2012 supports this), as a “*social organization*” in which raising livestock is merely the primary economic activity. Pastoralism, therefore, defined the roles individuals served within the family and community units, their functions as contributors to economy and general well-being, and their approach to resilience in times of difficulty. This included food security.

For the people who would be “Kenyans”, the pastoral system sustained them economically and socially, as well as protecting the natural resources on which they relied. The economy functioned to ensure collective subsistence rather than individual accumulation (Ndege 2009, Parsons 2011), and people adapted production to changing conditions. Households shifted between multiple modes of subsistence production, grew crops suited to local conditions, and types of production were rarely exclusive. Integrated systems of land management used canopy cover to buffer against rainsplash, intercropping using legumes, crop rotations which included fallows, and *miconjo* (moveable piles of vegetative debris constructed cross-slope to prevent water erosion), ensured the integrity of the soil base (“As a conservation technique, it may be noted that *miconjo* were neither labour nor land absorbing, [and left land more fertile after moved], unlike the grass strips and bench terraces proposed by the colonial agricultural officers of the 1930s onwards”;

Mackenzie 1991). The practice of storing abundant food from years when productivity was high, together with an emphasis on drought-resistant crops enabled food security for extended periods of time.

Evidence of an intensively cultivated area capable of supporting a relatively dense population also comes from the written records of J. Thomson (1885), L. Von Hohnel (1894) and James Macdonald (1897). Agricultural "surpluses" provisioned the trading caravans of these and exploratory / military expeditions of European travelers. Referring to the Kikuyu plateau, Thomson wrote: 'Enormous quantities of sweet potatoes, yams, cassava, sugarcane, Indian corn, millet, etc. are raised, and the supply seems to be quite inexhaustible' (Mackenzie 1991)

They kept a variety of animals with different grazing preferences, disease resilience and drought tolerance. Animals were rotated regionally, thereby enabling seasonal resource and ecological niche exploitation (a practice known as *transhumance*; Rocheleau et al. 1995). Economic success of the community, therefore, relied on the ability of individuals to be mobile and adaptive (Berman 2004).

Some tribes were transhumant over relatively small distances (among them, the Masaai), while others (the Samburu and Akamba) were more widely dispersed (Waller 2012). In all cases, rotation between resource pockets ensured animals were fed and no resource was depleted in the process (Waller 2012, Berman 2004, Rocheleau et al. 1995, Mackenzie 1991). Equally important was keeping large and diverse herds which were continually divided and redirected. Animal disease was viewed as inevitable, large herds used as insurance against devastating loss, and herd division used to isolate illness and promote biodiversity (Waller 2012, Rocheleau et al. 1995). Successful production of livestock and containment of disease, while concurrently protecting the environment on which they depended, therefore, rested firmly in their ability to practice transhumance.

Economic success was also dependent on networks of relations, within and beyond the community, based in mutual advantage (Waller & Sobania 1994, Parsons 2011). In this way, those raising animals gained agricultural produce to make up for shortfalls in milk production, growers invested their surplus in livestock as a durable and reproducible store of wealth, and hunter-gatherers added forest products to the exchange (Waller 2012). This network structure allowed everyone to prosper in good times, and also functioned socially to absorb shocks in bad times (Waller 2012, Rocheleau et al. 1995, Berman 2004).

Communities could shed members rapidly under pressure, just as they could reconstitute themselves when conditions improved. In times of severe crisis—especially the “famines that kill”, expected every generation—communities split up and dispersed. Those who still retained stock hoped to hold on and rebuild later, perhaps taking in dependents from poorer, now unviable, households. Those with too few or no stock would have to take refuge elsewhere in less affected areas, with neighboring agricultural or hunter-gathering communities, or in small cultivating enclaves with permanent water. Some of these migrants might return; others would remain with their host communities. Linked clan systems preserved the memory of how and from where communities had absorbed members and indicated pathways to safety from one identity to another (Waller 2012; supported by Parsons 2011)

This sense of interconnectedness is demonstrated in a traditional Akamba proverb: “One in the woodpile does not laugh at one in the fire”. (All Things Kenyan 2014).

This linked kinship system was also the basis for ownership of land and livestock. Labor was largely cooperative within the family and the larger kin group, and the rewards of labor were mostly redistributed in kind and according to need. There existed little differences in wealth possession.

The extensive networks and mutual reciprocity arrangements among the pastoralists served to ensure sustainable livelihoods, limit vulnerability, protect natural resources, and provide mechanisms for coping during difficult times (Bernard and Thorn, 1981; Lambert, 1947; Wailer, 1985; from Rocheleau et al. 1995), ensuring that individuals never slid into abject poverty (Ndege 2009). The system was apparently successful: Rocheleau et al. quotes the Reverend Johann Ludwig Krapf—the first Christian missionary to live in east Africa, and the first European ever to see Mount Kenya—from 1860, who described the region as, “a fertile land inhabited by a prosperous people”. Kenya’s people were not always food insecure. The question then is, what happened to change this?

Section 2--Colonial Socio-Economic Policies and Their Influences: Land Management

“The African people have never established a symbiotic relationship with the land. They are, in the strict scientific sense, parasites on the land, all of them” (a witness at a Kenya Land Commission meeting, as cited in Rocheleau et al. 1995).

This perspective is illustrated frequently in the colonial management of land (and natives) in Kenya (the attitude of native inferiority and ignorance is also illustrated in Waller 2012, Parsons 2011, and Campbell 2002). This, coupled with the state’s drive to propel the success of white settlers in agriculture as a means by which to fund administration of the colony (Wolff 1970)—which concurrently required undermining native agriculture—drove early and continued efforts to separate Africans from white settlers (Overton 1987, Wolff

1970). As will be demonstrated later in this paper, this physical separation was concurrent to economic and social differentiation and oppression, the consequences of which ultimately drove natives to near complete ruin and continues to affect them today.

The division began with the drawing of a boundary onto a map. At the Berlin Conference of 1885, the British indicated the area to be called “Kenya” and became its self-appointed “protectorate” (Ndege 2009). This act was to firmly establish British hold in the region, protect their trade routes to India, and block German access to the headwaters of the Nile (Wolff 1970). Unaware of (or perhaps unconcerned with), extensive socio-economic networks and linked clan systems on which the native pastoralists relied, the Empire demarcated a section of land on the African continent and deemed it a nation. The process—done without the input of the land’s inhabitants (Ndege 2009)—divided tribes and alliances in some areas, while overall merging more than 40 previously independent communities and ethnicities into one entity (Ogot 2000). The hunter-gatherers, growers of crops, and producers of animals who were cooperatively interdependent for so long would now be divided and left to compete for resources. Ethnic tensions would be the result (Waller 2012). The very creation of “Kenya” severed the pastoralist social structure.

Upon arrival to the new colony, the British set out to locate the most fertile and well-water land (Jayne & Jones 1997, and Waller 2012). To entice Europeans to settle in Kenya, the state sponsored location and survey of the most productive areas (Overton 1987, Waller 2012, and Rocheleau et al. 1995). British surveyors, unaware of transhumance practices which kept pastoralists in motion, initially perceived much of what they saw as “vacant” and unused, and quickly allotted it all to whites (in some instances physically separating migrating pastoralists from their home territories mid-stride; Overton 1987). Prior to 1904 the state collected mostly “unoccupied” land, but as settler agriculture grew and attitudes regarding native abilities flourished, all land became fair game (Overton 1987, and Waller 2012). The “White Highlands”

grew to comprise much of the most fertile and well-watered agricultural land in Kenya (Jayne & Jones 1997), and also lay along the rail line through Nairobi (Overton 1987).

Where territory was obviously occupied, the state forced African tribes to surrender prime tracts of land, often facing armed resistance (Overton 1987). Colonial military expeditions led to genocide and forced migrations (Ndege 2009). Until nearly 10 years in to colonial rule, the state “did not concern itself *at all*” with land for Africans (Overton 1987). By 1920, 3 million hectares had been alienated to whites, and another 1.3 million hectares taken as forest resources (Overton 1987). Natives were separated from their productive lands, and landlessness and social disintegration emerged for the first time (Alila 1977). But settlers would not have natives being “loose”.

“As a matter of expediency to protect land, circumvent African resistance and protect settlers” (Overton 1987), large-scale migration and resettlement of natives and their herds (Rocheleau et al. 1995), to closed, often barbed wire districts became the new plan (Wolff 1970, Parsons 2011). Beginning in 1902 the “Outlying Districts Ordinance” was used to demarcate “reserves” far from European Settlement, and by 1904 segregation and rigid spatial structure became official policy (Overton 1987, and Lonsdale & Berman 1979). Colonial officials claimed the native reserve system “protected unsophisticated primitive societies from exploitation”, thus depicting the British empire as the “enlightened trustee of backward peoples” (Parsons 2011).

The reserves consisted of marginal lands of low productive capability. Once segregated from whites the state pressed natives to change to western-style agriculture aimed toward meeting market demands, for which financial gain would be the reward (though as it will be revealed later in this paper, they were not permitted to partake in those markets—gain went to the British to support the cost of colonial

administration; Waller 2012, Alila 1977). The promotion of the new crops was linked to changes in crop production and general land management, specifically a move towards intensified monocropping and the abandon of rotations (including fallows; Mackenzie 1991). By 1930 86% of all natives (and their livestock) were crowded into territory comprising only 22% of the colony's arable land (Parsons 2011). Land degradation within the Reserves became increasingly obvious (Dregne 1990), and Europeans determined the soil erosion crisis to be a result of the inferior agricultural and cattle-rearing practices of the natives (Rocheleau et al. 1995, Parsons 2011).

Production was directed solely toward meeting British demands (especially during war time shortages), and was therefore independent of sound land management principles natives had traditionally practiced (Alila 1977, Overton 1987). Contrary to cooperatively producing for the sake of survival and mutual advantage within the social network, the new market system required competition for resources and export of food stuffs to outside the community (further discussed in the *Economic Oppression* section). White maize (of great demand by British; Jayne & Jones 1997) was given higher price than yellow, and by 1931 had replaced drought-resistant sorghum and millet as the staple crop grown both seasons (Mackenzie 1991, Rocheleau et al. 1995). Growers were now more vulnerable to inevitable drought events. Funding the state, however, required fixed, productive, and taxable cultivators, and mass-producing maize was viewed as the most expeditious way to obtain funds (Waller 2012).

For many years the lands had been used by pastoral communities whose prosperity rested in *mobility* and *adaptability* (Waller 2012, Boon 2002). Now confined to live in Reserves, Africans were restricted to maize production and were only allowed outside their districts as labor for whites. There they were sometimes permitted to graze small numbers of livestock on the employer's land. However as settler crop production expanded whites needed less labor and more land. Laborers were sent back to the Reserves, more land

was confiscated for white use (often in the name of “soil preservation”, since natives were viewed as incapable of managing soil), and livestock (also evicted from the employer’s land), were either offloaded at rock-bottom prices or added to the densely-populated, poor-quality fields within the Reserves (Waller 2012). High density livestock in limited space—unfortunately, ideal conditions for the rapid spread of disease (Rocheleau et al. 1995).

Historically, pastoralists utilized animal diversity and herd mobility to help isolate any disease that occurred (Waller 2012, Berman 2004). Within the Reserves, however, crowded conditions and immobility prevented traditional practices of mixing, dividing and mobilizing herds. Rinderpest and Contagious Bovine Pleuro-Pneumonia (CBPP)—both of which arrived concurrent to the colonists— spread by close contact. As a result, during the second decade of the 20th century, cattle diseases ravaged much of the nation’s livestock, settler and native herds alike.

The British responded with additional land seizures and enclosure programs. Quarantine was imposed to prevent the spread of infection, further separating natives from settlers. Complex rules affected all aspects of livestock movement, created added expense and inconvenience, and resulted in owners concealing outbreaks to ensure access to trade (Waller—2012). By the 1930s, Africans had lost the majority of their land, approximately 50% of their livestock, and were living in closed Reserves on barely farmable land.

Section 3--Colonial Socio-Economic Policies and Their Influences: Economic Oppression

Prior to British occupancy, Native economy was woven into a social structure where production was primarily for collective subsistence rather than individual accumulation (Parsons 2011). This approach conflicted with that of the British, who believed in production for accumulation and market gains (Waller

2012, Lonsdale & Berman 2004). From the state's "commercial" viewpoint, subsistence seemed an irrational choice to be overcome. Furthermore, the Protectorate needed to shift the costs of railway maintenance, military pacification, and general colonial administration from the London Treasury to the colony (Wolff 1970). While depicting itself as the enlightened trustee of inferior peoples, the defacto British function was to generate income. This meant creating an economic system in which Europeans had specific advantages, and a body of low-cost labor to fund it all (Parsons 2011). After detaching pastoralists from their traditional collective economy, colonists forced them into the commercial market economy to help with production; then controlled their ability to succeed in it (Ndege 2009, Overton 1987 and Jayne & Jones 1997).

Between the emergence of new demand centers stemming from mining activities and urban employment, (Lonsdale & Berman 2004), and offering of premium prices for white maize by the British starch market, the demand for grain greatly increased in the early 1920s. Europeans and natives alike responded by rapidly increasing maize production, with natives foregoing production of more drought tolerant crops (see Land Management section for greater detail). Grain trade was essentially devoid of government regulation during this period (Jayne & Jones 1997). But as the depression set in and settler production could not keep pace with global prices, African farmers were increasingly perceived as a threat against white success.

Substantial evidence indicated that African maize surpluses were capable of being generated at prices below the cost of production on most white farms, hence settlers successfully lobbied the colonial government for protection from African competition. "Without protection, according to the Secretary of Agriculture of Rhodesia, 'the extinction of the European farmer through native competition must be merely a question of time' " (Jayne & Jones 1997).

State Agencies were established to buy grain from European producers above export parity, thereby ensuring the economic success of white growers. Losses were offset by the institution of Provincial Boards, created to buy African products at prices 30-60% lower (Jayne & Jones 1997, and Waller 2012). This two-tiered pricing structure functioned by cross subsidization—extracting cheap surpluses from natives and redistributing the gains to subsidize whites (Overton 1987, Alila 1977, Lonsdale & Berman). To ensure natives couldn't circumvent the system, the Native Foodstuffs Ordinance was established (Jayne & Jones 1997), restricting African maize and livestock trade across district boundaries—they had to sell to Boards within their districts. It was later followed by the Marketing of Native Produce Ordinance, which tightened controls at all stages of grain sales. In addition to being restricted territorially and grossly underpaid for their products, natives were charged higher freight for rail service to move their products to market areas. (Overton 1987). All of these policies conjoined to ensure white agriculture succeeded.

The inefficiency of settler production was masked in the early 1920s by high export prices, however the dramatic drop in prices for maize, coffee and sisal on the world market in late 1929 exposed the reliance on state support. In response, the state yielded again to settler demands to restrict production of high value crops such as tea, coffee and cotton to white settlement areas only (Overton 1987, Alila 1977), but overrode settler hostility by encouraging white maize production by Africans (Mackenzie 1991). Natives were officially barred from export-oriented production (Rocheleau et al. 1995, Wolff 1970, Fahnbulleh 2006), and administrative support for agricultural intensification within the reserves merely reflected the collapse of settler cereal production (Mackenzie 1991). Natives grains were further used to offset the expense of British "protection".

To continue growth in European production, natives became targeted as the labor that would drive settler agriculture and economy. To have competitive advantage in world markets, Europeans needed abundant

cheap labor and land (Wolff 1970, Overton 1987). African males between the ages of 15 and 40 were often forced to leave the Reserves to work for whites on farms and in mines (Jayne & Jones 1997, Wolff 1970), at times for little or no money. To help drive men into the work force the state imposed taxes on native households, creating a specific need for cash and inducing Africans to move off their farms to work for wages (Alila 1977, Jayne & Jones 1997). Concurrently wages were fixed at low and inflexible rates (Overton 1987, Waller 2012, and Alila 1977), and during the first two decades of the 20th century, despite a growing Kenyan economy, real income among Africans actually declined (Overton 1987). Low wages coupled with mounting opportunity costs of being diverted from their own work made survival increasingly difficult.

Despite an extensive low-wage labor pool and a productive settler economy now active in mining and agricultural, the nation of Kenya did not become “developed” during the colonial years. While a railway and roads were constructed, they ran only through white territories and connected the market centers of Nairobi and Mombasa (Overton 1987). Remaining landlocked territories (i.e., those occupied by natives) remained isolated (Fahnbulleh 2006). While generating income, the colonial economy served first to support its own administration, and second to support European interests (Overton 1987). The empire, therefore, did not concern itself with creating comprehensive infrastructure or schools—indeed even the minimal funds spent toward education (see, Social Degradation section for details), were cut during less profitable years (Wallbank 1938). Trade was conducted by whites, hence only whites needed to be educated or connected to the market.

Through cheap labor and subsidized, controlled trade, the British state elevated the economic status of Europeans while suppressing that of natives (Wolff 1970), caused food shortages and famines (via forced fulfillment of grain export quotas during WW2--Rocheleau et al. 1995; and by supporting intensified

production of drought intolerant crops—see Land Management section for details), destroyed local industries by banning the trade of those products (Ndege 2009), and caused the decreased availability of and access to food for natives throughout the colonial period.

Section 4--Colonial Socio-Economic Policies and Their Influences: Social Degradation

British colonial rule can be viewed as a period during which native intellect, morality and ability to flourish were publicly debased, witnessed by the implementation of policies designed to “improve” their primitive socio-economic practices and “save them from themselves” (Waller 2012). These perspectives, in addition to suppressing economic potential, would limit native social capital until well into the 20th century.

When Britain declared itself “protectorate” over “Kenya”, their unilaterally-determined boundaries divided single communities and split long-term partnerships across national lines. As settlers moved in and forced natives out, the regional economic network through which people adapted and prospered was dissolved (Waller 2012, Boon 2002). Because that same network served as social structure, delineating the roles of individuals in society, and absorbing individuals across communities to ensure the survival of all within it (Parsons 2011), a “monster of social disruption” ensued (Berman 2004). Former understandings of moral economy and political legitimacy that defined the reciprocal obligation of the ruler and ruled, rich and poor, elders and youth were severed. Colonial structures of master-and-servant and commercialism would replace them. Wallbank described the cultural fracture in 1938:

The intensity of culture impacts has swept the bewildered African from his once sheltered...farm and hut...to labor for the white man in gold mine, factory or farm; it has acquainted him with the delights and temptations of a money economy, and introduced him to new religions which, while

destroying all credence in his tribal beliefs, does not always immediately give a...satisfying substitute in return. A gulf often develops between the old generation, too old fashioned to "catch one," and the young men and women who have acquired a smattering of Western ideas and "pooh-pooh" the traditional sanctions and customs of their tribal society.

Disenfranchised and restricted from full benefit of the market economy (see *Economic Oppression* section), increasing numbers of men became migrant workers, changing household relations (Rocheleau et al. 1995). Prospects of young men were limited, and inequalities emerged throughout the reserves. The poor could no longer better themselves by adopting the identity of another group, nor by relying on clientage reciprocity inherent in the traditional system. Women who ran informal exchange networks in the old society were displaced by "official" markets controlled by men (Waller 2012). Britain's "protection" catalyzed native socio-economic disintegration that would persist long after Independence (Fahnbulleh 2006, Wolff 1970).

Dislocation and poverty led many to urban areas, particularly young males seeking survival options (Ocobock 2006). Juvenile delinquency emerged in the absence of traditional tribal and family structure, though most crimes were that of vagrancy or minor petty theft (Campbell 2002). However this "crime wave" of the early 20th century—which peaked during times of drought and economic depression—created sufficient anxiety among the whites to result in legal actions (Campbell 2002). The Vagrancy Ordinance of 1920 (among others), restricted juveniles from being in urban areas—the breaking of which, should youth go out to seek work—further "criminalized" the youth in question (Ocobock 2006). Caning and repatriation became a popular marriage of punishments as magistrates extracted the 'wanderlust' out of juveniles by using violence and exclusion (Ocobock 2006). Reformatories were built, where offenders would be wholly segregated from society and taught skills (to ensure white safety, and concurrently to turn youth into labor). Children became wards of the state (May 1973), further removing families' ability to influence youth, and

the image of the maladjusted adolescent became a major stereotype. “Training” received while confined consisted strictly of agricultural skills—“...a deliberate effort to push ex-inmates back into rural areas on release...to European employment” (Campbell 2002, Wallbank 1938).

The issue of delinquency soon became linked to debates about African *genetic capacity* to develop. Indeed, the superintendent of Kenya's Kabete Reformatory saw juvenile delinquency and the “*incapacity of some Africans* to cope with [urban life], resultant of ‘*mental inefficiency and criminal tendencies*’”. He furthered, “Racial turpitude is in my opinion the only answer...” [as to why theft of food was occurring] (Campbell 2002). Through the use of obscure measurements and tests, Dr. Henry Gordon, working at the reformatory, ‘estimated that *the mental capacity of the adult East African native was that of a European child of about eight or nine*’, and that the stress on the brain from trying to education such a being, ‘caused senility and dementia’ (Campbell 2002; inferior mental capacity also supported by Wallbank 1938). His findings brought into question the purpose of training Africans at the reformatory, and supported decisions to keep universal education *for whites only* (Campbell 2002). This image of inferior intellect and morality was not new, and was repeatedly used to subjugate Africans.

Prior to 1911, Kenyan education was left to Christian missionaries with occasional minor support from the colonial state. By 1923, despite an education ordinance, total national spending on native education only totaled £20,000 (approximately \$1.5 million in *current* USD; Measuring Worth 2014). The vast majority of “schools” were sub-elementary level, catechetical centers conducted by teachers with the poorest qualification, and did not involve education beyond religion or technical training (Wallbank 1938). Wallbank further demonstrates attitudes toward native education, “The problem of education is, in short, How to enable backward peoples”.

During the years of livestock disease, colonists accused natives of, “weakness of character, irrational attachment to their cattle, and destructive cultivation practices”, blaming disease on their ‘primitive’ ways (Rocheleau et al. 1995). Christian missionaries further called to question African culture, insisting Africans’ salvation “must be gauged on the extent to which traditional cultural practices were abandoned”, adding, “it is God who placed [the British] there”, hence pleasing God meant obeying the colonists (Ndege 2009). Therefore those who resisted relocation, commercial production or forced labor were viewed as delinquents or mentally damaged, and further policies were created to protect Europeans from them. A canyon now existed between the traditional socio-economic order and new colonial mandates.

Discussion

This paper examines connections between socio-economic policies of colonial Kenya, and causes of food insecurity Kenyans currently experience. In pursuit of such, (4) questions were asked (refer to *Methods*). Each of them is addressed here, pulling answers from the previous sections, and used as evidence supporting the main hypothesis.

Question 1: What policies did the British implement in Kenya on land management, economics, and society in general? We now know that British forces alienated much land from natives, and further forced them to live in crowded, gated Reserves. The natives were pastoralists who kept large herds; and the herdsmen traded with those growing crops, hunting and gathering. Regional interdependence ensured everyone’s success and stability, all of which was tied to land. Policies such as the Outlying Districts Ordinance, and prohibition of livestock movement alienated natives from their land-based socio-economy, and immobilization in the Reserves erased their ability to practice traditions that enabled them to adapt to

changing ecologies, feed animals and themselves even during droughts and floods, uplift the poor, and protect their natural resources.

Without the ability to engage in traditional livelihood, natives were forced to rely on market forces. Once relocated to Reserves they were made laborers for white industries. British fixed low wages and forced labor, paid below-market prices for goods from native farms, and prohibited sales outside the district. The market forces they now relied upon for survival were fixed against them, and their traditional livelihood gone. "By 1940, much of the older flexible structure of the intercommunal relations that had enabled pastoralists to survive, adapt and prosper for more than a century had been swept away, and the relation between pastoralism and agriculture, center and periphery, had been removed" (Waller 2012).

Instead of acknowledging that the natives were displaced and economically constrained, Europeans viewed them as ignorant and incapable of "developing". Instead of linking soil erosion with the combined forces of land alienation, population concentration, and over cultivation and overgrazing of limited areas, Europeans assessed natives as bad farmers. Youth migrating to urban areas seeking opportunities were "vagrants", and if they stole food, "dangerous criminals". The social disorder at hand resulted from weak character and sinful traditions inherent in the native race, hence training and education seen as pointless. Policies dictating land use, economic constraint and social differentiation were instituted to protect inferior natives from themselves, and whites from natives.

The answers to questions 2, 3 and 4 become quite obvious now: Policies were *not* equally beneficial for white settlers and black natives, *did* create discrimination and marginalization of the natives, and *absolutely interfered* with their ability to support themselves. The British objective was for settlers to prosper. They ensured the outcome by creating competitive advantages for whites. European advantages resulted in

native disadvantages. British achieved their objective during the colonial period, unfortunately the disadvantages created remain today.

Many of Kenya's current obstacles to achieving food security (as previously delineated by Hickey et al. 2012), resulted from policies discussed in this paper. "Lack of infrastructure and inadequate markets" was directly caused by colonial restriction of natives to markets. "Exporter of food for cash" (despite internal shortages) is a policy British held for the duration of their rule. "Low and declining soil fertility" emerged consequent to land alienation, population concentration, and intensified production using methodologies dictated by the magistrate. "Crop failures from droughts" reflects the conversion from drought tolerant traditional crops to maize. "Low absorption of modern technology" is likely a result of distrust of "white technology" which contradicted traditional methods, as well as a lack of ability to access those technologies. Fahnbulleh (2006) adds, "Forced displacement of Africans from the land was at the root of an [severe] unemployment problem that would dog the post-independence government".

Recall the 4 pillars of food security: **Availability** of food, **access** to food, **utilization** of food, and food **stability**. At least 3 of these 4 have been inhibited by the aforementioned disadvantages.

First, once displaced, people are not always able to return to homelands (from personal conversations with displaced persons in Angola 2009). Many Kenyans remain in unproductive or spatially limited lands (where British sent them). After independence, pastoralists continued to lose access to grazing due in part to investors buying blocks of higher-potential land for commercial agriculture (Waller 2012). Today, about 25% of the population remains on marginal land (i.e., arid or semi-arid), and at least 50% remain below the poverty line (Kiome 2009). Increasing temperatures, diminishing rainfall, marginal soils and lack of access to large tracts for pastoral mobility reduce volume and reliability of agricultural productivity (USAID 2014).

Next, British revenues were used to support self interests instead of infrastructure which enables trade and distribution (Overton 1987, and Jayne et al. 2002). Lack of infrastructure reduces availability of food and access to it—particularly for urban poor not growing food—and hinders rural farmers' ability to enter the market economy or purchase food if crops are insufficient.

Finally, at the time of independence, local policymakers had only experienced the state-controlled food system, as controls dated back to the 1920s (Jayne et al. 2002). Colonial policies were therefore adopted nearly intact, except advantages previously given to whites were now intended for all (advantages proven to disrupt the balance between production costs and gains). Trade and marketing were state-controlled and private trade was discouraged. (Jayne & Jones 1997, Fahnbulleh 2006). Because of highly unstable production and the lack of infrastructure by which to transport goods, production costs soon exceeded what could be recovered via export, and it became cheaper to import food than to become food self-sufficient (Jayne & Jones 1997). Kenya is still a net importer of food (World Trade Organization 2012), which means people must be able to purchase food; plus it must be transported to their region.

It is acknowledged that colonial policies have overshadowed and limited development in Kenya thus far (see Overton 1987, Ndege 2009, Jayne & Jones 1997, Fahnbulleh 2006). Based on the findings of this paper, food security in particular, has also been negatively influenced.

Colonial policies trying to impose “commercialized” production failed with native Kenyans. Perhaps it seemed irrational (or immoral?) to focus on personal gain over the well-being of the community as a whole. Colonists deemed subsistence agriculture irrational, and that opinion holds today among those driving development policies (Rocheleau et al. 1995, and Boon 2002). Commercial intensification of agriculture is

the “accepted” means to development (Boon 2002, Jayne et al., Jayne & Jones 1997), despite the fact that 70% of Kenyans survive on subsistence farming and may or may not seek to become commercial enterprises (based on personal conversations with smallholder farmers in the Meru region of Kenya 2010-11). Therefore, perhaps the focus should shift to supporting innovations in (Hickey 2012 concurs), and traditional methods of subsistence farming *first*, enabling people to feed themselves *first*, and press toward economic development after. Using food as a market good to drive economic development misses a simple truth with profound consequences: Without food we are dead (Fullbrook 2010)!

Conclusion

Ending hunger is imperative, not only for the health and well-being of individuals, but for the economic security and peace of entire nations. Despite decades of research focused on identifying, measuring and addressing the causes of hunger in developing nations, 25% of all people in sub-Saharan Africa live in hunger. The question remains, *why?* Within this region, Kenya serves as a useful case study with which to examine this question—a nation possessing factors *appearing* favorable for development, yet having approximately half its population characterized as living below the poverty line.

In light of such contradiction, this paper endeavored beyond what factors are observable in the present to investigate the notion that factors from the *past* are interfering with Kenya’s ability to flourish. Prior to colonization Kenya’s people were not food insecure, but were living well and demonstrating stewardship for lands which enabled their food security. Traditional practices worked toward mutual security and not personal gain, created interdependence among its citizens, and insured none went hungry. Colonial rule, however, imposed policies designed to bolster success of a white economy by oppressing black natives. Policies limited access to land on which natives depended, restricted natives’ ability to benefit (or even

survive) in the new market economy, and degraded the native to sub-human status possessing little intelligence or ability to develop. Colonial policies not only succeeded at propelling British settlers to economic superiority, they forever altered Kenyan socio-economic structure, severing natives' ties to the land, and destroying traditional practices which catalyzed native prosperity in the past. As such, this paper demonstrates how those ***socio-economic policies of the colonialist past catalyze food insecurity today***. Using FAO's metric of the "4 pillars of food security"--availability of food, access to food, utilization of food, and food stability--this paper reveals how at least 3 of the 4 have been inhibited in Kenya by the disadvantages created by colonial policies.

The implications of these findings are useful as we plot the course of development programs in Kenya: Understanding mistakes of the past can empower more appropriate planning for the future. Colonists found that "commercializing" production (mainly agricultural) failed miserably with natives in Kenya (in that they did not adopt the colonists practices), so *is it wise to continue promoting agricultural intensification and commercialization as a mode of development there?* Future research could examine socio-economic barriers to adoption of large-scale agriculture, as well as production and market technologies which support it, to better determine if these "accepted" modes of development are well-suited to the region. Research might also examine policies which better favor subsistence farming and small scale innovations, since 70% of Kenyans survive on subsistence agriculture.

Colonial policies altering socio-economic structure caused great disadvantages in attaining food security in today's Kenya, and while we cannot return the entire nation to pre-colonial, traditional practices, we must examine *with sensitivity* what development approaches are suitable to natives' needs instead of imposing what we believe, as colonists did, is best to "save them from themselves".

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