

EXPORTING FOOD, IMPORTING FOOD AID?
KENYA AND FOOD SECURITY IN THE WORLD FOOD SYSTEM

By

JOAB O. ESAMWATA

B.D.A., Gandhigram Rural University, 1994
M.D.A., Madurai Kamaraj University, 1996

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Approved by:

Major Professor
Matthew R. Sanderson

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Abstract

Food crises in Kenya are recurring phenomena. Despite widespread and perennial famines, Kenya is exporting food while importing food aid. This study focuses on the concept and question of food security in Kenya. If Kenya can produce and even export food products, why does the country still import food aid every year? Why is the country classified as food insecure? And why does the country still suffer from recurrent famines? Drawing on social science theory from the political economy of food and agriculture, this study postulates that the contradiction between exporting food and importing food aid is related to Kenya's subordinate position in the world economy. Using a comparative-historical, in-depth case study research design, this research descriptively explores the relationship between trends in food aid, trade, production and food security. The study finds that the relationship between food trade and aid with food security is mixed in Kenya. Aid and trade have not strongly enhanced food security in Kenya, but food insecurity in Kenya has not gotten markedly worse.

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Dedication

This thesis is dedicated to my native community in Bunyore, Kenya, which holds a special place in my heart and memory. To those who are engaged in endless daily struggles to sustain their livelihoods, indeed, to those who never had a chance to scale the heights of academia and yet still believed in the gift and power of education: you are an epitome of humanity.

Chapter 1 - Introduction

News articles are awash with pictures and varied descriptions of food crises in Kenya.

Recent headlines in the media describe this situation:

Kenya fails to manage its food crisis (Katrina, 2011)

Was the food crisis in Kenya avoidable? (Will, 2011)

US urges long term food aid for Kenya (Kevin, 2011)

Food security warning in Kenya as maize production drops by 45% (Gitonga 2013)

FAO warns of looming food shortage (Gitonga,, 2013)

That famine is a frequent phenomenon in Kenya is a source of great concern not only to policy makers but to social scientists. It is of great interest to observe that despite widespread and recurrent famines, Kenya is exporting food and importing food aid. Indeed, the World Food Program says that Kenya has a yearly need of \$300 million to pay for food aid, while Kenya exported roughly \$3 billion in food products in 2010 (Rudick,2013). This means that for every one dollar in food aid Kenya receives, it exports ten dollars' worth of food. Kenya is also helping to feed neighboring countries that are faced with famine.

If Kenyan agriculture is productive enough to produce food exports, why then does the country still suffer from famines, and why does the country continue to import food aid?

This study addresses these questions by investigating the concept of food security in Kenya in the context of the world food system. Placing recurrent famines, agricultural trade, and food aid in Kenya within the broader world food system makes it possible to critically examine the idea of food security. Thus, this study attempts to answer the following questions:

1. Is Kenya food secure? Has Kenya ever been food secure? How has Kenya's food security changed since independence?

To answer these questions, I will investigate the relationship between food security, food aid, and agricultural trade, focusing on how food aid and trade have affected food security in Kenya:

2. How has food aid affected food security in Kenya?
3. How has agricultural trade (i.e., food exports and imports) affected food security in Kenya?

In answering the questions, this study ultimately seeks to examine some of the key challenges and opportunities facing Kenya as the country attempts to become more food secure. Kenya is a strategic case study for understanding the North-South relationship in the context of the World Food System. To explore these questions, I will use official secondary data from reputable international sources and the results of prior research to conduct a descriptive analysis of food security and international agricultural trade and aid in Kenya. Drawing on social science theory on food security in the world food system, I expect that international agricultural trade and aid will not have made Kenya more food secure, and may even have worsened food insecurity in the country.

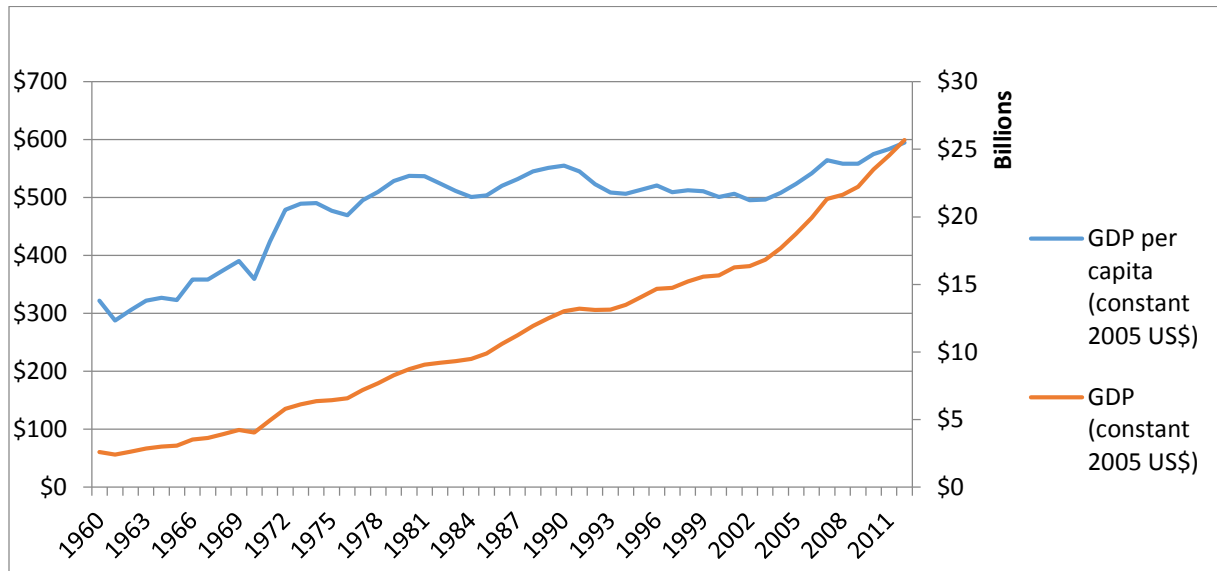
Kenya: A Brief Overview

Kenya continues to experience tremendous changes in its economy, population, and agricultural sector. Kenya's economy is the largest in East Africa and the country has set out ambitious targets in its bid to become a middle-income economy by 2030. There has been substantial growth in the economy since the 1960s. As Figure 1.1 shows, the current GDP estimate stands at \$40.70 billion, which makes Kenya a low-income country by world standards,

but GDP has grown since the 1960s. Kenya's GDP per capita stood at \$300 USD in 1960s to almost a close of \$600 USD in 2012.

Figure 1.1 Kenyan Economy, 1960-2012

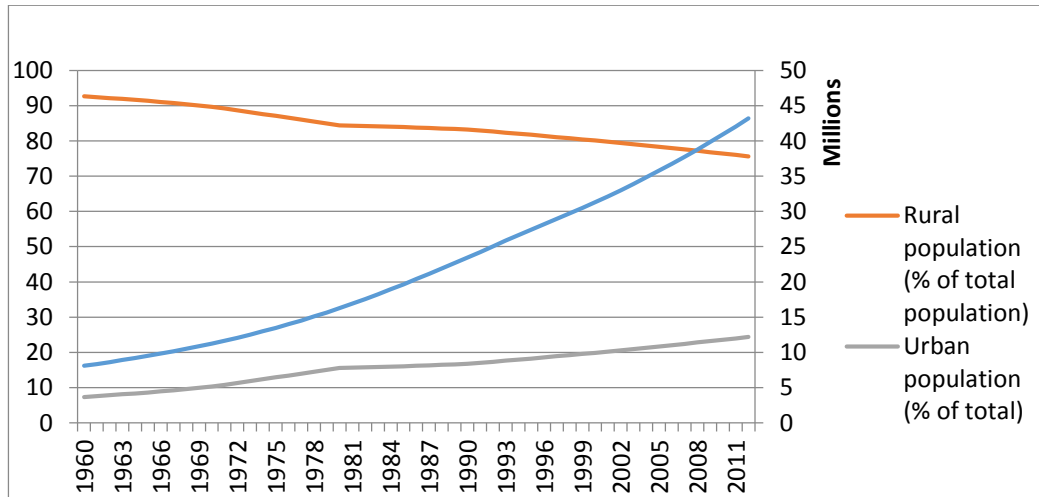
Source: World Bank, (2013)



Kenya remains a low-income, predominantly rural country, and agriculture is vital to the economy (Alila & Atieno, 2006). Despite significant growth of the industrial and services sector, agriculture is the single most important sector in the economy, contributing approximately 25% of GDP and employing 75% of the national labor force (Nyangito & Okello, 1998). Kenya's agricultural sector is characterized by smallholder mixed farming and is predominantly rain-fed (Gitu, 2006).

Figure 1.2 Kenyan Population- 1960-2012

Source: World Bank (2013)

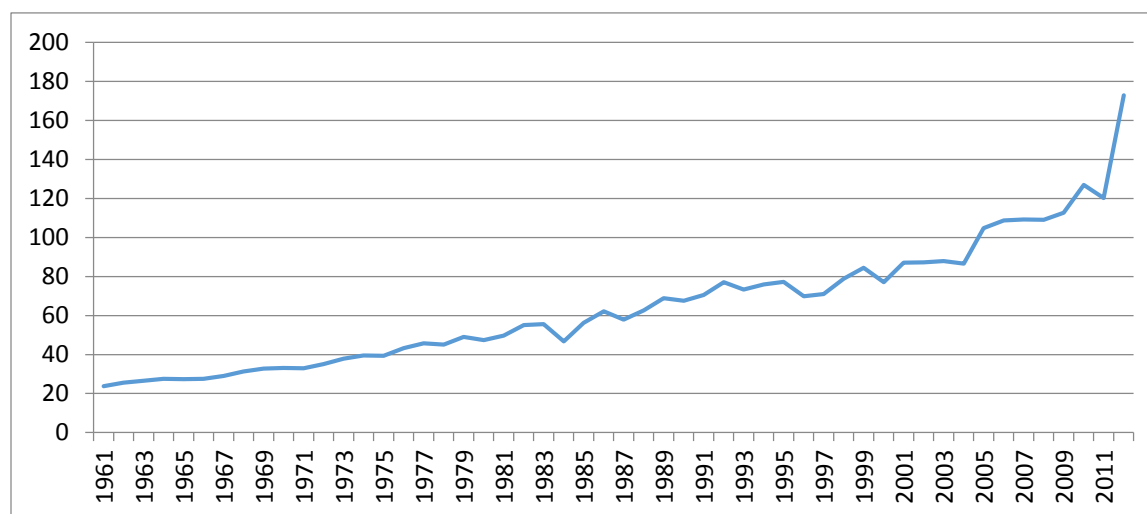


Population is considered an important variable in matters pertaining to food security. As Kenya's population continues to grow, producing enough food for all remains a challenge (Policy Brief, 2011). Figure 1.2 above shows that Kenya's population has more than quadrupled since the 1960s, growing from around 8.1 million to more than 43 million in 2012. It is important also to note that the urban population has been growing as the rural population has decreased. The spatial distribution of the population is also changing. Although the country remains predominately rural, there has been a relatively slight increase in the urban population from around 8% urban in 1960 to almost 13% in 2011. The rural population on the other hand has registered a decrease from an initial high of 92% in 1960's to around 75% in 2011. The annual growth rate was last measured at 4.4% in 2011 (World Bank 2013). Nationally, an estimated 1.8 million children (30%) are classified as chronically undernourished (Policy Brief, 2011). According to the 2008-9 Kenya Demographic and Health Survey, 5% of children under five years are stunted. Indeed, close interconnections exist between food security and population dynamics (Policy Brief 2011).

Approximately 80% of the country's population lives in rural areas and is therefore directly or indirectly connected with farming (Glopolis, 2013). Policy makers recognize the importance of agriculture and have since independence been actively involved in promoting the creation of an innovative, commercially oriented and modern agriculture sector in Kenya (Kerer, 2013). Despite the central role that agriculture plays in most Sub-Saharan countries, the performance of this sector has been poor for most years since 1970 (Nyangito and Okello, 1998). Further, land use and ownership is identified as one of the most contentious issues in Kenya's political economy, and is particularly an issue in agriculture. Kenya's agriculture is dominated by smallholder farmers who support livelihoods for a majority of the population and the country is heavily dependent on rain-fed agriculture (Republic of Kenya, 2011). The lack of a coherent land policy that harmonizes the different land based activities has continued to undermine agricultural development and food security.

Figure 1.3 Kenyan Crop Production Index, 1961-2012
(2004-2006 = 100)

Source: UN FAO (2013)



Agriculture has changed in Kenya since independence. Figure 1.3 shows that Kenya's agricultural production has increased tremendously over time. Crop production, measured by the production index, has registered an increase from around 21 in 1961 to 170 in 2011, meaning that production has increased nearly 700%. Notably, crop production has out-paced population growth and Kenya exports food even in the midst of recurrent famines.

The Kenyan state has strived to achieve national, household, and individual food security. Kenya's overarching development policy, launched in 2008, is called *Vision 2030*. The aim of this policy is to increase economic growth and transform Kenya into a development state. Further, the framework adapted by the Kenya government for food security includes four dimensions of availability, accessibility, stability and adequate nutritional requirements (Republic of Kenya, 2011). Agriculture is given the place of pride in this development vision. Prior to its launch, strategies for development of the agricultural sector were outlined in its national development plans, Strategy to Revitalize Agriculture (SRA) and the Kenya Agriculture Sector Strategy Program (KASSP). Historically, Kenya's political economy landscape vis-à-vis the agricultural sector was defined by executive control over markets. The state largely pursued inward looking policies that were mainly meant to protect food producers as well as subsidize urban consumers. Decisions to import or export food were made by the cabinet and enforced through a monopoly state enterprise called the National Cereals Produce Board (NCPB). After the introduction of multi-party democracy in Kenya, the opposition groups were given the opportunity to check the executive in policy decision making.

Kenya for a long time pursued the goal of attaining self-sufficiency in key food commodities that included maize, wheat, rice, milk and meat. Maize is Kenya's most important staple food crop (Republic of Kenya, 2011). . The major cereal crops produced are maize, wheat,

and rice. Other important food crops include potatoes, bananas, sorghum, millet, cassava, sweet potatoes, vegetables and fruits. In 1986, Kenya shifted from a food self-sufficiency goal to an outward strategy for both home consumption and export markets (Republic of Kenya 2011). This was a deliberate government policy that was put in place to liberalize its markets. It involved a liberal state ideology that was a turning point in its attempt to achieve economic growth. In 1980, Kenya became one of the countries to sign a structural adjustment loan with the World Bank (Gertz, 2009). Over the next two decades, reluctantly at first, but with renewed commitment, Kenya replaced the import-substitution policies it had pursued much earlier with an open, liberalized trading regime. In 1982, the government turned to the International Monetary Fund for further funding, hence setting up itself for a debt regime (Gertz, 2009). Currently, the country imports wheat, rice, maize, powdered milk and sugar, and receives food aid from donor agencies, mainly the U.S. and European Union as a form of development assistance (Gitu, 2006). Indeed, over the years Kenya has benefitted from various donor agencies like the World Food Program and USAID. Wheat remains the major food aid import. This outward strategy is manifested most importantly as increased food exports.

Figure 1.4 Kenyan Food Exports, 1976-2010
(% of merchandise exports)

Source: World Bank (2013)

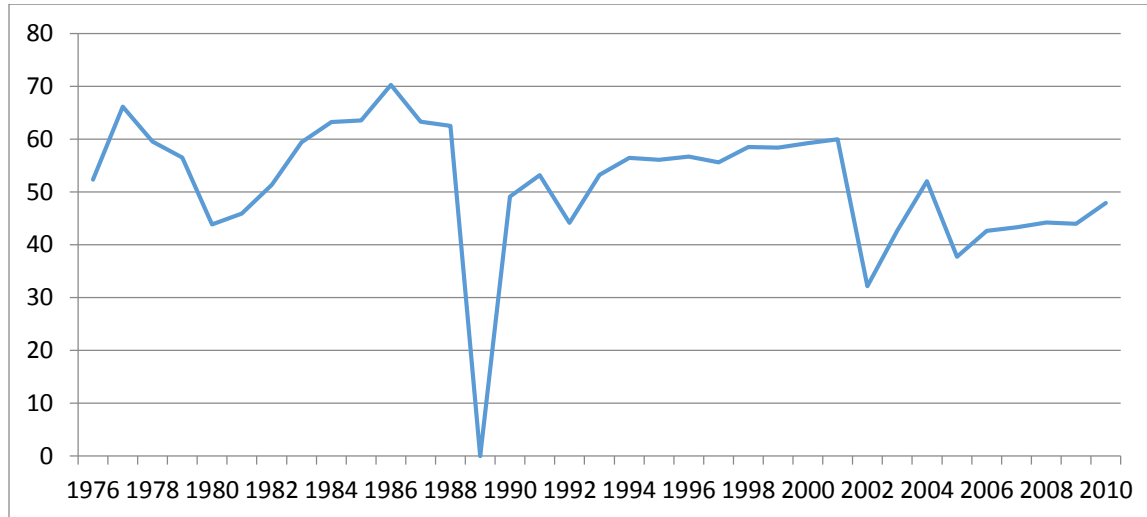


Figure 1.4 above shows that food exports have equaled as much as 70% of all exports from Kenya in 1987 and still represent about 50% of all exports in 2010 (please note: 1989 data are missing; food exports were not '0' this year). Major cash exports are coffee, tea, sugar and cotton.

There have been significant changes in Kenya's economy, population, and agricultural sector since independence, and many of these changes may affect food security. In this sense, food security is influenced by an array of factors, both internal to the country and external to the country. In order to understand the contradiction of importing food aid while exporting food amidst famine and poverty, this study employs ideas derived from the political economy of food to understand how and why both internal and external factors affect Kenya's food security situation. I turn now to a development of the analytical framework for the study, which places food security in Kenya in the context of both internal factors and the broader world food system.

Chapter 2 - Analytical Framework

This study compares food security in two important time periods: the Development project era (1963-1980) and the Globalization project era (1980-to the present). It is examined and analyzed using Harriet Friedmann and Philip McMichael's' theoretical framework. I begin by describing the Development Era and the Debt Crisis era, which was a period of transition, before discussing the Globalization Era.

The Development Project Era: 1940s-1970s

Development has long been a highly contested concept, and it remains so today. It is largely appreciated as a relative concept. When it first emerged as a new concept, development was understood as the improvement of humankind and the social engineering of emerging national societies. Given its dynamic nature in the mid-20th century, development became associated with an internationally orchestrated program of national economic growth with financial, technological and military assistance. It was conceived in an exclusive economic sense with pre-conceived ideas about the development agenda for the rest of the world. This era came to be referred to as the development project era (McMichael 2008).

This project was defined by the nation-state as a political system and national economic growth. These two ingredients were critical in laying out the foundational strategy for realizing the development project goals. It must be observed that development at these initial stages was conceptualized as a top-down strategy. It was assumed that for development to be realized material support, financial, trade and technology transfer were to be availed and simply channeled to the target countries. It must be acknowledged that the development project was defined through the western capitalistic lenses as it was synonymous with industrialization and

modernization (McMichael, 2000). Further, a range of modern practices and institutions designed to sustain economic growth such as banking and accounting systems, education, stock markets, legal systems and public infrastructure were also put in place. All were considered as prerequisites for the realization of this goal. Citing the success stories of the industrial revolution and enlightenment age, it was conceived that this strategy will work for the rest of the world and particularly the Third World countries. This study argues that development was defined in the eyes of imperialism through which the First World defined the Third World as undeveloped and therefore a target of opportunity for exploitation.

It is also important to observe that this project was framed by the cold war tension between capitalism and communism. In an attempt to propagate their ideologies, the west identified with free enterprise capitalism as the end point of development, while the eastern bloc identified with central planning communism as the goal of social development. In light of these two blocks, most third world governments sought to achieve Western levels of affluence. They chose to pursue political nationalism as they did with economic nationalism. These countries encouraged and protected domestic industrialization with tariffs and public subsidies reducing dependence on primary products. Import-substitution industrialization (ISI) framed initial economic development strategies in third world as governments supported infant industries. Import controls reduced expensive imports of western manufactured goods while shifting resources into domestic manufacturing. These ideas initially appeared to favor third world countries, but were later on overtaken by events when globalization set in.

The Bretton Woods institutions and the U.S. government seemed to lend credence to this agenda. Following the severe 1930's depression and the devastation of World War II, the U.S. thus spearheaded two initiatives to reconstruct the world economy: the bilateral Marshall Plan

and the multilateral Bretton Woods program. Central to this arrangement was a food aid regime that demonstrated the profoundly international character of the development project as a strategy for ordering the world under the guise of development. Indeed, as manifested in the foregoing, Western aid concentrated on undercutting competition from political and economic rivals. The period between the late 1940s and the early 1970s was characterized by overlapping sets of orderly international arrangements which had an aim of establishing an open world economy for the free movement of commodities and capital (Friedmann, 1982).

Kenya's incorporation into the world system first took shape under the development project, which shaped its food insecurity situation for years to come. In the Postwar era, the U.S. set up a food aid program to channel food surpluses to Third World countries like Kenya. These surpluses arose out of the U.S. agro industrial model, heavily protected by tariffs and subsidies. Farmers specialized in one or two commodities such as corn, rice, sugar and dairy products, and with technological support from the government, routinely over-produced. The resulting surpluses flooded the Third world markets with cheap food. To dispose these surpluses the U.S. government instituted the Public Law Program (PL-480) in 1954. Its stated goal was to "increase the consumption of U.S agricultural commodities in foreign countries, to improve foreign relations and for other purposes" (McMichael, 2008: 70). The underlying motivation was to create future markets for commercial sales of U.S. grains as consumers shifted to wheat based diets. It is evident from the arrangement above that contradictory relations within World food system produce crisis, transformation and transition to successor regimes (McMichael, 2009).

Further, the U.S. Department of Agriculture outlined that one of the major objectives of this policy was the transition of countries from food aid to commercial trade. Under PL-480, wheat imports supplied growing Third World urban populations. It must be observed that the

U.S was instrumental in the creation of globalization and the World food system. It led the way in crafting a new food regime based on mercantile principles (McMichael, 2005). Over time the world per capita consumption of wheat has risen, while per capita consumption of traditional foods in these countries has declined. Additionally, the traditional peasant foods were replaced by the new wage foods of grains and also processed foods which were mainly consumed by urban workers.

Food policies during the development project era were conceived and emerged within the broader context of the Marshall Plan and the emergence of the Bretton Woods program. The U.S. in particular hoped to use financial aid to rekindle economic growth in strategic parts of the world. The Marshall Plan was a bilateral transfer of billions of dollars to Europe, Japan, and other countries. Indeed, this was later on extended to the newly independent countries in Asia and Africa. In order to entrench this strategy of reconstructing the world economy, the idea of an international bank was devised. This idea led to the formation of the World Bank and the International Monetary Fund (IMF), both of which played critical roles in the development project agenda. These agencies, among other things, disseminated technologies of the development project, tempting Third World states to adopt capital-intensive production, including in the agricultural sector. Nonetheless, it is worth noting that contrary to the prevailing development model of the ideal national economy in which agriculture and industry complement one another, this relationship was compromised (Friedmann & McMichael, 1987).

The Debt Crisis Era: 1980s

In order to entrench development, and later on globalization, the U.S. encouraged massive amounts of borrowing among less-developed countries' governments, culminating in the

debt crisis of the 1980's. This was as a result of Third World states over borrowing from international banks. This regime imposed financial discipline mainly via structural adjustment programs (SAPs) in less-developed countries. The conditions set up by SAPs were meant to increase export earnings in order to repay debts (Friedmann, 2004). The World Bank and IMF imposed new loan rescheduling conditions on indebted states, compelling them to look outward rather than inward for their development hopes. The debt crisis was important because it transformed the development project into a globalization project (McMichael 2008). This crisis influenced, changed, and strengthened the grip of the First World on the developing countries through the international financial institutions. In 1980, Kenya was one of the countries to sign a structural adjustment loan with the World Bank (Gertz, 2009). In 1982, the government turned to IMF for further funding thus setting itself up for a debt regime. It must be observed at this point that as countries adopted debt regime rules and restructured their social economies, they encouraged a new era in development: development under the globalization project.

The Globalization Project Era: 1990s-Present

Globalization can be thought of as a shift from economic nationalism to world market participation (McMichael 2008). Whereas in the 19th century states constructed markets, today in the globalization period states and multilateral institutions are reconstructing markets by restructuring states and their inter-relations (McMichael, 2000). The development project, which initially had been defined as nationally managed economic growth, was redefined in World Bank terms as “participation in the world market” (McMichael, 2008, p.151). This redefinition prepared the way for superseding economic nationalism and embracing globalization. The global economy began to emerge as the unit of development. It was viewed as a higher-order version of

the development project (McMichael, 2000). This was made possible by the rise of a global banking system, spurred on by a process of liberalization that eased the cross border movement of money. In Kenya, there has been a growing dependence on world markets since the 1980's (Madeley, 2000).

Development, formerly a public project, was redefined as a private, global project designed to capture resources for the global minority with purchasing power. With economic nationalism in decline, the development mantle was assumed by powerful corporations in the world market. The restructuring of policies and standards, under the World Trade Organization, across nation-states was emphasized and trade was privileged as the new vehicle for development.

The globalization project arose via the dismantling of the development project through trade liberalization. Liberalization, a critical factor of this era, downgraded social goals of development while upgrading participation in the world economy. It involved restructuring domestic economies in order to expand markets and shift control from government to liberalized markets. Neoliberalism, a theory of political and economic practices developed in the late 1970s, proposed that human well-being can best be advanced by liberating individual freedoms and skills within an institutional framework that is characterized by strong private property rights, free markets and free trade. The 1980's to early 1990's were a period of policy reforms in Kenya. These were aimed at reducing the involvement of government in economic activities and letting the country move towards a free market economy. This study contends that this facilitated and entrenched Kenya's incorporation into the world food economy.

Food Security, Aid, and Trade in the Globalization Era

The shift from the development project era to the globalization project era entailed important changes in agriculture, and thus, food security. Many Third World countries switched from the goal of modernizing agriculture to achieve national food security to a goal of integrating and finding niches within agriculture as a world industry. In the globalization era, states no longer have the right to self-sufficiency as a national strategy (McMichael, 2008). Food security is not necessarily about food self-reliance but rather food import dependency for most Third World states. The globalization project came with a new era of global governance in which individual national policies were subjected to external rule based procedures, and trade became more important for securing food access and supply among many less-developed countries.

Trade in agricultural commodities is now a major determinant of national food security, as is food aid for many less-developed countries. Although trade liberalization is touted as part of a strategy for economic development in developing countries, opening and deregulating markets can result in unintended consequences (Madeley, 2000). Food aid on the other hand allows governments to purchase food without depleting scarce foreign currency, and yet has resulted into food dependency and ultimately changed diets. This new food regime had interesting effects for the world food system. For instance, the world per capita consumption of wheat rose while per capita consumption of traditional root crops declined in most Third World countries. Indeed, wheat has become the overwhelmingly important staple food in world commerce throughout modern history (Friedmann, 1982). Subsidized grain imports have ended up undercutting the prices of traditional starches (e.g., potatoes, cassava, yams and taro). Free trade has maintained farm subsidies for the Northern countries while weakening Southern countries' ability to stabilize their agricultural systems (McMichael, 2009).

The contest over rules and relations for food and agriculture continues to manifest in the globalization era. In the development era, farms were suppliers of raw materials. The rules defining the food regime gave priority to national regulation and authorized both import controls and export subsidies necessary to manage national farm products. The asymmetry between the *North's* and *South's* agricultural systems was ignored and a system of free trade and neo-liberal tendencies installed at the disadvantage of Third world countries (McMichael, 2005). Food security was further redefined by the United States of America as best provided through a smooth-functioning world market. National programs generated chronic surpluses, particularly at the outset of the U.S. New Deal commodity programs. They structured a specific set of international relations in which power to restructure international trade and production in one state's favor was wielded in the usual form of subsidized exports of surplus commodities. In this way, agriculture, which was always central to the world economy, became a globalized sector.

The rise and fall of the international food order between 1950s and early 1970s was characterized by the following; (1) Surpluses of grain, sustained primarily for domestic reasons by the American government; (2) American policies, particularly food aid designed to dispose of these surpluses abroad; (3) the consequent increase of the historically American share of world grain exports; (4) consequent downward pressure on world prices and on grain production in other export and import countries; (5) the opening of new grain markets, notably in the underdeveloped world; (6) cheap food policies of many Third world governments, encouraging the growth of urban population dependent on food as a commodity; and (7) penetration of international capital into previously self-sufficient agrarian societies (Friedmann, 1982). Further, this era was also defined by the international monetary order centered on the dollar. This was meant to establish an open world economy for the free movement of commodities and capital,

thereby incorporating them into the world economy. The extension of capitalist relations to the former colonies was part of the American strategy of constructing the free world as an arena for the free flow of goods and capital. What is significant nonetheless is that the international food order contributes to the widening and deepening of capitalist relations within the world economy, by shifting more of the world's population away from direct access to food to incorporation into food markets. Indeed, food regime analysis brings an historical, structural perspective to the understanding of agriculture and food's role in capital accumulation (McMichael, 2009). It offers a unique comparative-historical lens on the political and ecological relations in matters of food security.

Food aid was an important means by which free trade was extended to underdeveloped nations, with the discrete objective of solving American wheat surplus problems (Friedmann, 1982). Bilateral arrangements between the United States and Third world governments became the typical transaction of the international food order. Many Third world states welcomed American subsidized wheat as an immediate political aid and as a potential way out of one the impasses of late capitalist development (Friedmann, 1982). The low prices and international trade patterns established by the international food order created food import dependence and contributed to agricultural underdevelopment in the Third world. American food aid therefore was conceived as a solution to domestic farm-support problems and as part of Cold war economic and political strategy. This assistance was also a product of the Marshall plan. The pressure of accumulating wheat surpluses and the experience of the Marshall Plan and ad hoc foreign aid led to Public Law 480, the Agricultural Trade Development and Assistance Act of 1954. This action was designed to allow American grain to be imported by countries lacking foreign exchange for commercial purchases. Indeed, part of this act provided for grants to

combat famine and for the barter of food for other raw materials. It is evident nonetheless that foreign aid generally, including food aid, was designed to promote trade and capitalist development in agrarian societies as part of the construction of the free world. Contrary, however to the neo-classical thinking, export reliance has ended up putting regions in Third world countries at a comparative disadvantage (McMichael, 2008). Further, the argument for liberalization that the market works best when competition is least regulated does not seem to hold for many Third world countries and Kenya in particular.

Aid restructured trade (Friedmann, 1982). It was the mechanism for overcoming social and national limits to the transformation of self-sufficient agrarian societies into consumers of commercial wheat. American food aid to underdeveloped countries accounted for an impressive proportion of world trade. Many Third world countries welcomed food aid, thereby creating dependency on food imports. In the context of an open world economy, this was even appealing to poor countries as food aid reduced the necessity to choose among difficult development options. Further, the desperate appeals for food aid since the 1973 “crisis” reflect dependence on cheap food which grew out of the Post war international food order. It is important to observe that this came with adverse consequences particularly to Third world states thus; the growth of urban populations, agricultural underdevelopment, the establishment of capitalist development-separating the populations from land and specializing agriculture.

It is evident that the operation of the international food order tended to contribute to key Third world problems (Friedmann, 1982). For example, it has been shown that cheap foreign wheat facilitated the growth of urban populations and contributed to underemployment and poverty in the countryside. This state of affairs has created problems that remain in different measure unresolved in various nations of the world to date. Nonetheless, this study supports the

idea that the world food order should not be held hostage to macroeconomic relations. Food should be understood as a right of national citizens rather than that of global consumers who wield financial power (McMichael & Mendi, 2011). Indeed, the operation of the international food order gradually changed relations both at the national and international level. As a result, a new relation began to emerge between supply and demand, leading to higher prices and to the collapse of the arrangements constructed over two decades. This order further induced a spectacular transformation of much of the Third world from self-sufficient agrarian societies to national economies dependent on wheat imports. Concessional sales of American surpluses were always intended to develop new commercial markets, and they did so at a considerable social and national cost to the recipient countries. Although unemployment and poverty increased in advanced capitalist countries in the 1970's, the scale of the impact for more food and the ability to purchase it was felt much more in the huge urban conglomerations of the underdeveloped world, created in part by the international food order.

While trade has lost its central connection to food aid in the globalization period, no new set of complementary national policies has yet emerged to constitute a new international food order (Friedmann, 1982). The eventual shape of a new order depends on the changing international relations. As aid became separated from trade, more countries have now become donors and donations have ceased to be exclusively American. Throughout the 1960's the United States provided more than 90% of all food aid. The new humanitarian focus of aid was reflected in a shift from bilateralism to multilateralism and from loans to grants. Food aid no longer plays a central role in trade and now takes place within the complex of objectives served by foreign aid in general. The new order nonetheless depends both on state-to-state relations and on national policy responses to new international and domestic conditions. Wheat imports on the other hand

are now a condition of survival in much of the underdeveloped world and of higher consumption policies in socialist countries. They are expensive and contingent on unstable international politics.

The crucial factor in the current global food crisis is the dependence of Third world countries on food imports. The transition from development to globalization has created dependency especially for these countries (Friedmann, 2005). The politics of food reflect tensions between nations, international financial agencies and populations who depend on food subsidies, between strategies of accumulation and self-determination. The period between 1947 and 1972 is described as the Surplus regime and this era was characterized by the US protecting its own domestic markets and other countries adopting similar agricultural policies focused on the national market. Surpluses mounted more persistently with the technological developments involved in the industrialization of agriculture. Industrialization subordinated agriculture to emerging agro-food corporations both as buyers of machines, chemicals and animal feeds, and also as sellers of raw materials to food manufacturing industries or livestock operations. The Post-War food regime was built on a tension between replication and integration of national agro-food sectors. The key however to the persistence of the world food regime was the innovative US policy of foreign aid combined with import controls. The Atlantic agro-food economy was the hinge for the reconfiguration of the food relations of Asian, Latin America and African countries. As third world states sought to develop national economies, their agrarian strategies were shaped by the opportunities and limits of world food markets.

Wheat became the basis for change from most traditional dietary staples and an efficiently produced often subsidized alternative to the marketed crops of domestic farmers. It is interesting to note that, despite the Green Revolution, the third world countries became the main

source of import demand on world wheat markets. Import policies created food dependence within two decades in countries that had been mostly self-sufficient in food. As regards the export side, tropical crops faced the notorious problem of declining terms of trade. By the 1970's the food regime had caught the Third world in a scissors. One blade was food import dependency while the other was the declining food revenues from the traditional exports of tropical crops. The international food regime has no doubt created a new international division of labor. It has in fact contributed to a typical third world pattern of rural underdevelopment, poverty and dependence. The third world countries remain a field of competition globally. Indeed, the hungry masses of the third world are now potential consumers of surpluses that are increasingly international.

At present in this globalization era, agro-food corporations are the major agencies attempting to regulate the agro-food industry conditions. Transnational agro-food corporations have outgrown the regimes that spawned them. Within the limits of international rules, corporate integration of a global agro-food sector has proceeded as quickly and thoroughly as changing technologies permit. Nonetheless, the growing power of capital to organize and reorganize agriculture globally undercuts state policies. It can be analyzed from the proceedings that the development era demonstrated the following: (1) A provision for the growing Western proletariat with wage foods; (2) A new type of trade within a new international order, alongside the colonial relation and where the metropolis administers tropical exports of agriculture; (3) As agriculture industrialized, U.S. Corporations led a process of transnational accumulation which doubly undercut the independent capacities of states to regulate domestic production and trade. The globalization era project is basically the emergence of a global production system. The

transition from the development era to the globalization era has no doubt affected agriculture in less developed countries.

What remains nonetheless is to critically examine the extent to which it is likely to be sustainable (McMichael, 2000). It is almost clear that globalization is a process that was conceived and premised on eliminating national developmentalism. The influence of globalization on the Third world countries cannot be overemphasized. It has created dependency and further caused a shift in power from governments to a few multinationals, thereby diminishing the power of these governments. For example, what was assumed to be a globally managed food security system seems to thrive on contradictory complex conditions. Given this scenario described above, the envisioning of a fully globalized food system seems to be far-fetched (McMichael, 2000). This is because it portends immense inequalities and marginalization of countries. Further, there is no level playing in globalization especially between the North and South divide. Although Kenya's trade portfolio and food aid has had mixed results, there is very little association to food security.

I investigate the relationship between food trade, aid, and food security in Kenya through these two eras. Based upon the analytical framework developed above, I postulate the following hypotheses:

Hypothesis 1: the composition of agricultural trade will change as Kenya has been incorporated more thoroughly into the globalization project as food dependent country after 1980.

Hypothesis 1a: Wheat will become a more important food import and food aid after 1980.

Hypothesis 1b: Food exports will be primarily comprised of luxury commodities (i.e., tea and coffee) after 1980.

Hypothesis 2: Imports of food aid will be associated with changes in the composition of agricultural trade, especially after 1980

Hypothesis 3: food aid will not be associated with increased food security or other relevant development outcomes in either of the time periods

Chapter 3 - Method and Data

This study employs a comparative-historical, in-depth case study research design (Berg 2004). The main goal is descriptive, which is the cornerstone of the scientific research process and an essential component for understanding the social world (Shutt, 2004). An in-depth examination of phenomena aids in the identification of key features of cases which is a critical aspect of studies in social science (Ragin, 1994). Through a case study, information is gathered systematically on a particular unit of analysis with the goal of effectively understanding how a process operates or functions (Schutt, 2004).

This strategy is employed to investigate food security in Kenya in the context of the world food system. Ragin (1994) observes that comparative researchers typically start with a carefully specified category of phenomena that is intrinsically interesting. Using descriptive data, this research seeks to explore the relationship between trends in food aid, trade, production and food security in Kenya. A case study is defined as an intensive study of a single unit with an aim to generalize across larger sets of units (Gerring, 2004). Case studies are more useful in forming descriptive inferences, all other things being equal (Gerring, 2004). It is therefore not an exaggeration to observe that there is a methodological affinity between descriptive inference and case study work as attested in this study. Indeed, when one is examining correlative relationships or proximate causal relationships, the case study method is less problematic and is often highly informative. Gerring (2004) observes that one of the primary advantages of the case study method is the depth of analysis that it offers. This method is in harmony with the researcher's experience as an international Fulbright scholar and Kenyan national. It is also popular among qualitative researchers. (Merida, Amanda & Virginia, 2014).

Comparative-historical analysis as a field of research is characterized by the use of systematic comparison and the analysis of processes over time to explain large-scale outcomes such as welfare or national development (Mahoney, 2004). Further, it is defined in part by the analysis of sequences of events that occur within cases. Comparative-historical analysis is appreciated for its contribution to substantive generation of knowledge in the social sciences (Mahoney & Rueschemeyer, 2003). It has a long and distinguished history in this area.

The study is comparative and historical in the sense that it compares descriptive variables from two historical time periods (i.e., eras) within the same unit of analysis (i.e. Kenya). This strategy is similar to a pre-post case study design (Berg, 2004), where one research entity that has two time points is separated by a critical event. A critical event is one that on the basis of a theory under study would be expected to impact the case in question significantly. This research project has two time periods (i.e., the Development Era and the Globalization Era). The neo-liberal policies introduced in the 1980s in Kenya the critical event of interest for understanding the relationship between food trade, aid, production and food security.

The central insight behind methods in historical and comparative investigations is that the researcher can improve the understanding of social processes when these are compared to other times and places (Russell, 2004). The comparative-historical design allows for analyzing historical sequences and takes seriously the unfolding of processes over time (Mahoney & Rueschemeyer, 2003). Social scientists often formulate theories that are defined by complex arguments about sequence and duration (Mahoney 2004). Given that food insecurity and famine are realities in Kenya, it is prudent to trace this outcome relative to past historical events in order to understand the extent to which Kenya's food security had changed over time. By examining

Kenya's food security in the past, this study contends that it will be better placed to understand the current situation.

Data and Variables

Key datasets that contain information on Kenya's food exports, imports, and food aid were identified; downloaded, statistical graphs developed and then analyzed. These sets included: the World Bank, UN-FAOSTAT, UN-World Food Programme, and the Kenyan Ministry of Agriculture. Data collection depicted the researcher's plan for collecting data to ensure that the data collected allowed the researcher to answer the research questions posed in the study (Ragin, 1994).

Food security is the dependent variable. The FAO (1996) defines food security as a situation in which 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. Measuring food security is complex, with several competing definitions. Typically, food security indicators try to assess one or more of four dimensions, as stipulated by FAO parameters (Elizabeth, 2011); availability, access, utilization, and sustainability. This study employs measures that mainly capture the access dimension of food security. These measures are drawn from the World Bank indicators of food security. In order to understand different aspects of the availability dimension of food security, five measures were analyzed. Two of these measures illustrate food security for children specifically and the other three assess food security among the broader population of children and adults. Malnutrition prevalence is the percentage of children under the age of 5 who are more than two standard deviations below the world median height for their age (World Bank 2013). The prevalence of wasting is the percentage of children under age 5 whose ratio of weight-to-height is more than two standard deviations below the

world median (World Bank 2013). The prevalence of undernourishment is the percentage of the population below the minimum level of dietary energy consumption and the number of undernourished is simply the sum total of the undernourished population (World Bank 2013). Finally, the depth of the food deficit measures the calories (kilocalories per person, per day) necessary to move undernourished persons out of that status.

The independent variables are food aid, food trade, and production (World Bank 2013). *Food aid* is measured in three ways. First, food aid was measured as the total amount of food aid in delivered in metric tons, using the official UN World Food Programme data (UN WFP, 2013). To see how much food aid was delivered per person, this measure was divided by the total population to see food aid per capita. Second, food aid was measured in terms of the aid provided explicitly for food security purposes using data collected through AidData.org, the most comprehensive data collection effort on international aid flows available. Food aid is provided for many reasons. Aiddata.org categorizes the sector and purpose of aid flows by year. This study used their measure of food aid given for food security purposes (total dollar amount, in constant 2011 U.S.\$) by any donor country or agency in all years available (Sector 520). Finally, this study analyzed the trend in food aid in terms of total cereal aid given (in tons) and total wheat aid given (in tons).

Food trade was measured in terms of food imports and food exports. Two indicators were used for food exports and imports: exports and imports in value terms (dollars) and exports and imports in quantity terms (UN FAO 2013). The study focused specifically on identifying the top 5 food exports and food imports in order to understand whether, and how, these may have changed over the study period.

Food production was measured in terms of the total quantity (in tons) of agricultural crops (UN FAO 2013). The study focused specifically on identifying the top 5 crops produced in order to understand whether, and how, these may have changed over the study period.

The analytical approach is to use descriptive graphs to assess the relationship between these variables. Graphs are useful particularly for exploring data because they show a full range of variation and any anomalies that may be in need for further study (Schutt, 2004). The data collected from these sources are analyzed descriptively with a focus on identifying the extent to which trends in the variables are explained by the ideas in the analytical framework. These results are then presented in graphs describing food imports, food exports, agricultural production, food aid, and other important variables that shape Kenya's food industry. The goal is to provide a descriptive analysis of these variables in order to better understand the factors associated with food security in Kenya.

Chapter 4 - Results

Before I analyze trends and patterns in food trade, aid, and food security, I first investigate descriptively some basic trends in food production in Kenya. Doing so allows for a better understanding of how agricultural production itself has changed over time in Kenya..

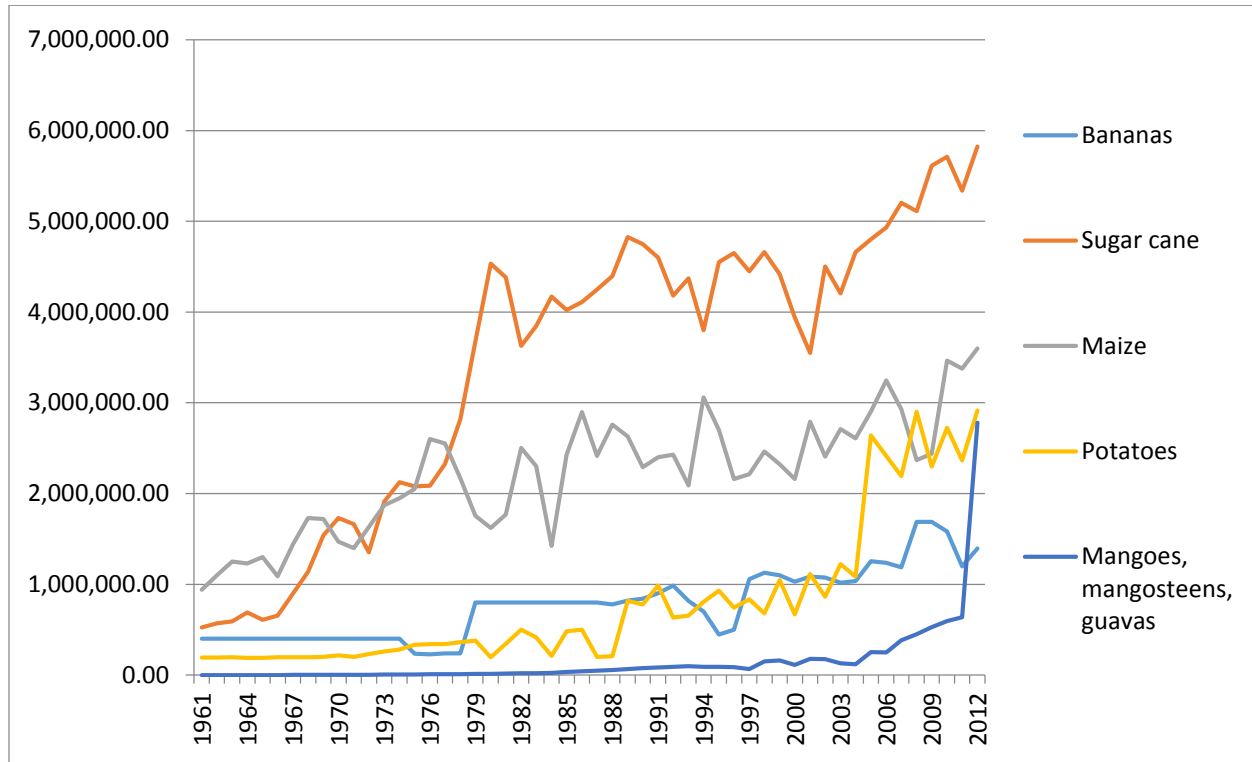
Production

The data provided on food production shows an upward trend. That Kenya's food production has been on the increase is in no doubt. The expansion of agricultural output after independence was based on increases in the cropped area in addition to the opening of commercial production opportunities to small holder African producers (Winter & Gem, 2007). What is of interest however is its relationship to food security. Food production has been on the increase since independence, as shown by Figure 4.1. This graph is supported by the Kenya government report on '*Food Crops Management*', which reveals that compared to 2011, production of nearly all major food crops increased in 2012: maize production increased by 7%, wheat by 64%, rice 10%, beans 14% and potatoes by 90% (Republic of Kenya, 2013).

The analyzed data from this study (Figure 4.1) reveals that the top five crops produced in tons are: sugar cane, maize, potatoes, mangoes, mango stems, guavas, and bananas. There is a steady increase in food production in Kenya over the two time periods under this study. It is interesting to observe however that among the general factors affecting food production in Kenya, no external related factor is mentioned.

Figure 4.1 Top Five Crops Produced in Kenya (in metric tons)

Source: UN FAO (2013)



Sugar cane appears to be the leading crop produced, the others being: maize, potatoes, bananas and mangoes. Whereas this growth is documented and clear, Kenya continues to suffer from recurrent famines. Food production has remained more or less the same in terms of food crops in the two eras. The development era was characterized by a balanced perspective to food production. It was based on Kenya's desire to be involved both at the local level and internationally. What however is significant is the emphasis on the production of commercial and luxurious foods in the globalization period. This is attributed to Kenya's involvement in international trade coupled with the liberalization policy. This study opines that Kenya's poor food situation is perhaps attributed to its emphasis on the production of commercial luxurious food crops for export. This data correlates with the theoretical proposition in this study which

contends that when developing countries get incorporated into the world food system, food production especially for these countries change. There is a sense in which globalization era affected the way agriculture was practiced in Kenya. Further, it is interesting to observe that Kenya's traditional foods like bananas and potatoes have also been in production. However, it is suffice to note that food insecurity in Kenya is likely attributed to other factors not accounted for here, ranging from food prices, poverty, climate change, policy framework and others.

Trade

Question 1: Has the composition of trade changed as Kenya has been incorporated into the world food system?

Question 1a: Has wheat become a more important food import?

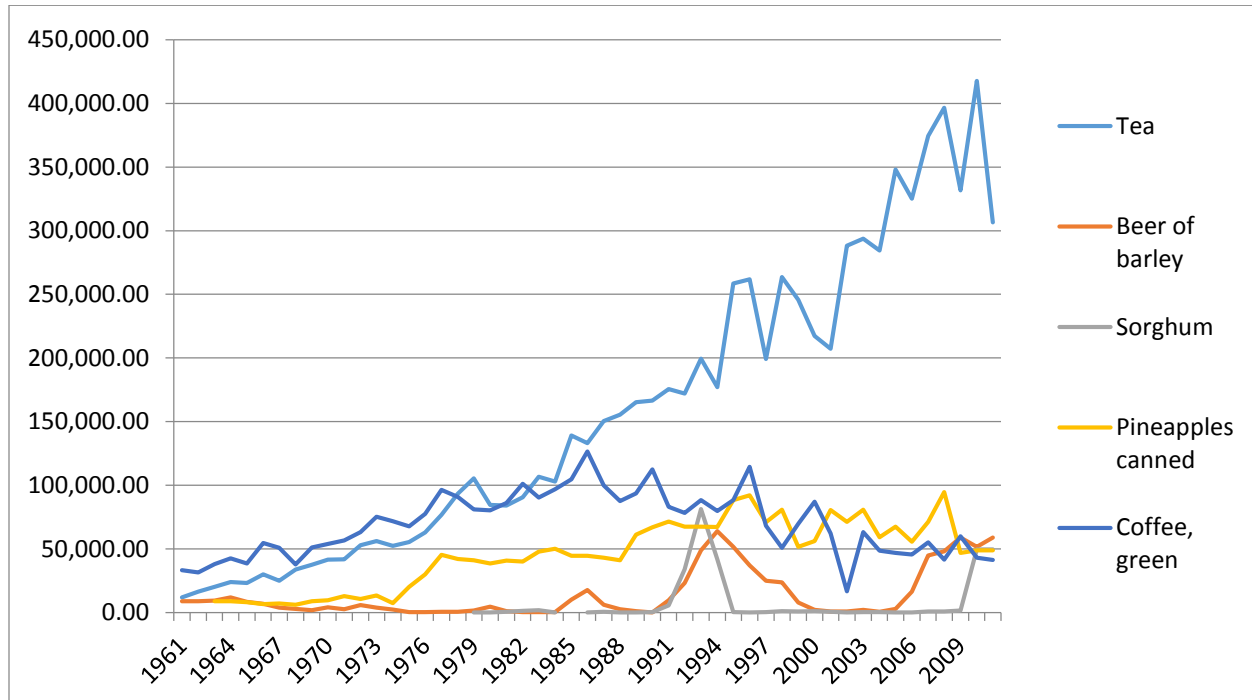
Question 1b: Have food exports become comprised mainly of luxury commodities?

Kenya's incorporation into the world food system has no doubt affected its food security. Wheat has become a major food import for the country as food exports become comprised of luxury commodities.

This study revolves around Kenya's food exports and imports. Involvement at the international level of trade is significant. The data available on top food exports and imports shows largely an increase in all the top five major crops (UN FAO, 2013). It is also evident that Kenya has been exporting food products since the 1960s. Kenya's trade and development landscape continues to undergo significant changes. As Figure 4.2 shows, the following are the top five export products in tons; tea, beer of barley, sorghum, canned pineapples, and green coffee beans.

Figure 4.2 Top five food exports (in tons)

Source: UN FAO (2013)



It is worth pointing out that most of these exports are basically commercial and luxurious type of foods for the international market abroad. As indicated, McMichael and Friedmann's proposition that countries like Kenya when incorporated into the World Food System produce largely for the international market is evident. The globalization period for Kenya presents a change in the production of agricultural products. This study contends that the production of such food products on a large scale compromises the food security situation for Kenya. It is apparent that the production of traditional foods has been replaced by the new wage foods that serve the international markets.

Figure 4.3 Kenya's Food Exports (in 1,000 U.S. \$)

Source: UN FAO (2013)

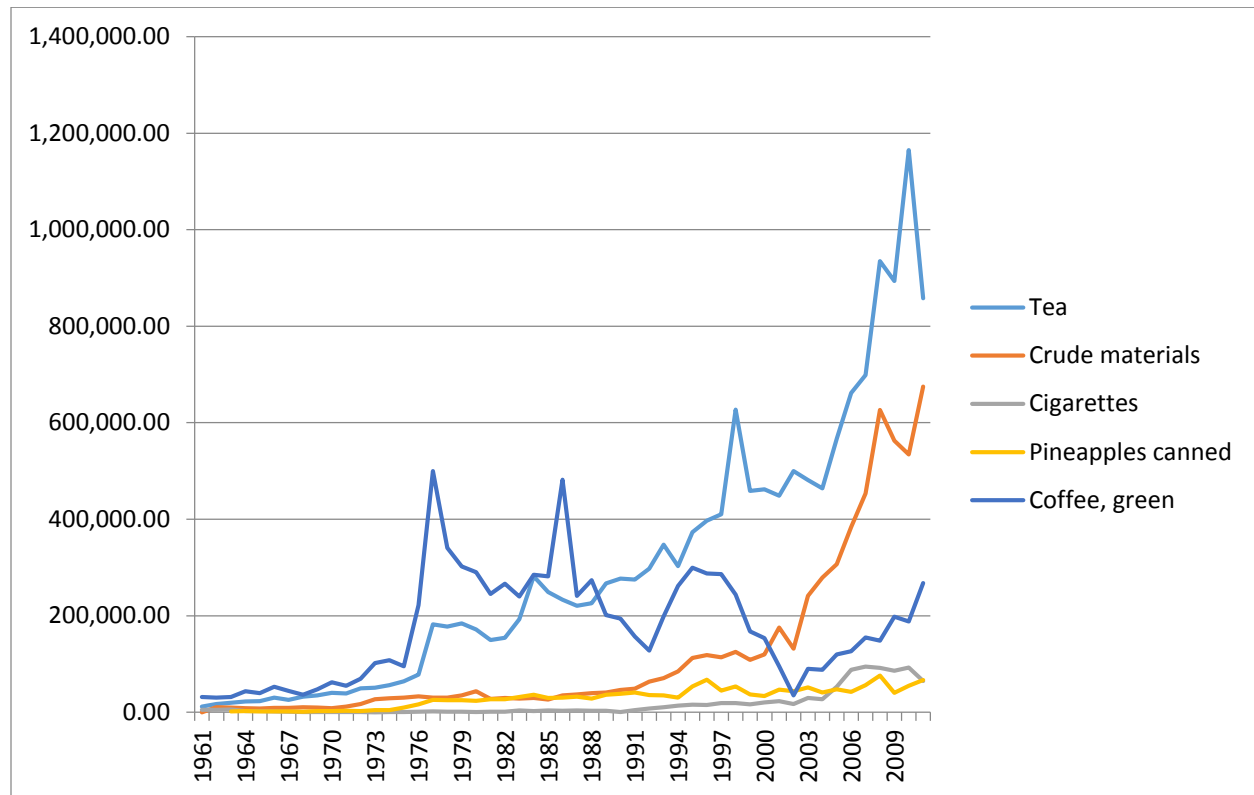
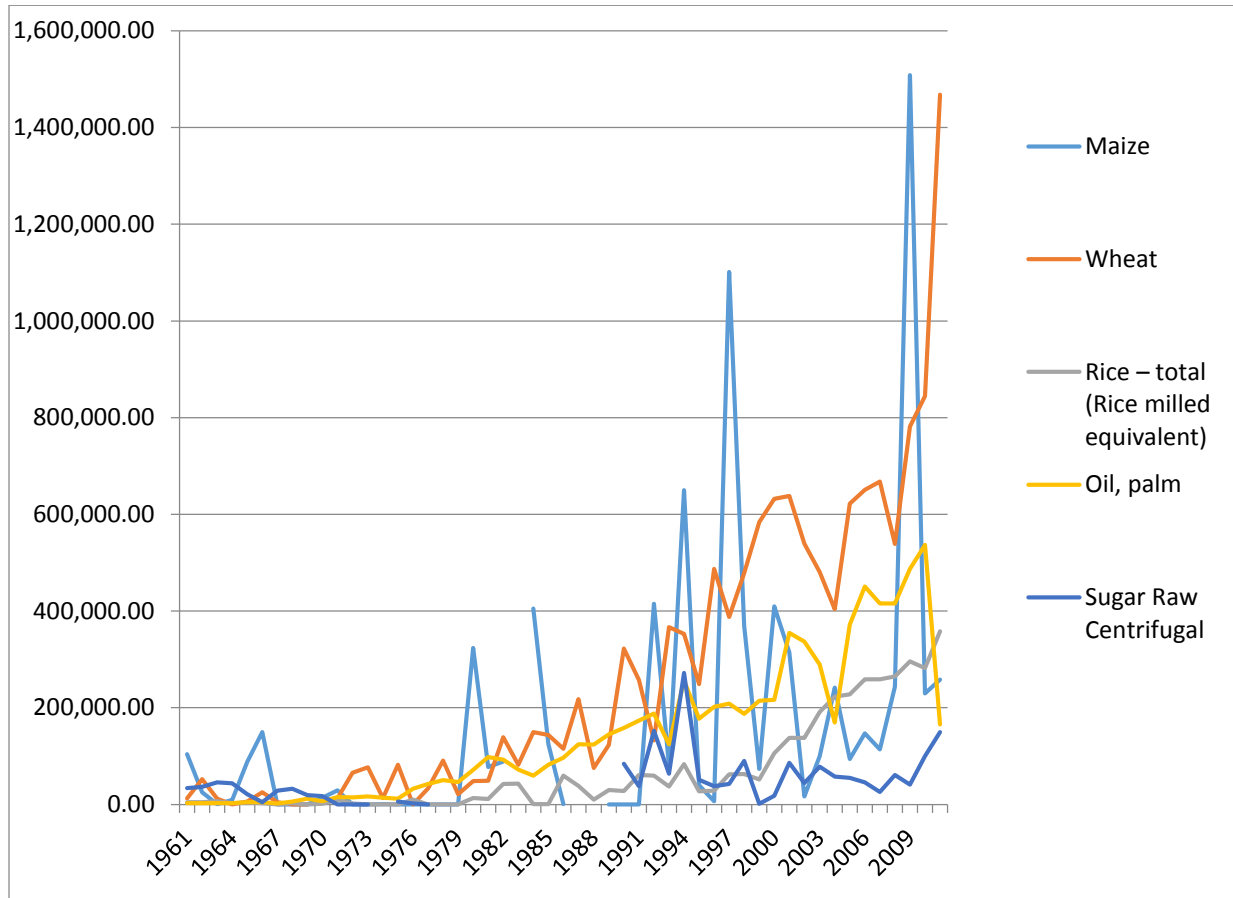


Figure 4.3 shows the value in U.S. dollars of the top five agricultural export: tea, crude materials, which includes cut flowers, green coffee, canned pineapples, and tobacco cigarettes. Similarly, the data reveal that the following are the top five crops imported in terms of quantity (tons), as shown in Figure 4.4: wheat, rice, maize, which is Kenya's staple food comes third, palm oil, and raw sugar. The trend in Kenya's top food exports, by quantity, is upward as one move from the development era years to the globalization era. Tea exports have all along dominated Kenya's food exports and are significant given its performance over the years. A slight slump in the quantity of these food products compared to tea exports is nonetheless evident.

Figure 4.4 Kenya's Top Five Food Imports (in tons)

Source: UN FAO (2013)



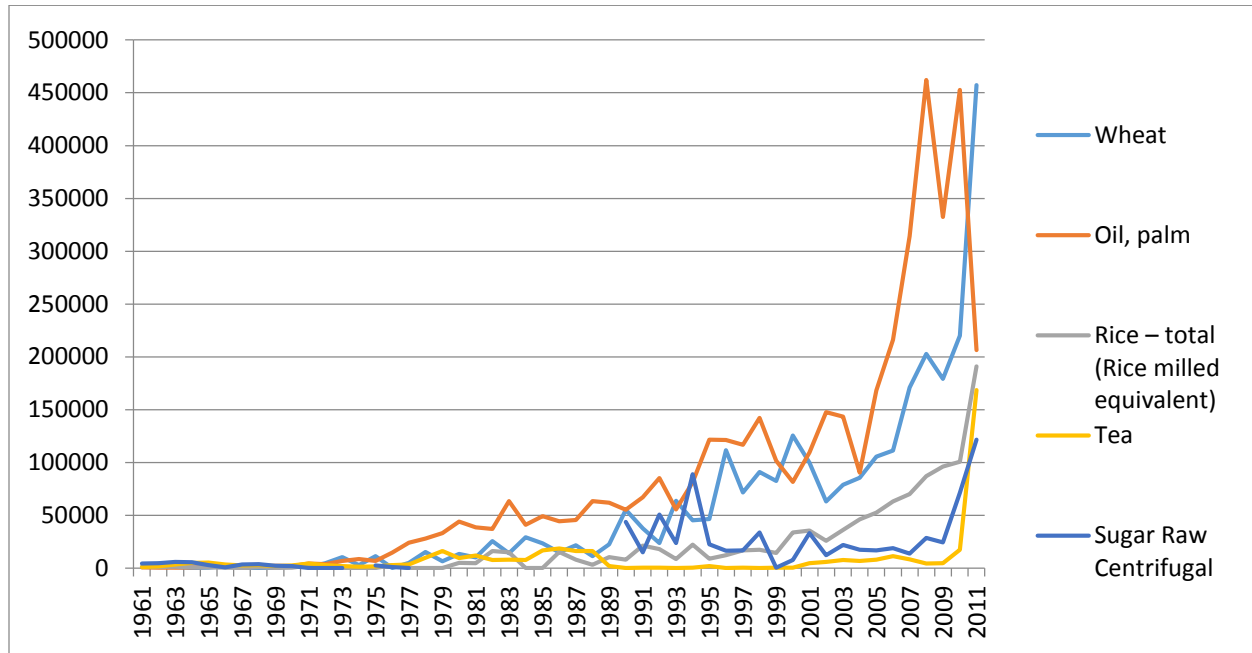
These data support the proposition that wheat will become a major food import for countries like Kenya. Indeed, per capita consumption for wheat has increased. It is interesting also to note that maize, which is Kenya's staple food, is also among these food imports. Further, palm oil and all the other top food imports are locally produced in Kenya, raising questions as to why government policy supports imports of these products. This has implications for Kenya's food security. The controls the government exercised during the development era worked well as there was a rapid increase in Maize and other food crops. The transition to globalization has changed the patterns of food production in Kenya. This data supports the assumption that food security for Kenya and developing countries in general is not necessarily about self-reliance but

instead about instilling food import dependency. Ideas propounded by McMichael argue that a stable of international arrangements have been constructed and which operate in ways that maintain high grain surpluses in the world markets, while at the same time producing specific deleterious effects in major exporting countries and new import countries in the underdeveloped countries. Indeed, the data above shows clearly that the top three food crops imported are grains. Subsidized grain imports have ended up undercutting the prices of traditional starches like potatoes, cassava, yams and taro.

On the other hand, the top five crops imported in value (1,000 USD), as shown in Figure 4.5 are: wheat, palm oil, rice, tea, and raw sugar. These data support the proposition that wheat is becoming a more important food import in Kenya. It is also apparent that developing countries like Kenya are coming to have more “westernized,” wheat-based diets. What is interesting is that these top food imports have always increased in both volume and value. In Kenya before the 1990’s food imports were low since food consumption was almost commensurate with domestic food production (Gitu, 2006).

Figure 4.5 Kenya's Top Five Food Imports (in 1,000 U.S. \$)

Sources: UN FAO (2013)



The data presented above with regard to the composition of trade show a distinct picture in relation to the two time periods under study, namely the development era and the global era. From the early 1960s to mid-1980s, the amounts of food exports and imports were minimal. It is not until the globalization era that a significant involvement of these food commodities is recorded, with wheat and tea becoming very important.

Food Trade, Food Aid, and Food Security

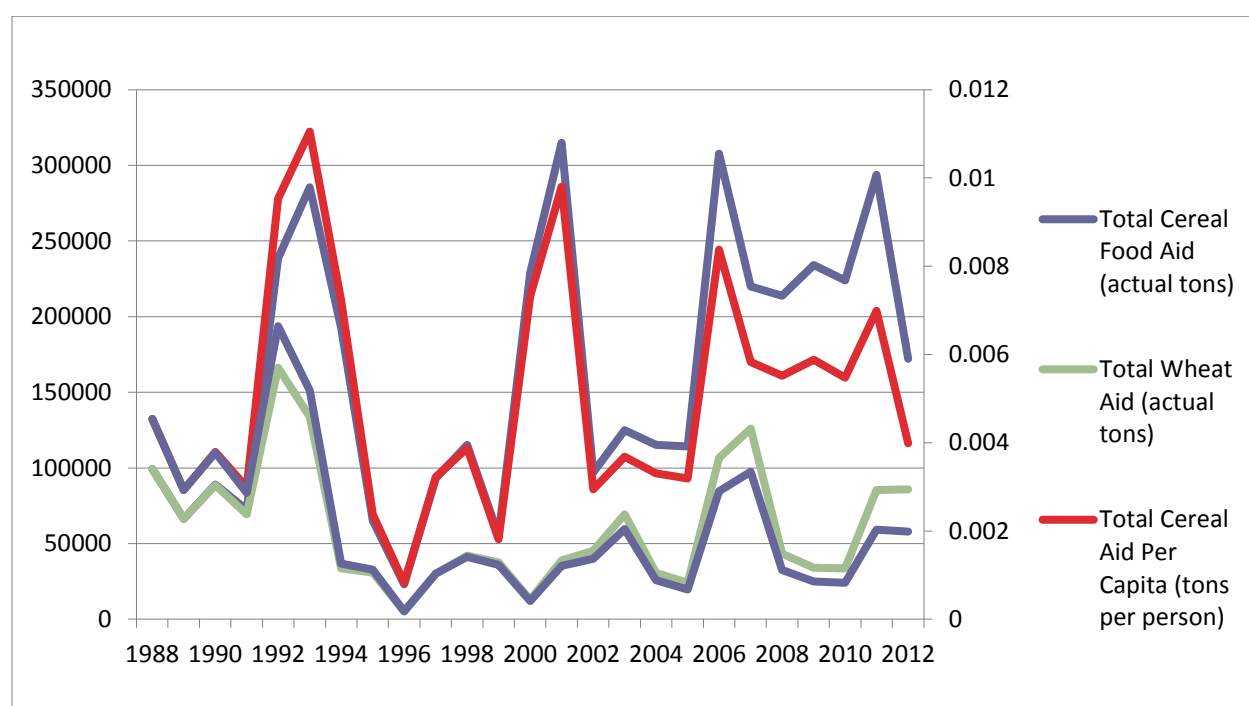
Question 2: Is the changing composition of food trade associated with food aid, especially after 1980?

As regards the data on food aid, Figure 4.8 shows that the total wheat aid per capita (tons per person) for Kenya has decreased over the years from 130,000 tons per person in the late 1980s to around 60,000 tons in 2011. Total cereal food aid in actual tons has also experienced an

increase from 130,000 tons in the late 1980s to around 170,000 tons in 2011. Further, data on the total food aid in actual tons for Kenya shows an increase from 100,000 tons in the late 1980s to an estimated 200,000 tons in 2011. This shows clearly that there has been an increase in the total amount of food aid to Kenya.

Figure 4.6 Food Aid in Kenya, 1988-2011

Source: UN WFP (2013)

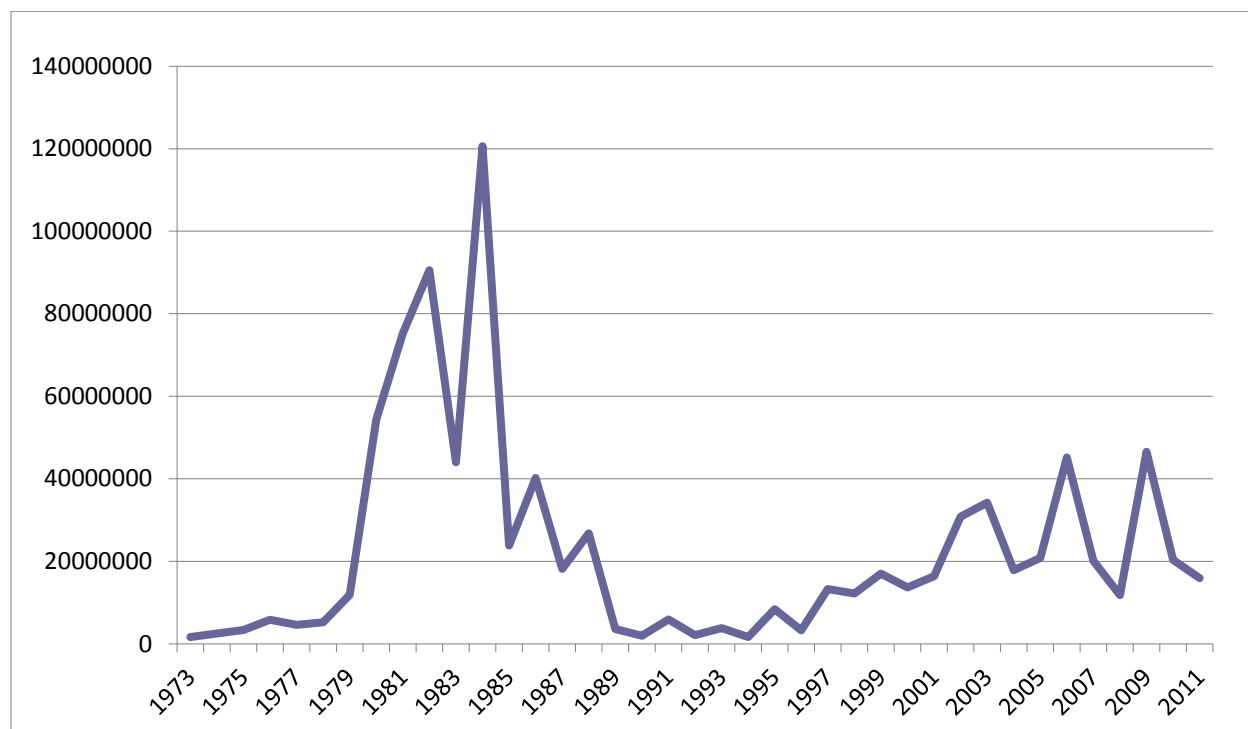


The data on flows of aid for food security, as depicted in Figure 4.7, shows a rather fluctuating pattern. From less than \$20 million in the early 1970s followed by a sharp increase in the 1980's to an estimated 120,000 tons, this trend has been preceded with yet another decrease in the 1990's. From the year 2000 the projection has been between 20 million and 40 million tons averaging around 30 million tons. Food aid nonetheless does not seem to be associated with increased food security or other development outcomes for Kenya. Food imports and food aid

have been used in Kenya for a long time with trends showing an increased dependence (Gitu, 2006). It is merely an important means by which free trade within the free world was extended to developing nations (Friedmann, 1982).

Figure 4.7 Flows of Aid for Food Security in Kenya (constant 2011 U.S. \$)

Source: AidData.org (2013)



Question 3: Has food aid been associated with increased food security?

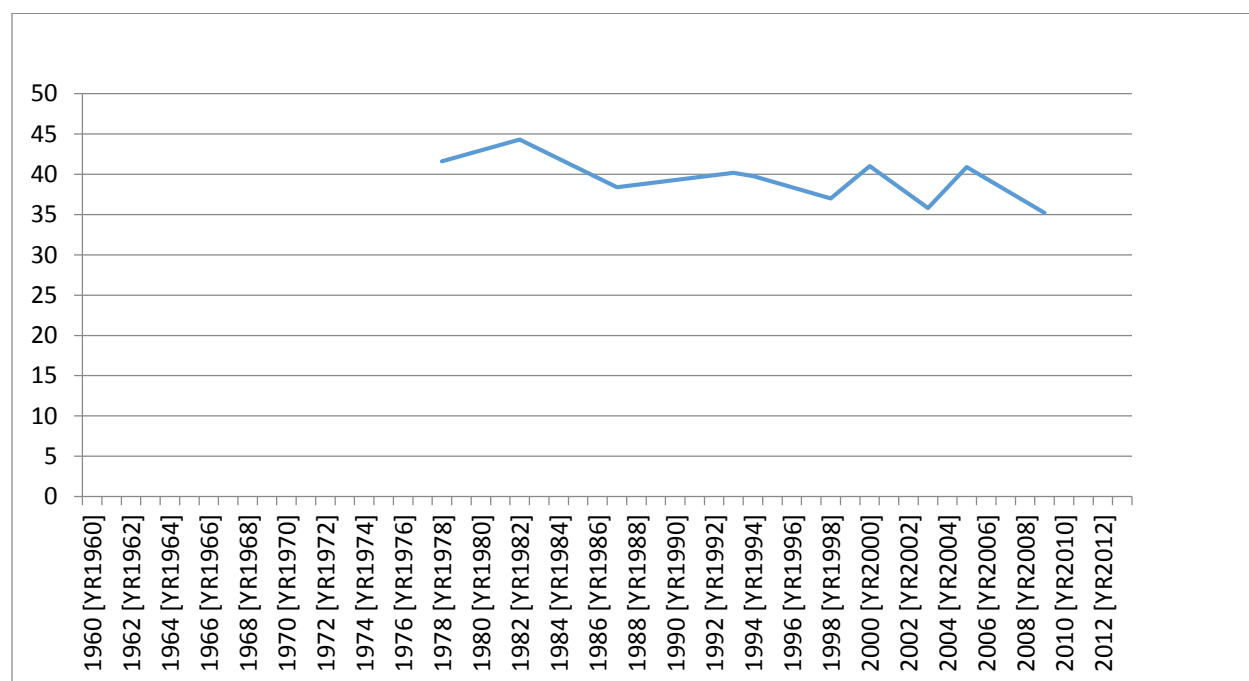
Although food aid today is widely recognized as a potential instrument for addressing food insecurity, its role in hunger alleviation is an empirical question. Kenya's food security has traditionally been defined in terms of energy intake. Those who suffer from chronic food insecurity have low protein and energy as well as micro nutrient intakes (Republic of Kenya, 2011). Food imports and food aid have been used in Kenya for a long time with trends showing a tendency towards dependency (Gitu, 2006). It is interesting to observe that food availability in

Kenya is understood in terms of cereal supply, while food security is understood in terms of having adequate maize (Republic of Kenya, 2011).

This study used the following key indicators to measure food security and to assess the question of food insecurity in Kenya. These include: malnutrition prevalence, depth of the food deficit in kilocalories per person per day, prevalence of undernourishment, wasting, and people who are undernourished. I present these data below in graphical form.

**Figure 4.8 Malnutrition Prevalence, Height for Age
(% of Children Under Age 5)**

Source: World Bank (2013)

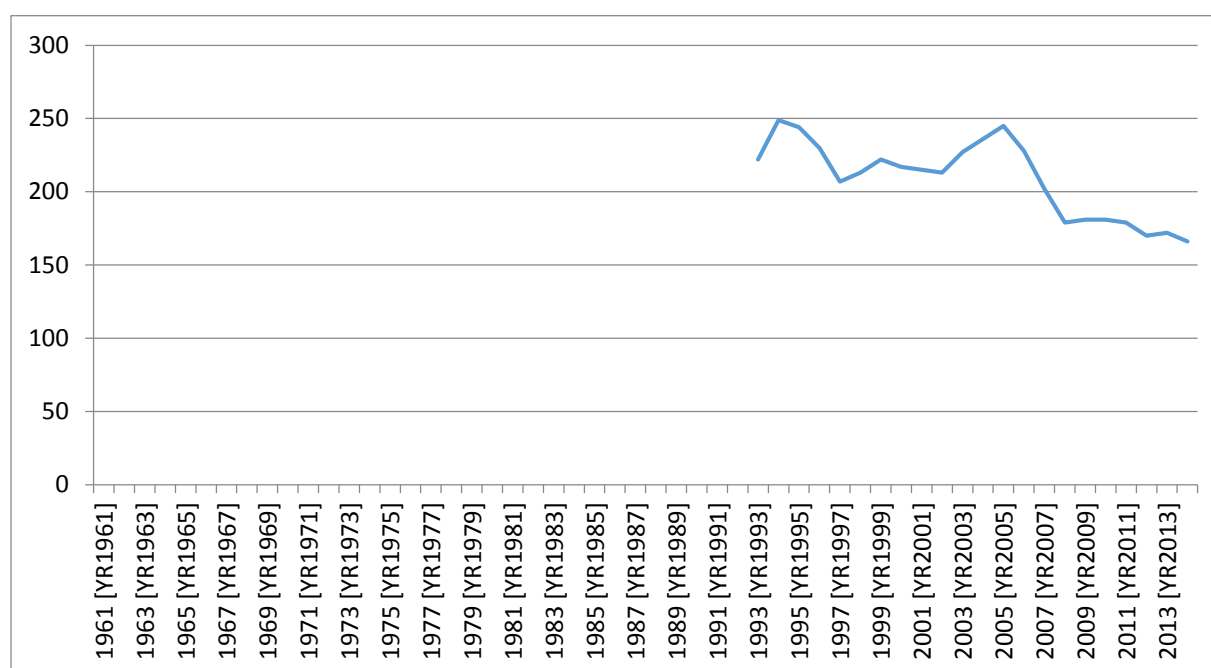


Malnutrition in Kenya remains not only a large public health problem and a development challenge for the country. The data presented in Figure 4.8 show a slight decrease in malnutrition from about 45% in the late 1970s to 35% of the population in 2010. This trend does not support McMichael's, nor Friedmann's, hypotheses. It is possible that this trend is

attributable to the Kenyan government's efforts in improving food security. The Government has developed the Food and Nutrition Security Policy to address nutrition security the country (Republic of Kenya, 2011). Relevant policies and programs have been designed and implemented targeting this issue. This merits further attention in future research.

Figure 4.9 Depth of Food Deficit, Kilocalories Per Person Per Day

Source: World Bank (2013)



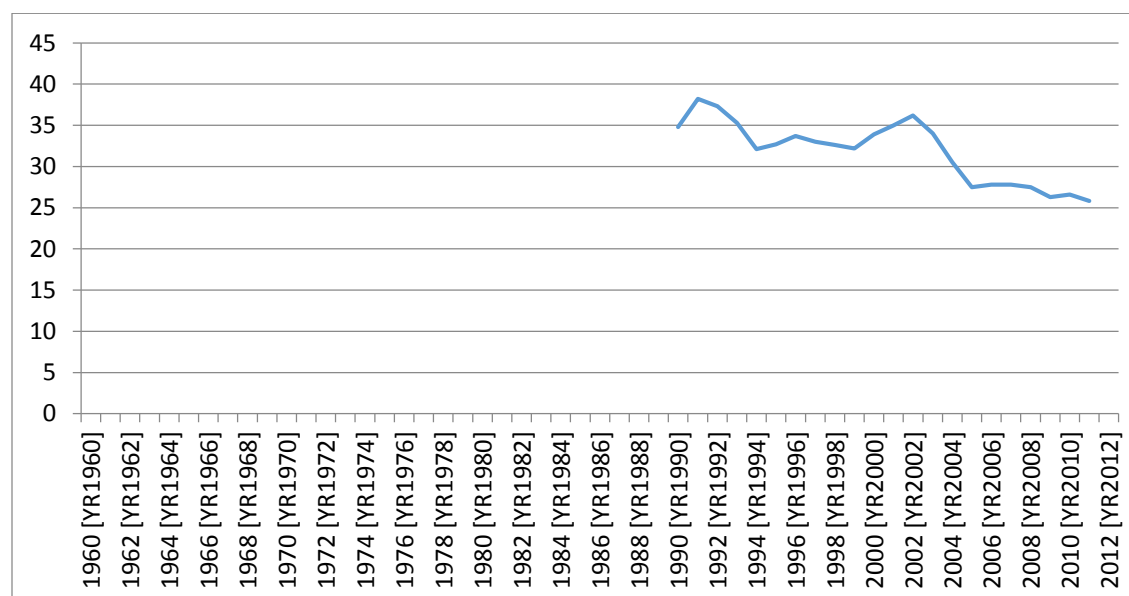
In an attempt to measure the kilocalories consumed per person per day in Kenya, the data presented in Figure 4.9 above shows an equally decreasing trend from the early 1990s (225) to about 170 in 2012. These findings are significant in this study as they demonstrate that both the level of malnutrition cases in Kenya and food deficit indicators have gone down. A drop in food deficit implies a better food security situation for the country. This is a remarkable outcome for Kenya given that nearly a half of the population is poor and close to 10 million experience chronic food insecurity and poor nutrition. Further, this result again is contrary to expectations

derived from political economy of food literatures. This prevalence nonetheless might be attributed to the many government programs and interventions that have been put in place

The data provided in Figure 4.10 below shows a downward trend in the prevalence of undernourishment cases in Kenya's population from 35% in the late 1980s to 25% of the population in 2011. This is a positive sign, but still, a quarter of the Kenyan population is affected in terms of this important variable that relates to food security.

Figure 4.10 Prevalence of Undernourishment (Percent of Population)

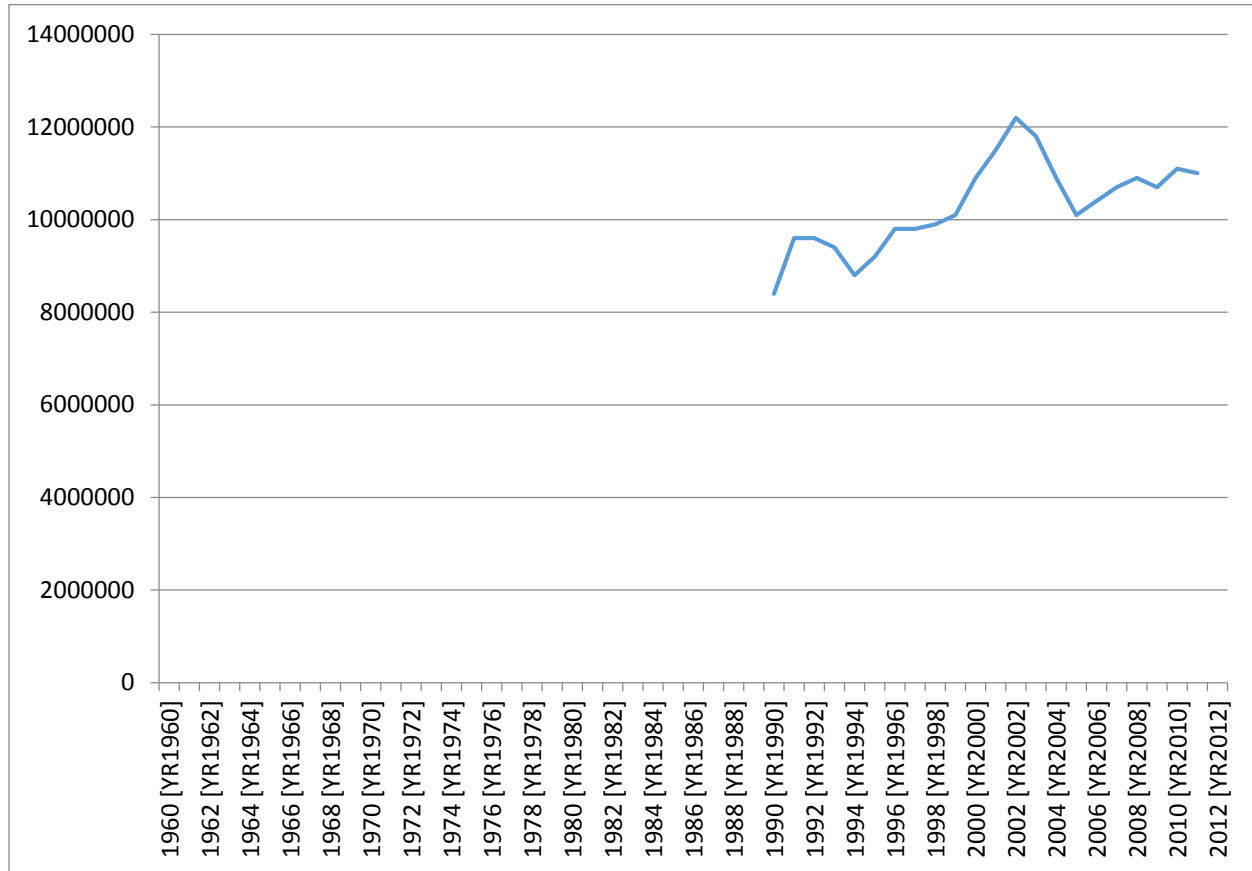
Source: World Bank (2013)



The number of people who are undernourished on the other hand has shown a sharp increase, as depicted in Figure 4.11, from 8.2 million in the late 1980s to around 11 million in 2011. This is an average of close to 10 million people, signifying 25% of the population.

Figure 4.11 Total Number Undernourished

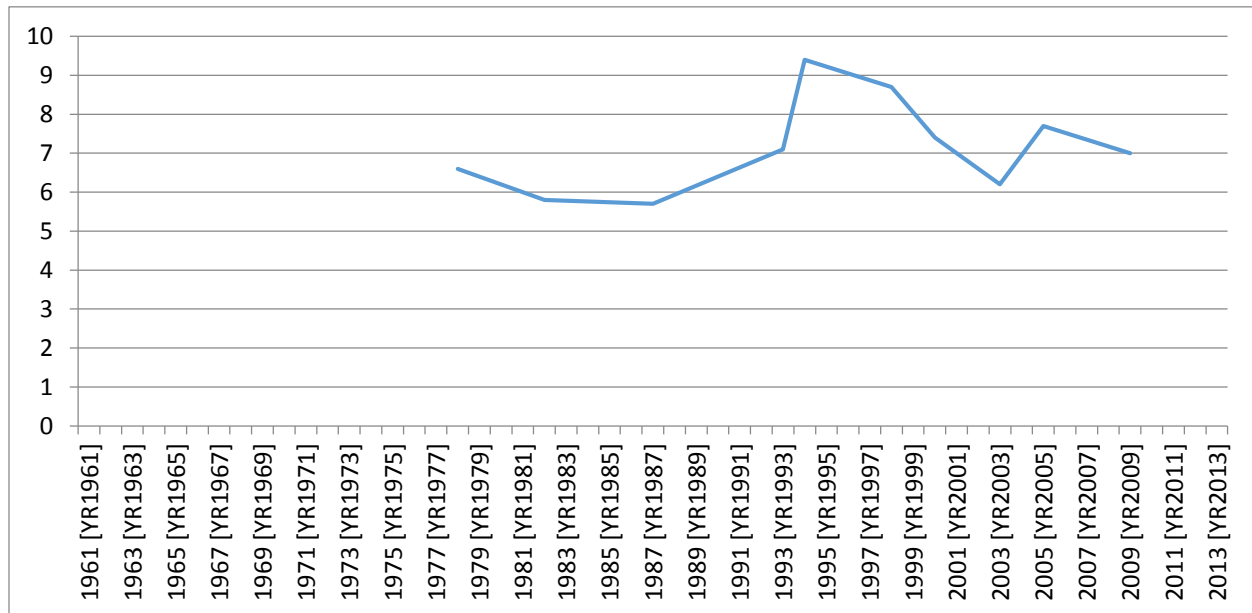
Source: World Bank (2013)



The situation on the prevalence of wasting (% of children under 5) is similarly significant in matters of nutrition and food security. This study contends that this is one of the crucial indicators of food security. The wasting prevalence is the proportion of children under 5 whose weight for height is more than two standard deviations below the median for the international reference population ages 0-59 (World Bank, 2014). Acute malnutrition manifested by wasting results in children being too thin for their heights (Kenya Demographic and Health Survey, 2004). Figure 4.12 below shows that the trend in the wasting prevalence for Kenya indicates an average of 7% between 1977 and 2010. There is a slight increase from around 6.6% to 7% of children under 5 who are affected.

Figure 4.12 Prevalence of Wasting (Percent of Children Under 5)

Source: World Bank (2013)



While Kenya has adopted a set of high impact nutrition interventions, the coverage of these interventions remains low due to inadequate resources and low prioritization of nutrition as reflected by the poor investment in this area of human development. The nutritional status of children less than 5 years has shown no significant change. It is important to observe that the above mentioned aspects are as a result of the poor situation of Kenya's food security, a consequence of insufficient food available to the population and improper feeding practices (WHO, 2011).

Chapter 5 - Conclusion

The results emanating from this study provide some support for hypotheses proposed: food trade and aid will not be associated with increased food security. Although food production has shown a tremendous increase over time, Kenyans still suffer from recurrent famines and hunger. Although Kenya has been a recipient of aid for decades since independence, and the country has liberalized its food sectors, the food security has not improved significantly.

Although this study provides substantive findings, there are several limitations. Reliability and validity in social science research is critical. Adequate data must be seen to support claims that are made in any study. It is important to state that current and reliable data in Kenya, like most developing countries, is not always guaranteed. Any good study must also demonstrate the use of accurate data collection methods. Similarly, this study used key secondary sources of data is thus subject to the possibility that there are errors in the data. Finally, it is possible that a study using a more mixed approach with methods, including both qualitative and quantitative evidence, could yield different results.

Nonetheless, at a point of time when the world and especially the Sub-Saharan countries are grappling with episodes of hunger and famine, this study can illuminate some macro-structural dynamics behind food insecurity in Kenya. The results obtained from this research provide some support for McMichael's and Friedmann's theoretical arguments. Nonetheless, one of the central paradoxes of both the development and globalization projects has been the legitimacy of its promises to the developing countries like Kenya (McMichael, 2008). Although the data provided does not demonstrate a huge impact on the food security variables, the general picture is one of significant health and welfare problems for Kenya. It is in this context that the

neo-liberal framework for Kenya finds significance. Globalization in which neo-liberal policies emerged leads to both challenges and possibilities for developing countries. It can be argued for instance that the uniting of nations on a global scale can in itself be seen as positive, despite the continuing highly uneven levels of development and power globally. Further, the proponents of this ideology contend that it creates opportunities for wealth creation through opening up of economies for to the flow of goods, services, capital and business from other nations that integrate their markets with those abroad (Mishkin, 2006).

The data are, however, mixed. There is some evidence of a certain amount of gains achieved in Kenya's food security situation. Malnutrition prevalence has almost stabilized over the years while the prevalence of undernourished population has also decreased. Further, Gitu (2006) observes that Kenya continues to enjoy some comparative advantage in the production of crops for export such as tea, coffee, pyrethrum, cut flowers and other horticultural products.

These findings nonetheless do not override the fact that the overall food security situation is still wanting. Indeed, although this situation is attributed to a myriad of factors, this study contends that Kenya's incorporation into the world food system is a significant factor worth considering. Position in the international division of labor may be a cause to development or underdevelopment (Gunder Frank, 1967). Further, nation-states no longer develop; they position themselves in the global economy (Evans, 1995). It must be observed therefore that Kenya's poor food situation is tied to the global food system and its own internal constraints.

Article 238 (1) of the Kenyan constitution provides for the freedoms of Kenyan people, which include the right to be free from hunger and to have adequate food of acceptable quality. It is also the policy of the government that all Kenyans, throughout their life cycle enjoy at all times safe food in sufficient quantity and quality to satisfy their nutritional needs for optimal

health. This policy also covers the provision of adequate diverse and healthy diets with an emphasis on the following four dimensions thus; availability, accessibility, stability and the meeting of nutritional requirements. It is evident that the globalization project has many economic, social and political consequences and implications for the future of the world and particularly the Third World. It is apparent that even with national support as was envisaged in the development era, the success of third world agro food systems depends not only on international institutions but is largely influenced by the developed nations (Friedmann, 1982).

Kenya's involvement in these two projects and particularly the globalization project has not secured Kenya's food situation today. The failure of Kenya's crops to compete favorably in the global market has caused the country diminished capacity to participate to participate in a productive and beneficial foreign exchange leading to a decreased food security (Nyangito & Okello, 1998). Globalization has in fact created dependency for Kenya. A country can only be said to have achieved complete food security if each and every individual is able to access and consume an adequate and balanced diet on a regular basis. It is clear for the case of Kenya that even after five decades of independence, this challenge of ensuring food and nutritional security remains. Liberalization for instance has been for Kenya less about freeing trade than about consolidating a corporate food regime. Although the concept of food security is considered fundamental to the neo-liberal approach in opening up national agricultural systems this has not been to the advantage of Kenya's food security.

Agriculture nonetheless, still offers the huge potential prospect for economic growth and development in Kenya given its contribution to Gross Domestic Product (GDP) and government revenue. Indeed, it is important to state that other factors that are not directly related to this study may have also had an impact to the current outcome in Kenya's food security, including; post-

harvest spoilage and wastage, infrastructure, pricing, cultural, social and political factors, and climate change. While this study has sought to explore the relationship between food aid, food production, food trade, and food security in Kenya, other studies should consider examining the extent to which regional trade in the East African region, food sovereignty, and fair trade in the could affect food security for third world countries like Kenya. Further, it may be imperative to institute an effective monitoring and evaluation framework for Kenya's food security programs.

References

- AidData.org (2013). <http://aiddata.org>. Washington, D.C.
- Alex, W.-N.& Gem, A.-K. (2007). *Distortions to Agricultural incentives in Kenya*. Agricultural Distortions Working Paper 45, World Bank. REPEC; ags: wbadwp; 485
- Alila P. & Atieno R. (2006). *Agricultural Policy in Kenya; Issues and Processes, Future Agricultures*, A paper for the Future Agricultures Consortium Workshop, IDS, Nairobi Kenya
- Berg, B.L. (2004). *Qualitative Research Methods for the Social Sciences*, 5th Edition, Pearson Education Inc. USA
- Danida (2005-2010). *Lessons learned Report*, Kenya Agricultural Sector Programme Support, Royal Dutch Embassy
- Elizabeth, A. (2011). *Gender IFIS and food insecurity: Case study of Kenya*, Gender Action Group, Washington DC USA
- Evans P. (1995). *Embedded Autonomy: States and Industrial Transformation*, Princeton University Press, New Jersey
- Food Aid Flows, (2011). *2010 Food Aid Flows, International Food Aid Information System*, World Food Program (WFP)
- FAO (Food and Agricultural Organization). (2009). *Declaration of the World Summit on Food Security, WSFS 2009/2, 16th November, 2009, Rome*
- FAO (Food and Agriculture Organization). (2003). *Trade and Food Security: Conceptualizing the linkages*, Rome, Italy: FAO
- FAO (Food and Agricultural Organization). (1996). *“Rome Declaration on World Food Security and World Food Summit Plan of Action”* 13-17 November 1996, Rome
- Friedmann H. (2005). *Feeding the Empire: Pathologies of Globalized Agriculture, Socialist Register, The Empire Reloaded*, Leo Panitch and Collin Leys, London: Merlin 2004
- Friedmann H. and McMichael P. (1987). *Agriculture and the State System: Rise and Fall of National Agricultures 1870 to the Present*; Sociologia Ruralis 1989 Vol. 29 No.2 p. 93-117
- Friedmann, H. (1982). *The Political Economy of Food: The Rise and fall of the Postwar International Food Order*, American Journal of Sociology, Vol. 88 pp. S248-S286, University of Chicago press

- Gerring, John. (2004). *What is a Case Study and What Is It Good for?* American Political Science Review, Vol.98, No. 2
- Gertz G. (2009). *Kenya's Trade Liberalization of the 1980's and 1990's: Policies, Impacts and Implications*, Carnegie Endowment for International Peace, Washington DC
- Gitonga A. (2013). *Food Security Warning in Kenya as maize production drops by 45%*, Standard digital newspaper, September 27 <http://www.standardmedia.co.ke>
- Gitonga A. (2013). *FAO warns of looming food shortage*, Standard digital newspaper, November 23 <http://www.standardmedia.co.ke>
- Gitu K. (2006). *Agricultural Development and Food Security in Sub-Saharan Africa; Building a Case of Kenya*, Rome
- GLOPOLIS, (2013). *Food Security and Agricultural Trade in Kenya: The Impact of the Economic Partnership Agreement (EPA) on Food Security of Poor Kenyans*, Prague Global Policy Institute-Glopolis
- Gow J. & Parton K. A. (1992). *The Evolution of Kenyan Agricultural Policy* (No.146500), Australian Agricultural and Resource Economics Society, Canberra Australia
- Gunder, F.G (1967). *Capitalism and Underdevelopment in Latin America: Historical Studies of Chile and Brazil*, New York
- Katrina M. (2011). *Kenya fails to manage its food crisis*, The Financial Times, July 31 www.ft.com world
- Kerer, Jan. (2013). *Background paper on the situation of Agriculture Insurance in Kenya with reference to International Best Practices, Adaptation to Climate change and Insurance*, Nairobi, Kenya
- Kevin, K. (2011). *US urge long term food aid for Kenya*, Daily Nation newspaper, August 13
- Madeley J. (2000). *Trade and Hunger- an Overview of Case Studies on the Impact of Trade Liberalization on Food Security*, Global Studier 4. Stockholm, Sweden: Forum Syd
- MAFAP (2013). *Review of Food and Agricultural Policies in Kenya*; MAFAP Country Report Series, FAO, Rome Italy
- Mahoney, J. (2004). *Comparative-Historical Methodology*, Annual Review Sociology.2004. 30:81-101
- Mahoney, J. & Rueschemeyer, D. (2003). *Comparative Historical Analysis in the Social Sciences*, Cambridge University Press, New York
- Manson, Katrina. (2011). *Kenya fails to manage its food crisis*, Financial Times Service, July 31

- McMichael P. & Mindi S. (2011). *Food Security Politics and the Millennium Development goals*, Third World Quarterly No 1. Pp.119-139, Routledge
- McMichael P. (2000). *The Power of Food, Agriculture and Human values* 17:21-33, Kluwer Academic Publishers, Netherlands
- McMichael P. (2009). *A Food Regime genealogy*, The Journal of Peasant studies, 36:1, 139-169, Routledge,, USA
- McMichael, P. (2008). *Development and Social Change: A Global Perspective*, Pine Forge Press, Los Angeles
- McMichael, P. (2005). *Global development and the Corporate food regime*, New Directions in the Sociology of Global development, Vol. 11, pp 269-303, Elsevier Ltd
- McMichael, Philip. (1996). “*Globalization: Myths and Realities*” Rural Sociology 61 (1): 25-55
- Merida, H., Amanda K., and Virginia D. (2014). *Methodology or Method: A critical review of Qualitative case study reports*, La Trobe University, Australia
- Mishkin, F. (2006). *The Next Great Globalization: How disadvantaged nations can harness their financial systems to get rich*, New Jersey: Princeton University Press
- Nyangito H. & Okello J. (1998). *Kenya’s Agricultural Policy and Sector Performance: 1964-1996*, Institute of Policy Analysis and Research, Nairobi Kenya
- Otero G, Pechlaner G. and Gurcan E. Can (2013). *The Political Economy of “Food Sovereignty” and Trade: Uneven and Combined Dependency*, Rural Sociology 78 (3) p. 263-328
- Policy Brief. (2011). National coordinating Agency for Population and Development, Policy Brief #19, Nairobi, Kenya.
- Ragin, Charles C. (1994). *Constructing Social Research: The Unity and Diversity of Method*, Pine Forge press, Thousand Oaks. USA
- Republic of Kenya. (2013). *Food Security Assessment Report*, Department of Crops Management, Ministry of Agriculture, Nairobi Kenya
- Republic of Kenya. (2011). *National food and Nutrition Security Policy*, Nairobi, Kenya
- Rudick, (2013). *Koru Kenya Tushirikiane “Kenya’s food exports vs food aid”* Mombasa, Kenya
- Schutt, Russell K. (2004). *Investigating the Social World: The Process and Practice of Research*, 4th Edition, Pine Forge press, Thousand Oaks, USA
- UN FAO. (2013). <http://www.fao.org/statistics/en/>. Rome.
- UN World Food Programme (2013). <http://www.wfp.org/fais/> Rome.

Will, R. (2011). *Was the Food Crisis in Kenya avoidable*, BBC News, Africa, August 10

World Bank (2013). *World Development Indicators*. <http://data.worldbank.org>. Washington. D.C.