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# The Nature, Extent and Causes of Food Insecurity in Sub-Saharan Africa

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# List of Acronyms

AGRA	Alliance for a Green Revolution in Africa
AoA	Agreement on Agriculture
CAP	Common Agricultura Policy
CPI	Consumer Price Index
EPAs	Economic Partnership Agreements
EU	European Union
FAO	Food and Agricultural Organization
FTAs	Free Trade Agreements
G8	The Group of Eight
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
LDCs	Least Developed Countries
NAFSN	New Alliance for Food Security and Nutrition in Africa
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
SAPs	Structural Adjustment Programmes
SSA	Sub-Saharan Africa
UK	United Kingdom
UNCTAD	The United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
US	United States
USDA	United States Department of Agriculture
WHO	World Health Organization
WTO	World Trade Organizations

## Abstract

Food insecurity in Sub-Saharan Africa (SSA) continues to exist, in spite of the rising awareness of the problem within and outside of the region. The traditional explanations tend to focus on such factors as the absence of the necessary technical expertise and corrupt administrations failing to liberalise food production and imports. Others, returning to themes developed in the traditional 'Dependency' literature, have pointed to the possibility that prevalent food insecurity in SSA serves the interests of those seeking to obtain plentiful and cheap supplies of the much-needed raw materials which the region possesses. This research paper considers the nature, extent and causes of food insecurity in SSA. The analysis shows (1) the problem of food security in SSA is extensive and has worsened over the recent past in contrast to most other developing countries, and (2) the source of the problem is the global and domestic institutional environments which condition food production and price in the region and which are shaped by the necessity of the regions continue role as a global provider of cheap raw materials for the developed world. The implication of the study is that a basic food self-sufficiency strategy is indispensable for attaining greater food security for the majority of the SSA populations, and their attempt to break free of the dependent divisions of labour imposed on them.

# Keywords

Food security, Sub-Saharan Africa, food production, food Price, food self-sufficiency, institution

## **Chapter 1: Introduction**

"It's important for our Nation to be able to grow foodstuffs to feed our people. Can you imagine a country that was unable to grow enough food to feed the people? It would be a nation that would be subject to international pressure. It would be a nation at risk. And so when we're talking about American agriculture, we're really talking about a national security issue." – US President George W. Bush, July 27, 2001

#### 1-1 Background

The present study focuses on the issue of food insecurity in Sub-Saharan Africa (SSA). The issue of food security has traditionally been discussed in the context of that of poverty and mal-nourishment of large proportions of population in developing countries. This is particularly true of the discussion of food security in SSA where around one in four persons is estimated to persistently suffer from hunger<sup>2</sup>, and nearly one in every two citizens is below the extreme poverty line<sup>3</sup>. SSA is also the only region in the world where extreme poverty has been rising (Figure 1).



Figure 1: Total population living in extreme poverty by world region

Source: OurWorldinData 2017

<sup>&</sup>lt;sup>1</sup> Cited in the United States Government Printing Office (2003: 920)

<sup>&</sup>lt;sup>2</sup> Although FAO changed the measurement of hunger in 2012, around one in three or four persons is estimated to suffer from hunger. FAO (2010) reveals the proportion of undernourished in total population in SSA was 34% in 1990-92, 33% in 1995-97, 31% in 2000-02, and 28% in 2005-07, whereas FAO (2015) slightly modifies: 33% in 1990-92, 30% in 2000-02, 27% in 2005-07, and 24% in 2010-12.

<sup>&</sup>lt;sup>3</sup> Extreme poverty is defined as living with per capita household consumption below 1.90 dollars per day (World Bank 2017). According to the World Bank Development Indicator (2017), SSA's extreme poverty headcount ratio of population is 54% in 1990, 58% in 1993, 58% in 1996, 56% in 2002, 50% in 2005, 47% in 2008, and 46% in 2010.

The notion of food security was first defined and used at the World Food Congress in 1974, in the aftermath of the world food crisis of the early 1970s, triggered by the global rise in world food prices. Prior to this increase in global food prices, food security had not been discussed officially at the global level. Since this time the issue has assumed centre stage in much of the literature on global agriculture, and becoming increasingly politicised due to its obvious linkages with poverty and malnutrition.

The question of food security in SSA has also been receiving increasing attention within and outside of the region alike. On the one hand, government of countries in the region have sought to obtain concessions with respect to the Agreement on Agriculture, particularly in respect of the Special Safeguards Mechanisms, to support their own attempts to improve food security in their countries in spite of objections that these would distort trade and be counterproductive in the long-term. On the other hand, the need to improve food security in this region has been accepted as an important imperative by many advanced countries that rely on the region for their raw material supplies if political instability is to be avoided. Indeed, this has been used as the rationale by the US government to provide considerable amounts of food aid to the region.

Underlying much of the debate, particularly with respect to the issue of food insecurity in SSA, is the question of why, in spite of the rising awareness of the problem, and even the above-mentioned efforts on the part of national and international bodies, food insecurity continues to exist. The traditional explanations, as we will see below, tend to focus on such factors as the absence of the necessary technical expertise and corrupt administrations failing to liberalise food production and imports. Others, returning to themes developed in the traditional 'Dependency' literature, have pointed to the possibility that the situation of food insecurity which prevails in SSA serves the interests of those seeking to obtain plentiful and cheap supplies of the much-needed raw materials which the region possesses. It is against the backdrop of this debate that following study on food insecurity in SSA is located.

#### 1-2 Objectives and Arguments

The objectives of this research are:

- (1) To consider the nature and extent of food insecurity in SSA
- (2) To explore the causes of food insecurity in SSA

The arguments which the research paper attempts to develop are;

- (1) That the problem of food security in SSA is extensive and has worsened over the recent past in contrast to most other developing countries.
- (2) That the source of the problem is the global and domestic institutional environments which condition food production and price in the region and which are shaped by the

necessity of the regions continue role as a global provider of cheap raw materials for the advanced countries including China.

### 1-3 Approach

This research starts with a literature review on food security, then provide some relevant background information, and analyses the nature, extent, and causes of food insecurity in SSA. In order to capture important trend in global economy and politics, the approach adopted in this research is a statistical analysis with secondary data. It includes simple data transformations and tabulation / graphing of data, to detect the major trends of food trade, production, and price. The principal sources of data are the FAO, IMF, The World Bank, UNCTAD, and WHO.

#### 1-4 Scope and Limitations

What this research tries to do is to deepen my understanding on the food security situation by answering the question: why has only SSA persistently suffered from food insecurity? The scope of this research is, therefore, limited to study SSA's situation in contrast with other regions, rather than specific individual countries within. In addition, by centring on global economy and politics, this research does not focus on socio-cultural dimension and micronutrient differences of food.

### 1-5 Chapter Outline

The structure of this research paper is as follows; Chapter 2 reviews the food security literature, most importantly contending definitions and measurements of the term. It also considers approaches to relevant issues related to the term. Chapter 3 provides background information on food production and trade practices in SSA, and the international institutional environment, and domestic food self-sufficiency policies in SSA. Chapter 4 explores the nature, extent and causes of food insecurity in SSA. Chapter 5, the conclusion, summarizes the main findings of this research.

## Chapter 2. Literature Review

It is important to review the principal definitions and measurements of food security and the causes of food insecurity in order to gain analytical and critical background to guide own research. The first and second sections of this chapter examine the definitions and measurements of food security, respectively, by focusing on the official definitions by the FAO. The third section considers the approaches to food insecurity, looking at supply and demand side.

#### 2-1 Definitions of Food Security

The term, food security, has been variously defined and interpreted in different academic scholarly disciplines and ideologies (Jones at al. 2013). Although food security is a multi-faceted concept<sup>4</sup>, we look into the lineage of the definitions put forward by the Food and Agricultural Organization (FAO) of the United Nations system and introduces how the concept of food security has entered. Our focus on FAO definitions is due to the fact these have been most widely accepted. It then attempts to identify limitations of the definitions by considering the question: 'why only SSA?'.

As noted at the outset of this research, the concept of food security was first used and defined officially at the World Food Congress in 1974 when in the global food price crisis. The initial focus on food security<sup>5</sup> was primarily on supply-side of food: the volume and stability of food supplies (FAO 2003a).

The FAO has since modified the definition of food security three times. In 1983, the organization added the dimension of secured access by vulnerable people to food<sup>6</sup>. In 1996, the FAO expressed the definition to include human rights perspectives<sup>7</sup> in the light of the 1994 UNDP *Human Development Report* which included food security as one of the main factors safeguarding human security. The definition was redefined into the current official definition in 2001 by the Committee on World Food Security:

<sup>&</sup>lt;sup>4</sup> One source states that between 1975 and 1991, 32 different definitions were used for food security (Maxwell 1996), whereas another source identified as many as approximately 200 different definitions for household food security (Maxwell and Smith 1992).

<sup>&</sup>lt;sup>5</sup> "Availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices" (United Nations 1975).

<sup>&</sup>lt;sup>6</sup> "Ensuring that all people at all times have both physical and economic access to the basic food that they need" (FAO 1983).

<sup>&</sup>lt;sup>7</sup> "Food security, at the individual, household, national, regional and global levels is achieved when all people, at all times, have physical and economic access to sufficient, safe and notorious food to meet their dietary needs and food preferences for an active and healthy life" (FAO 1996).

"Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO 2001).

Thus, recent definitions have placed the greater emphasis on demand side – the issues of access by vulnerable people to food – which is strongly reflected by the seminal study by Amartya Sen (1981)<sup>8</sup>. Food security can be described "as a phenomenon relating to individuals" (FAO 2003a: 29).

However, the FAO's definitions of food security still have limitations in terms of SSA's unique situation and food sources. The recent definitions of food security cover all individuals in the world including in advanced and developing countries. But the analysis at the individual level is too narrow to capture what political and economic forces contribute to malnutrition by maldistribution at the global level (Carey 1981). Moreover, food security does not distinguish sources of food – whether the food is grown domestically or imported (Clapp 2014). Indeed, the real concerns of many countries are domestic food production and its implications for their food security, economic development, and political stability (Clapp 2015b: 9). The appropriate definition of food security should consider the ability of domestic production for existing and future food needs of its population in the context of economic development and demographic shifts resulting from urban industrialization.

#### 2-2 Measurement of Food Security

Food security is generally described in terms of two dimensions: food availability<sup>9</sup> and food access <sup>10</sup> (FAO 2003a). Food availability is commonly associated with the supply-side indicators of food security, while food access reflects the demand side (Barrett 2010). Focusing on food availability and access, this section introduces the measurement of food security, and identifies its limitations.

Food availability, which was the initial focus for food security, can be measured by using calorie (FAO 2003a). Since the late 1870s when it was first mentioned in nutrition science, calorie has become a standard measurement unit, and made food and diet more "legible". A good example is the Green Revolution (from the 1930s to the late 1960s), which are regarded as successful in terms of caloric output. Carolan (2012) called this emphasis on food availability as "calorie-ization of food security". But this was far from adequate. This is because no matter how successfully agricultural output is raised, this cannot feed the world

<sup>&</sup>lt;sup>8</sup> Sen, A. (1981) Poverty and Famines: An Essay on Entitlement and Deprivation. Oxford: Clarendon Press.

<sup>&</sup>lt;sup>9</sup> Food availability: "The availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports" (FAO 2006)

<sup>&</sup>lt;sup>10</sup> Food access: "Access by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet" (FAO 2006)

unless it is well allocated. In other words, adequate food availability is necessary, but it is not sufficient to ensure universal access (Barrett 2010).

Food access is more difficult to measure because it is more related to individual wellbeing. This perspective is greatly influenced by the seminal study by Amartya Sen<sup>11</sup> (1981). Access is a multidimensional and elusive concept (Barrett 2010). Instead of measuring access, FAO estimates the number of undernourished people in the world in their annual report<sup>12</sup>. The number of undernourished people is derived from food balance sheets at the national level, nationally representative household survey, and official demographic data (FAO 2014); however, the figure is highly influenced by international politics. Since the FAO changed some parts of the assumptions of being undernourished<sup>13</sup> in 2012 report, the trend of the number of undernourished people was reversed (Figure 2). Underlying this revised result was the consideration of a Millennium Development Goal (MDG) target, reducing by half the percentage of people suffering from chronic hunger by 2015 (Lappé et al. 2013). Tomlinson (2013) also points out that FAO's simulations have some missing issues, such as nutrition transition and food waste.



Figure 2: The number of undernourished people in the world in the FAO report

Source: FAO 2010, 2013

Some analysts argue that following the international standard measurement is not useful to achieve food security. The food security framing is "obviously an ideal that no country could hope to reach" (Timmer 2004: 2). On the other hand, "there are a number of instances when pursuing policies to increase a country's own food production for domestic

<sup>&</sup>lt;sup>11</sup> Amartya Sen (1981) states: "Starvation is the characteristic of some people not having enough food to eat. It is not the characteristic of there being not enough food to eat. While the latter can be a cause of the former, it is but one of many possible causes"

<sup>&</sup>lt;sup>12</sup> 'The state of food insecurity in the world'. Rome: FAO

<sup>&</sup>lt;sup>13</sup> "Undernourishment has been defined as an extreme form of food insecurity, arising when food energy availability is inadequate to cover even minimum needs for a sedentary lifestyle. . . . Hence, the FAO indicator is designed to capture a clearly – and narrowly – defined concept of undernourishment, namely a state of energy deprivation lasting over a year" (FAO 2012: 50).

consumption may be beneficial both economically and politically" (Clapp 2015b: 1). By looking at most Asian countries which could lift the thread of hunger and famine between the middle of the 1970s and the end of the 1990s, Timmer (2000) points out that they had their own strategies which implied mainly two elements: economic growth and rice price stability. Given that rice is dominant in Asian diets, Asian countries' attempts to stabilize rice price has generally successful by boosting rice production and purchasing power of farmers, and having buffer their domestic rice price from the world price (Timmer 1989).

#### 2-3 Approaches to Food Insecurity

This section identifies the major causes of food insecurity in SSA, by looking into food availability and food access: supply side and demand side. It also attempts to identify problems of this conventional approach.

#### 2-3-1 Availability Approaches

Availability approach mainly deals with issues that are associated with efficiency in food production. We have repeatedly heard the call for the improved in food productivity to feed the people at global level. One of the core and oldest ideas of this perspective could be traced back to the 18th century Malthusian debate. His key assumption is that population grows exponentially, but food and other essentials only grow arithmetically, much more slowly, which implies that society tends to face the famine (or the situation of food deficit) in the long run (Gould 2009: 50). In contrast to Malthus' pessimistic scenario, Boserup's (1965) optimistic scenario showed that there is space to increase agricultural productivity by innovation, as evidenced by the Green Revolution which succeeded in doubling total food production in developing countries. Recently, the notion of low food productivity to feed people has gained a renewed interest in the wider policy debates, especially since the 2007-08 world food price crisis. At the High-Level Conference on World Food Security in June 2008 held under the auspices of the FAO<sup>14</sup>, Jacques Diouf, Director General of the organization, stated: "[G]lobal food production must be doubled to feed a world population currently standing at 6 billion and expected to rise to 9 billion by 2050" (FAO 2008: 17). Ban Ki-Moon, the Secretary-General of the UN, at the same meeting, addressed: "[W]orld food production must rise by 50 percent by 2030 to meet increasing demand". One of the key approach to meet these challenge, without raising environmental burden, is "sustainable intensification", which is defined as the production process of which "yields are increased without adverse environment impact and without the cultivation of more land" (The Royal Society 2009: 9). A number of observers, researchers as well as organizations uphold the idea of sustainable intensification of agriculture, maintaining that the world can produce more

<sup>&</sup>lt;sup>14</sup> 'High-level conference on world food security: The challenges of climate change and bioenergy' was held at the Headquaters of the FAO in Rome from 3 to 5 June 2008.

food efficiently for improving sustainability through scientific and technological innovation such as Genetically Modified foods (Godfray et al. 2010, Tilman et al. 2011).

However, the necessity to increase food supply at the global level does not address an important issue of food loss and waste. According to FAO (2011b), roughly one-third of food produced for human consumptions gets wasted and lost globally. If the wastage and loss could be served globally, the present global food production would be enough to feed around 3.5 billion people (FAO 2016). In this regard, food access could be a more pertinent issue in many countries. Dorosh (2002) looks at Asian countries and concludes that major cause of food insecurity is food access by individuals rather than food availability.

For Africa, recently, a new Green Revolution has gained a renewed interest by international organizations, as seen in the Alliance for a Green Revolution in Africa (AGRA) established in 2006 by the Bill and Melinda Gates Foundation and the Rockefeller Foundation, and the New Alliance for Food Security and Nutrition in Africa (NAFSN) launched in 2012 by the G8<sup>15</sup> governments. SSA region's population is projected to be more than double from about 800 million in 2005 to 1.8 billion by 2050. Crop production in SSA has been increasing, but this is largely due to the expansion of cultivated land. Yields of grain crops in SSA is a quite low level and have been stagnant (Hunt 2011). Fertiliser use in SSA has remained at very low levels, with less than 3 percent of global fertiliser consumption in 2006 (FAO 2011a). Under these circumstances, a new Green Revolution for Africa attempts to drive agricultural development, increase rural incomes, and contribute to national economic growth through technological change (Toenniessen et al. 2008).

On the other hand, there are a handful of critiques about this new approach. African peasant farmers and pastoralist organisations, the most prominent critics to AGRA, claim that expensive and foreign-controlled products include seeds, fertilisers, and pesticides that dangerous economically and ecologically (Koopman 2012). Thompson (2012) sympathized with the farmers who must buy the expensive AGRA-sponsored one-generation-only seeds that cannot be saved or cross-fertilized. Furthermore, this market-led technology adoption approach would be lead the future control of Africa's food system. Tansey and Rajotte (2008) argues that proprietary technologies in seeds and fertilizer are the source of profit, and that those are dominated by foreign private sector. The NGO GRAIN (2008) also points out that a few multinational companies occupy more than a half of the global seed market, and control smaller national seed companies with political connections by expanding networks of private agro-dealers.

<sup>&</sup>lt;sup>15</sup> G8: Canada, France, Germany, Italy, Japan, Russia, UK, US

#### 2-3-2 Access Approaches

In the access perspective, the causes of food insecurity are closely associated with individuals' poverty and social, economic, and political disenfranchisement (Barrett 2010). The enhancement of food accessibility emphasized different approach: for example, incomebased approach (Lipton and Longhurst 1989, Sibrian et al. 2007); entitlement-based and capability approach (Sen 1981, Dreze and Sen 1989, Crocker 2008); basic needs approach (Stewart 1985, Shue 1996, Kent 2005); and sustainable livelihoods approach (Chambers 1983, Ellis 2000, Scoones 2009). The crucial point in these approaches is that the unit of analysis is an individual / household.

Individuals' access to food also can be influenced directly and indirectly by policies (Sen 1986). In international politics, there are various influential suggestions for SSA to enhance access to food; SSA should improve small farmers' purchasing power by increasing their low competitiveness, gain benefits from low cheap imported food for individual's access to food by eliminating trade tariffs, and so forth. Although the first approach seems to be the one traditionally used to increase income to get out of poverty, it has reframed and gained a renewed interest in the context of agricultural sector by the World Bank's report (2008), *Agriculture for Development*. The report provides the outline of a strategy: SSA should achieve food security through rising incomes by improving smallholder competitiveness, and SSA should seek agricultural products in which the returns on investment are promising, such as cash crops:

"Maintaining international competitiveness in bulk agricultural commodity exports is a major challenge for many low-income countries, especially in Africa. Competitiveness is important, because exports of coffee, cocoa, tea, cotton, and other bulk commodities are their main source of foreign exchange" (The World Bank 2008: 122).

The ideas of producing cash crops for export could increase the farmers' gains compared with other products. However, this strategy of export orientation would potentially expose SSA to the higher risk of volatility in and downward pressure on the world commodity prices. Lines (2008) explains a recent case of the vanilla production in Madagascar, which produced around half of the world's vanilla. When the country experienced the reduction of one quarter of its vanilla production by cyclones in 2000, its international price soared from \$33 per kg in 2000 to \$450 in 2004, which encourage other countries, such as India, Papua New Guinea, and Uganda, to enter the market, and accordingly the price plummeted to \$20 - \$25 per kg by 2006. Flooding global markets of agricultural products with substitutes can seriously depress their market price.

The argument that countries can benefit from cheap imported food to enhance access to food by individual consumers has increasingly dominated the international arena. For instance, Anderson et al. (2006), McCalla, A. and Nash, J. (2007), and the World Bank (2008) stress the merit of trade liberalization in terms of food prices and GDP in developing

countries. Moreover, this perspective was clearly voiced by the former Director-General of the World Trade Organization (WTO) as follows:

"Clearly, international trade was not the source of the food crises. If anything, international trade has reduced the price of food over the years through greater competition, and enhanced consumer purchasing power. International trade has also brought about undisputable efficiency gains in agricultural production" (Lamy 2011).

However, whether trade is beneficial or not is highly dependent on the discourse context, i.e, who is speaking for what purpose. Furthermore, Chang (2009) argues that levels of economic development can affect whether or not trade can provide an opportunity for food security. He highlights the strategies of Netherlands and Denmark, which enjoy gaining higher income and greater capacity to import food by importing cheap grains for their livestock that is processed and exported as cheese, butter, and bacon. On the contrary, countries at low levels of economic development cannot shift agricultural production from basic staples for local consumption to cash crops for export because fluctuating incomes and food prices would disable some people to get sufficient food to live on.

# Chapter 3: Food Production and Trade in SSA and Influential Institutional Environment

This chapter provides an overview of food production and trade in SSA which are of greatest relevance to the issue of food security / self-sufficiency. Historically, providing adequate food, staples in particular, to the people is crucial in the nation-building process in order to stabilize the government and support for industrialization<sup>16</sup>. The first section of this chapter explains key features of food production and trade in SSA, distinguishing between staple crops and cash crops. The second section introduces the influential institutional environment on food production and trade.

#### 3-1 Key Features of Food Production and Trade in SSA

Agricultural production is a source of livelihood for the majority of rural people in SSA. It employs more than half of the total labour force in SSA (IMF 2012). Agriculture value added per worker in SSA has increased; however, it is still around one-fourth of the world's average (Rakotoarisoa et al. 2011: 29). Between 1961 and 2007, total food production growth per year was 2.7 %, but on the per capita basis it was only 0.1 % (Ibid.).

SSA has been increasingly dependent on imports of staple crops. The value ratio of imports to domestic supply tripled from 5.6% in 1991 to 15.2% in 2013 (Figure 3). Especially, import value of wheat and rice rose more than elevenfold and eightfold, respectively<sup>17</sup>. Virtually all imports (99%) of wheat and rice are from outside SSA. Between 1986 and 2013, 44% of wheat was imported from France and the U.S, and 34% of rice was from Thailand alone (FAOSTAT 2017). Incidentally, other staple crops including beans, cassava, maize, millet, and sorghum are largely produced domestically, and a small amount of excess or shortage of these staples are traded within SSA<sup>18</sup>.

<sup>&</sup>lt;sup>16</sup> For example, during the period of its global hegemony Britain successfully imported food cheaply from its colonies. The imported cheap food consumed by the British industrial working class allowed companies to pay low wages and accumulate capital. This outsourcing practice of food reproduced a colonial division of labour between Britain and their colonies, and underwrote it's "workshop of the world" (McMichael 2009: 141).

<sup>&</sup>lt;sup>17</sup> Between 1991 and 2013, import value of wheat rose from US\$ 403 million to US\$ 4,552 million, and it of rice from US\$ 731 million to US\$ 6,093 million (FAOSTAT 2017).

<sup>&</sup>lt;sup>18</sup> Maize – white maize – in Eastern and Southern Africa, and cassava, millet, and sorghum in West and Middle Africa were traded intra-regionally. Between 1998 and 2013, the average contribution of trade within Eastern and Southern Africa in maize was 86%. During the same period, the average contribution of trade within Middle and Western Africa in millet and sorghum are 99% and 98%, respectively (FAOSTAT 2017).





Source: Calculated by using the data from FAOSTAT 2017

On the other hand, cash crops such as cocoa, coffee, and tea have been one of the major sources of export earnings in SSA. These exported-oriented crops are shipped mostly to many destinations beyond SSA. Between 1986 and 2003, the total value contribution of cash crops including cocoa, coffee, and tea in export outside SSA accounted for around 97% (FAOSTAT 2017).

#### 3-2 Influential Institutional Environment on Food Production and Trade

The dominant regime of production in trade of food has shifted over time: Corn Law in Britain (1815–1846), free trade in European countries (1846–1880), ad hoc protectionism (to 1945), food exceptionalism under General Agreement on Tariffs and Trade (GATT) (1947–1994), liberalization under the WTO Agreement on Agriculture (1995–present) (Clapp 2015a). Those shifts have influenced the production and trade in agriculture. First, this section briefly maps out the global institutional environment since around 1980s when many SSA countries started reducing their agricultural support. It then looks into food self-sufficiency policies in SSA.

#### 3-2-1 Global Institutional Environment

Under GATT (1947 – 1994), agricultural products were considered as an exception to international trade rules and protected by many governments. However, since around 1980s, government supports for agriculture have been reduced gradually in many countries, especially in developing countries. In the 1980s and 1990s, many developing countries were faced with tremendous external debts, and they were obliged to accept the structural adjustment programmes (SAPs) imposed by the World Bank and the IMF. The programmes enabled indebted countries to pay off their debts, but at the same time they prescribed and imposed a set of policies to these countries. With regards to agriculture, the typical policy prescriptions required aid-recipient countries to liberalize the sector, reduce subsidies, reduce barriers to food imports, devaluate currency, and remove export tax in order to make their products, mainly cash crop commodities, more competitive in the world markets.

Agricultural trade liberalization was one of the central dictums in the Uruguay Round (1986-1994), and subsequently was embodied in the Agreement on Agriculture (AoA). It includes three main areas: market access, export subsidies, and domestic support. Key elements of enhancing market access are cutting tariffs and removing quantitative restrictions on agricultural imports. Advanced countries were slated to reduce tariffs by a third on average over six years, developing countries by a fourth over ten years, and Least Developed Countries (LDCs) were exempted from any cuts. Advanced countries also had to import a minimum of 3 percent of domestic consumption in 1995, increasing at least 5 percent by 2005 to provide minimum market access for other countries' exports. The AoA also required developed countries to reduce the subsidies for agricultural export by at least one third over six years, developing countries by one quarter over ten years. Regarding domestic support for farmers, advanced countries had to reduce domestic subsidies by 20 percent over six years, developing countries by one quarter over ten years. Regarding domestic support for farmers, advanced countries had to reduce domestic subsidies by 20 percent over six years, developing countries by 13 percent over ten years, and LDCs were exempted from the requirements. In the WTO terminology, agricultural support measures are categorized into three boxes: amber box, blue box, and green box (Table 1).

Box	Explanation
Amber Box	All domestic support measures considered to distort production and trade (Article 6 of the AoA) except those in the blue and green boxes. These include measures to support prices, or subsidies directly related to production quantities.
Blue Box	'Amber box with conditions' — conditions designed to reduce distortion. Any support that would normally be in the amber box, is placed in the blue box if the support also requires farmers to limit production (details set out in Paragraph 5 of Article 6 of the AoA). At present there are no limits on spending on blue box subsidies.
Green Box	Support measures that must not distort trade, or at most cause minimal distortion (paragraph 1). They have to be government-funded (not by charging consumers higher prices) and must not involve price support. They tend to be programmes that are not targeted at particular products, and include direct income supports for farmers that are not related to (are "decoupled" from) current production levels or prices. They also include environmental protection and regional development programmes. 'Green box' subsidies are therefore allowed without limits, provided they comply with the policy-specific criteria set out (in the WTO AoA)

Table 1: The WTO three-box categorization of agricultural support measures

Source: Based on WTO website accessed on 26th September 2017: https://www.wto.org/english/tratop\_e/agric\_e/agboxes\_e.htm

Although such trade barriers were reduced in principle by all countries (with the exception of LDCs), there were still huge gaps between rich and poor countries in terms of support capacity for domestic agricultural sector. At the occasion of handling the Doha Round in 2001, WTO members agreed to accept special and differential treatment requested by developing countries:

"We agree that special and differential treatment for developing countries shall be an integral part of all elements of the negotiations and shall be embodied in the schedules of concessions and commitments and as appropriate in the rules and disciplines to be negotiated, so as to be operationally effective and to enable developing countries to effectively take account of their development needs, including food security and rural development" (WTO 2001).

Since then, domestic food security policies have become one of the most contentious issues in the light of their effects on trade. At the Tenth WTO Ministerial Conference in 2015 in Nairobi, all WTO members finally were agreed to abolish export subsidies for agriculture. Yet, some issues such as public stockholding for food security purposes and special safeguard mechanisms for developing countries are still remain unsettled.

SSA countries are signed the Economic Partnership Agreements (EPAs) with the EU, and the Free Trade Agreements (FTAs) with China since the beginning of the new millennium. Although agricultural tariffs of SSA countries is already the lowest level of the

world<sup>19</sup>, those agreements furthermore cut the tariffs. Since SSA's largest agricultural export destinations and import origins is the EU, with around 51% and 29%, respectively (Rakotoarisoa et al. 2011), the impact of EPAs with the EU is significant for SSA's agricultural sector.

#### 3-2-2 Domestic Food Self-Sufficiency Policies in SSA

In addition to international institutional environment, domestic food self-sufficiency policy also influences on food production and trade. Until the 1970s, the notion of food self-sufficiency was widely accepted in both rich and poor countries (Chang 2009). For example, in the 1960s, attaining a high degree of national food self-sufficiency was one of the major goals of the Common Agricultural Policy (CAP) for European Economic Community<sup>20</sup> (Margulis 2017: 36). For developing countries, achieving food self-sufficiency was recommended internationally as indicated in the Resolution II of the 1974 World Food Conference<sup>21</sup> (O'Hagan 1975: 360).

From 1980s to the beginning of 2000, food self-sufficiency was outmoded policy in international policy circles (Clapp 2016b). During that time, food price was the historical lowest-level and trade liberalization became popular among countries. For SSA, many countries undertook SAPs that encouraged to focus their production on export crops and reduced the government support of basic food production. These economic and political structural reforms in SSA were justified by the 1981 World Bank report, *Accelerated Development in Sub-Saharan Africa: An agenda for action,* which is well known as the Berg report.

Against SAPs, Africa made their own food self-sufficiency policies. This includes 'The Lagos Plan of Action for the Economic Development of Africa 1980-2000' and 'The Final Act of Lagos' (1980), 'Africa's Priority Programme for Economic Recovery 1986-1990' (APPER) which later became 'United Nations Programme of Action for Africa's Economic Recovery and Development' (UN-PAAERD) (1986), 'The African Alternative Framework to Structural Adjustment Programme for Socio-Economic Recovery and Transformation' (AAF-SAP) (1989), 'The African Charter for Popular Participation for Development' (ACPPD) (1990), and 'The United Nations New Agenda for the Development of Africa in the 1990s' (UN-NADAF) (1991). With regards to agricultural sector and the issues of undernutrition, these plans stress the need for African countries to enhance food self-sufficiency, diversify agricultural production, and set up national strategic food reserves.

<sup>&</sup>lt;sup>19</sup> Average applied agricultural tariffs in SSA is around 12.5%, while those in OECD countries and Europe are around 17% (South Centre 2010).

<sup>&</sup>lt;sup>20</sup> CAP built up their support price schemes to increase domestic grains production.

<sup>&</sup>lt;sup>21</sup> "...the maximum possible degree of self-sufficiency in basic foods is the fundamental approach to the solution of the food problems of developing countries" (O'Hagan 1975: 360).

However, their strategies were not accepted by international organizations and donors. For example, the Berg report (1981) was a counterargument to the Lagos Plan of Action (1980). The former endorsed outward looking policies to accelerate international trade, while the latter expressed inward looking policies to be self-reliant. Similarly, AAF-SAP and ACPPD were prepared to propose alternatives solutions to SAPs; however, these were not accepted by the World Bank and IMF. Moreover, these plans were not carried out actively by African leaders.

Although food self-sufficiency policy has been criticized over last three decades, the 2007-08 food price crisis caught many countries' attention of food self-sufficiency policy. For SSA, as seen in Chapter 2-3, 'New' Green Revolution has gained a renewed interest. The point to note here is that this initiative emphasises on private investment for complementing public investment<sup>22</sup>.

<sup>&</sup>lt;sup>22</sup> European Parliament Think Tank (2015) explains it clearly as follows: "The New Alliance for Food Security and Nutrition in Africa (NAFSN) was launched in May 2012 under the auspices of the G8. Its aim is to attract private investment in agriculture, to complement public investment, by creating the conditions that will allow the countries concerned to improve agricultural productivity and develop their agrifood sector." (European Parliament Think Tank 2015 :4)

## **Chapter 4: Analysis**

This chapter aims to explore (1) the nature and extent of food insecurity in SSA, and (2) the causes of food insecurity in SSA. The first section of the chapter looks at the nature and extent of food insecurity in SSA. As argued in Chapter 2, the standard definitions and measurements of food security are limited and problematic for this purpose. Hence use will be made of the alternative definition and measure alluded to in that chapter. The second section then considers alternative explanations of causes (alternative to what is typically found in the literature) of food insecurity in SSA, paying specific attention to the global and domestic institutional environments which condition food production in the region and which are shaped by the necessity for the region to continue its long-standing role as a global provider of cheap raw materials.

#### 4-1 Nature and Extent of Food Insecurity in SSA

As noted in chapter 2, the appropriate definition of food security should be the ability of domestic production to meet existing and future food needs of its population in the context of the rapid growth of the economy and a possible shift in persons to the urban centres in the context of a major industrialisation effort. It was argued that in this context the appropriate measure of the nature and extent of food security should be; food expenditure in relation to income, the breakdown of this expenditure on basic food items and other foods, and the per capita calorie intake of the population.

Considering food expenditure relative to income first, it may be seen that many SSA countries exhibit high shares of food expenditure to income (see Figure 4). In SSA, the expenditure implies that basic food prices relative to income is high. This is because basic food contributes the largest share of total expenditure in SSA countries (Figure 5). This perspective is often used in explaining the impacts of the increase of basic food price on the number of hunger victims in SSA (OECD 2008; FAO 2009; Compton et al. 2010). It is also important to note that nearly one in every two persons live in the extreme poverty.



Figure 4: Average food expenditure ratio relative to income in different countries The ratio of food expenditure to income

Source: USDA Economic Research Service (2005 – 2015)



Figure 5: Breakdown of food expenditure ratio in SSA countries in 2010

Source: The World Bank Global Consumption Database accessed on 26th September 2017: http://datatopics.worldbank.org/consumption/

Basic food plays the critical role in terms of not only expenditure but also calorie intake. Staple crops have been the largest component of the total calorie intake for people in SSA including subsistence oriented people. Around half of calorie intake in SSA has been from cereals between 1965 and 2005 (Rakotoarisoa et al. 2011). In Zambia, for example, maize, cassava, and wheat make up around 69 percent of the average daily calorie intake (Leete et al. 2013). On the other hand, SSA is the only region where calorie intake per capita has been continuously at the lowest and stagnant levels, in contrast to other developing regions, such as Latin America and the Caribbean, South Asia, and East Asia (Figure 6). The amount of basic food people eat would not have been increased in SSA.



Figure 6: Calorie intake per capita and per day in different regions

Source: WHO 2003

From the above, SSA's unique situation as a region can be summarised as follows: the more widespread poverty than any other regions of the world, the persistently lowest calorie intake, the highest-level of basic food price relative to income in the world. But, why has SSA alone suffered so long, and why has its situation been deteriorating and not improving? Given a variety of economic and political dimensions, the causes of SSA's difficulties must be result in the light of its position in the context of global economy and politics.

### 4-2 The Real Causes of Food Insecurity in SSA

This section explores the real causes of food insecurity in SSA, focusing on the global and domestic institutional environments. It first examines the importance of the region as a global provider of cheap raw materials to advanced countries including China. It then looks at the international and domestic institutional structures which undermine the ability of the region to produce its own food, impacting negatively on domestic food production and prices of basic food items. The section ends with a consideration of policy space for the SSA region to do something about their food insecurity situation given their position in the global power asymmetry.

#### 4-2-1 Suppling Raw Materials to the Global Economy and Trade Agreements

In order to capture the general character of role of the SSA region as a raw material supplier, let us consider the following tables which indicate the dependence on primary exports of different regions and their shares in the value of total world exports between 1982 and 2015. What the tables show is that the value of export share for the SSA region is extremely small while most of the dynamism of their economies rests of these exports. This suggests, as numerous authors have claimed in the past, that the region's wealth is being used to underwrite the prosperity of other parts of the world, to the obvious detriment of the region.

	1			T	1		2			
	Agricultural raw materials		Food		Fuels		Ores and metals		Primary commodities	
	1975- 1979	2000- 2004	1975- 1979	2000- 2004	1975- 1979	2000- 2004	1975- 1979	2000- 2004	1975- 1979	2000- 2004
Sub-Saharan Africa	7.1	4.7	24.2	14.7	35.7	37.6	9.7	7.8	76.7	64.9
North Africa and Middle East	4.9	0.9	10.0	5.7	72.6	71.0	6.0	1.8	93.6	79.5
South Asia	7.6	1.3	33.2	12.0	1.3	4.2	6.9	2.9	49.1	20.5
Latin America and Caribbean	5.2	2.1	37.2	16.6	23.1	17.5	11.9	6.1	77.4	42.3
Low-income countries	7.9	2.9	29.2	15.5	23.8	28.2	6.8	3.9	67.6	50.4
Middle-income countries <sup>a</sup>	6.1	2.1	21.0	9.4	32.2	17.9	5.3	4.3	64.6	33.6
High-income countries	3.9	1.7	11.2	6.4	8.1	6.2	3.6	2.4	26.7	16.6

Table 2: Extent of dependence of exports on primary commodities

Note: The classification of countries by category follows the World Bank, World Development Indicators, 2006. See appendix for variables description.

a Due to changes in the classification of countries by income category, for the middle income category 1980-1984 data replace the 1975-1979 data.

Table 3: World export (goods and services) value shares in different regions Average world share of exports of goods and services (BoP, current US\$)

	1981-1985	1986-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2015
Euro Area	30.4%	35.4%	33.7%	30.9%	30.5%	28.2%	25.0%
North America	16.2%	16.2%	16.5%	17.1%	14.9%	12.4%	12.3%
East Asia & Pacific	11.6%	16.6%	21.4%	23.6%	24.1%	26.4%	29.7%
SSA	2.7%	2.0%	1.6%	1.5%	1.6%	2.0%	2.0%
SSA (excl. South Africa and Nigeria)	1.2%	1.0%	0.8%	0.7%	0.8%	1.1%	1.2%

Source: World Bank Development Indicators 2017

It is of note that this natural resource dependent production structures found in SSA countries is the legacy of colonialism. It is a production structure that has not changed much from colonial times, and notwithstanding the attainment by these countries of political independence some half a century ago. At least 30 SSA countries<sup>23</sup> depend for more than half their total export earnings on the export of commodities (Razzaque et al. 2007: 8), with only a single or a few commodities contributing to the majority of export earnings in many

<sup>&</sup>lt;sup>23</sup> Countries (the average percentage of commodity dependence in 1980, 1985, 1990, and 2000): Burundi (92%), Uganda (92%), Ethiopia (90%), Niger (90%), Rwanda (89%), Zambia (89%), Malawi (88%), Madagascar (81%), Congo, D.R. (80%), Guyana (80%), Gambia (79%), Guinea-Bissau (79%), Guinea (76%), Somalia (73%), Cote D'Ivoire (71%), Ghana (71%), Tanzania (71%), Chad (70%), Mozambique (68%), Burkina Faso (65%), Kenya (65%), Togo (65%), Comoros (64%), Mali (64%), Central African Republic (63%), Sudan (60%), Cameroon (59%), Swaziland (57%), Senegal (55%), Sierra Leone (50%)

SSA countries. For example, more than a half of export earnings of Burundi, Ethiopia, and Uganda come from coffee, from cocoa in the case of Cote d'Ivoire, from copper in the case of Zambia, crude oil in the case of Nigeria, Anglola, Gabon, and Republic of Congo (see Tale 4 below).

Commodities	50% or more	20-49%	10-19%
Tea			Kenya, Rwanda
Coffee	Burundi	Rwanda	
	Ethiopia		
	Uganda		
Cocoa	Cote d'Ivoire		Cameroon
	Ghana		
Tobacco	Malawi		
Vanilla		Comoros	
Cotton		Benin	Burkina Faso
		Chad	
		Mali	
Timber		Equatorial Guinea	Gabon
			Ghana
Crude	Angola	Cameroon	
petroleum	Gabon	Equatorial Guinea	
	Nigeria		
	Republic of Congo		
Gold		Ghana	Mali
Copper	Zambia		D.R.Congo
Uranium	Niger		
Bauxite	Guinea		
Iron ore		Mauritania	

Table 4: Large share of export earnings items from a single commodity in SSA

Source: Cashin et al. 1999: 424

International and regional free trade agreements are endorsed as useful in strengthening SSA's economic fundamentals while in essence they are mechanisms for other countries to tap raw materials from SSA. SSA's degree of export orientation and import penetration has been high; SSA imports are largely composed of final consumer goods, capital equipment and many intermediaries are primarily destined for commodity extraction (Morris and Fessehaie 2014). Tariffs in SSA countries have been reduced due to SAPs particularly in the 1980s and the 1990s, international trade agreements such as GATT and the WTO, and regional trade agreements such as the EPAs between the EU and African countries and the FTAs between China and Southern African countries since the beginning of the new millennium. For example, the conditions of the EPAs include zero tariffs on 70-80% of all tariff lines (South Centre 2010). Whereas SSA countries aimed to enjoy zero tariffs to ensure the market access to the EU for their key export commodities<sup>25</sup>, they are increasingly more dependent on foreign manufactured products. Increasing deficit in manufactured goods in SSA is hard to balance this significant deficit by surpluses in primary products (UNCTAD 2016). In addition, there are only less than 14% out of EU local production – 5,035 different

<sup>&</sup>lt;sup>24</sup> Annual average of value export between 1992 and 1997

<sup>&</sup>lt;sup>25</sup> Cameroon for banana, Cote d'Ivoire for bananas and cocoa, Lesotho for textiles, Seychelles for fish, and Botswana, Swaziland and Zimbabwe for beef and veal (South Centre 2010 :7)

tariff products – where Africa has more competitive to Europe (South Centre 2012). For example, EU's the dairy products, such as milk powder, have been displacing milk producers in Tanzania and Kenya, subsidized tomato paste from Italy have been destroying tomato producers in Ghana and Senegal. On the other hand, 50 -70% of exports from SSA to the EU are made up of only one primary commodity – gold and diamonds accounting 96% of Botswana's exports, petroleum is 90% of Nigerian exports, coffee is 67% of Burundi's exports (South Centre 2010).

# 4-2-2 Shaping Domestic Basic Food Production and Price by Foreign Initiatives and International Institutions

While recognising that the provision of certain staple crops are essential for a country to maintain and improve its living standards, the domestic supply of these crops has been poor and even deteriorating over time in SSA. Figure 7 shows that the average grain yield in SSA has been persistently among the lowest in the world. As a result, the dependence on this region on imports of these basic food staples has been increasing, even more rapidly than the population growth<sup>26</sup> (Rakotoarisoa et al. 2011). Far from having a dampening impact on domestic food prices, prices of basic food stuffs (grains) have continued to be relatively high. As suggested above, this deterioration in basic food security is no accident. Rather it has been shaped by global economic forces and the resulting international pressures exerted on SSA economies.





 $<sup>^{26}</sup>$  Between 1980 and 2007, the total net food imports in real term increased at 3.4% per year, and population growth at 2.6% per year (Rakotoarisoa et al. 2011: 20)

#### (1) Decreasing domestic food production and food aid

"We have got to look upon America's food abundance, not as a liability, but as a real asset... Wise statesmanship and leadership can convert these surpluses into a great asset for checking communist aggression. Communism has no greater ally than hunger; and democracy and freedom has no greater ally than an abundance of food." – US Senator Hubert Humphrey, July 16, 1953<sup>27</sup>

One of the most important of the international forces which have undermined food security in the region is food aid. More specifically, the U.S. aid, since Title II Food Aid of the Agricultural Trade Development and Assistance Act (Public Law 480) was enacted in 1954, the world's largest aid has been a geopolitical weapon in the Cold War (Friedmann 1982).

Indeed, food aid had a negative influence on domestic food production and created new tastes in SSA. It is documented that while food aid flows into SSA rose nearly fivefold between 1970 and the mid-1980s, per capita food production had been decreased in the corresponding period (FAOSTAT 2017). Agricultural self-sufficiency in Africa also fells from 98% in 1961 to 79% in 1978 (McMichael 2010: 65). Abdulai and Barrett (2005) find that food aid creates disincentive in recipient food production, as observed in rural Ethiopia. Food aid also created tastes for new food. For instance, wheat food aid to West Africa where the unfavourable climate prevents its local production has intensified wheat import significantly, from 1,415 million tonnes in 1990 to 7,126 million tonnes in 2013 (FAOSTAT 2017).

# (2) Shift in domestic production away from basic food production in agriculture and international institutional environment

A second factor undermining food security in SSA has been the incentive structures inducing a shift in agricultural production towards export-oriented cash crop production, especially since the early 1990s. Figure 8 provides data to support this contention. It shows that in both absolute and per capita volume terms there has been a significant shift towards cash crop production and away from basic food production in the region since the early 1990s.





<sup>&</sup>lt;sup>27</sup> Cited in Ruttan (1990: 1)

The above-mentioned shift in SSA taken place in the context of economic and policy reforms. Although most SSA countries had the state-led agricultural policy from the time of independence to the early 1980s, SAPs dismantled much of state intervention in agriculture (Adam 1994). In the 1980s, around 241 structural adjustment programmes were designed and implemented in the region, with wide range of policy instruments including credit policy, interest rates, exchange rate policy, trade liberalization, privatisation, price mechanism, and budget deficit reduction (Mlawa and Green 1996). Especially, the reduction in tariffs for commodity trade, the cut in subsidies for food production, and privatization of public services in agriculture contributed to the diminishing government control, thereby supporting the shift in agricultural production away from basic food.

Many SSA countries decreased the tariffs for commodity trade dramatically in the 1980s. For example, Tanzania experienced that commodities the government control its tariff were reduced from 400 to only 23 commodities in the early 1980s, which constitute less than 15% share of the CPI basket (Geest and Kottering 1994). Accordingly, the volume of export of cash crops rose dramatically; tea increased from 11 thousand tonnes to 15 thousand tonnes and coffee from 39 thousand tonnes to 61 thousand tonnes between 1988 and 1990 (FAOSTAT 2017).

Fertilizers is one most important agricultural input for food production. However, in 16 out of the 29 countries which implemented policy reforms between 1980 and 1991, fertilizer subsidies was reduced or eliminated (Mlawa and Green 1996). For example, after the removed of maize subsidy in Zambia in January 1989, this staple's production sharply declined from 1,894 thousand tonnes in 1988-89 to 1,095 thousand tonnes in 1990-91, and raised the production of inferior substitutes such as cassava and millet. Especially, notable was the production of cassava, which rose by 87% between 1988 and 1999 (FAOSTAT 2017).

Many SSA countries privatized their public service in agriculture<sup>28</sup>. But the flip side of it is that this reform shaped domestic food self-sufficiency policy. For example, Zambia lost its government control on production and consumer subsidies on maize by dissolving the National Agricultural Marketing Board which controlled marketing boards mainly in maize, and transferred of their functions to the Zambian Cooperative Federation and the Nitrogen Company of Zambia in 1989.

#### (3) High and volatile food price and international institutional settings

One of the important consequences of this shift in production towards cash crops and away from basic food has been the relative rise in prices – further undermining food security. Figures 9 and 10 provide the necessary data to support this contention. Figure 9

<sup>&</sup>lt;sup>28</sup> By the end of the 1980s, more than 35 state-owned enterprises in agriculture in SSA countries including Central African Republic, Cote d'Ivoire, Ghana, Mauritania, Senegal, Sierra Leone, Somalia, Zaire, and Zambia had been completely privatized (Candoy-Sekse 1989).

provides a comparison of the food price index<sup>29</sup> for the region (the food price index assigning a high weight to the prices of basic food items) and the price indices of cash crops produced and exported by countries in the region over the period 1993 - 2013. It shows a considerable divergence between the two, with domestic food prices rising considerably more than those of cash crops exported by the region.



Figure 9: Consumer price and cash crops price index in SSA (1993=100)

Source: Calculated by using data from FAOSTAT 2017, UNCTADstat, and World Bank Development Indicators 2017

Figure 10 provides a comparison of annual consumer price inflation of the SSA region with the result of the world and the OECD group of countries. It may be seen that inflation (of basic consumer goods) in the SSA region is consistently higher than in the rest of the world, which, in turn, is higher than in the OECD region.



Figure 10: Annual CPI in SSA, OECD members, and World (%)

Source: World Bank Development Indicator 2016

<sup>&</sup>lt;sup>29</sup> We are aware that basic food items occupy an overwhelming portion of consumer budget in SSA. This implies the overall rise of consumer price index reflects the similar measurements of price indices of basic food items

One added to point to note here is that there has been a decrease in the role that the governments in SSA play in stabilizing food prices thereby aggravating the problems of food insecurity. At the global level, the agricultural budget has increased over the last decades. For instance, between 1980 and 2010 the East Asia and Pacific region and South Asia region increased their real agricultural expenditures per capita nearly seven-hold and four-fold, respectively, but SSA declined by 25% (Anisimova 2016). SAPs in SSA particularly in the 1980s reduced significantly government budgets for agriculture, including subsidies for production by shutting down their marketing boards. This market-based solution implies a total decontrol of food prices by governments.

Thus, there has been a widening gap in the degree of subsidies between SSA and other regions of the world. For example, while the total agricultural support in 2000 by the EU, the largest destination of African agricultural exports, was around US\$ 108 billion (OECD Date), the total public support for agriculture in SSA was only 4 billion (Fan and Saurkar 2006). Annual public expenditure per capita in SSA has been considerably at the low levels (Figure 11).



Figure 11: Public agriculture expenditure per year and per capita Public Expenditure in Agriculture

Source: Calculated by using data from Fan and Saurkar (2006), FAOSTAT 2017, and OECD Date 2017

Total farm subsidies in the OECD countries was around US\$ 328 billion in 2000 (OECD Data). Although OECD countries, especially the U.S. and the EU, successfully reduced their producer support payment as a percentage of farm revenues significantly, their total support to food and agriculture has not decreased, even increased. The major reason as pointed out by Clapp (2016a) is a great deal of shifting their subsidies from the "amber box" into the "green and blue boxes" by the U.S. and the EU; while the US decreased its amber box subsidies from around US\$ 6.2 billion in 1995 to US\$ 4.7 billion in 2011, its green box subsidies climbed from US\$ 46 billion to over US\$ 125 billion during the same period. Similarly, the EU decreased its amber box subsidies from  $\in$ 50 billion in 1995 to  $\in$ 6.5 billion in 2010, while its green box subsidies increased significantly from  $\notin$ 9.2 billion to  $\notin$  68 billion. There are also various loopholes in the AoA that some countries can continue to increase their agricultural support. A clear example is the significant trend of decoupled direct aid payments and expanded rural development spending in the CAP of the EU. While the CAP budget for direct aid payments has been reduced significantly since 2007, their total budget has been increasing<sup>30</sup>. Goodison (2011: 6) explains the EU viewpoint as follows: "[T]he absence of agricultural support in the EU would not drastically affect the overall level of production but that it would affect the territorial and environmental balance of production".

#### 4-2-3 SSA's policy space

Are there any policy space for SSA countries to implement policies for trade protection and domestic support without being constrained by WTO rules? Technically, these policies are possible, but not practical. Matthews (2015) argues that developing countries can increase import protections up to bound tariff levels, and increase domestic support by using Green box policies and policies in the development box<sup>31</sup>. In reality, however, these policies have not been used effectively by SSA countries. A clear example is tariffs. While developing countries committed to cut their bound tariffs by 24% over ten years in the AOA, this commitment did not require any reduction in applied tariffs over the period. However, indeed, many developing countries have continued to cut their applied tariffs. For example, Senegal reduced their applied tariff from 65% to 20% over the period. Tariffs reductions in most cases have been pursued in the context of exchange rate adjustment (FAO 2003b).

Incidentally, SSA countries excluding South Africa have not involved in the process of dispute settlement at all (Figure 12). The major reasons as pointed out by Mosoti (2003) are that dispute settlement is prohibitively expensive and complicated. Since the process of dispute settlement is complicated<sup>32</sup>, it is essential for countries to hire the lawyers who have an intimate knowledge of WTO disciplines and the practice of dispute settlement. However, there are no locally-available and skilled trade lawyers in most SSA countries (Shaffer 2003). They also cannot afford to incur huge expenses of hiring expensive private lawyers.

<sup>&</sup>lt;sup>30</sup> Total CAP budget was increased from 40,467 million Euro in 2000 to 55,081 million Euro in 2008 (Agriculture in the European Union Statistical and Economic Information series annual report as citied in Goodison 2011: 4).

<sup>&</sup>lt;sup>31</sup> There are exemptions for developing countries, which is called on 'development box' or 'S&D box' (Article 6.2 of the AoA)

<sup>&</sup>lt;sup>32</sup> The scope of this research paper prevents the further elaboration on the WTO dispute settlement mechanism. More details could be found, for example, in Bossche (2005)

Moreover, SSA countries are subject to the vagaries of the power asymmetries in global politics. Since SSA countries receive some form of development assistance and aid from much of the developed world, they are bound to receive subtle threats to the effect that their assistant package will be withdrawn if they file a dispute against their benefactors (Mosoti 2003).



Figure 12: Map of disputes between WTO Members (either as complainant or respondent)

Source: WTO website accessed on 10<sup>th</sup> October 2017: https://www.wto.org/english/tratop\_e/dispu\_e/dispu\_maps\_e.htm?country\_selected=USA&sense=e

## **Chapter 5: Conclusion**

This research paper has focused on the vitally important issue of food insecurity in SSA. It sought to show that food insecurity is a major problem in the region and that its cause can be traced to the pivotal role the region plays, and historically has played, in the global economic system as a provider of cheap raw materials. Specifically, the research paper has sought to show that the situation of food insecurity in SSA is a long standing one and needs to be understood as fundamentally an international construct which has evolved over time to serve the above-mentioned purpose.

To this end the research began by considering the literature on food security and in particular the conception, measures and explanations of major causes of food insecurity, especially in SSA. It was argued that many of the definitions and measurements of food insecurity to be found in the literature are inadequate to capture the true nature and extent of the problem, and explain its causes. It was argued that many of the definitions do not adequately capture the ability or lack these of a country to produce its own basic food to meet existing and future food needs of its population in the context of an aggressive a shift in economic strategy towards urban-based industrialisation. That is to say, the appropriate food security framing should include national food self-sufficient and cheap domestic production of basic foods in the context of economic growth and possible shift in industrialization, as seen in the case of many Asian countries which could largely lift the thread of hunger and famine. It was argued that this alternative perspective of food security leads to a very different conception of the nature and extent of food insecurity in SSA than is typically found in the literature. It was further argued that, as with the concepts, the measurements of food security do not capture the extent and nature of the food insecurity, and for much the same reasons; the lack of focus on the production of basic foods - resulting in considerable vulnerabilities of the majority of the population with respect to food consumption as suggested by such indicators as food expenditure in relation to incomes. Finally, and most importantly, the literature review pointed to the failure of most studies to look at the underlying structural causes of the problem of food insecurity rather than merely the superficial proximate causes.

Against the backdrop of the literature review some background was provided to enable the reader to understand the nature of the SSA economies and their role in the global economy, and the international and domestic institutional/policy environments which need to be taken into account when explaining the extent and causes of food insecurity in SSA. Thus, it was shown how important the region has been for global raw material production and how dependent the economies of the countries making up the region have been made on this raw material production. It was shown how unrewarding for the populations of this region this role and corresponding dependence has been. It was further shown that the general institutional environment has generally militated against any diversification away from this role, with the implication being that structures preventing increased food security being an important part of this. Emphasis in this context was placed on the global trading system and both the Agreement on Agriculture and regional trade agreements such as the Economic Partnership Agreements concluded by all SSA countries with the EU.

The last part of the paper then used the conceptions and suggested measures which emerged from the literature review to indicate the extent of food insecurity in the countries of the SSA region. Of particular note is the fact that as a percentage of total incomes expenditure on basic food has been by far and away the highest and the differentials between the prices of basic foods and non-basic (and other consumer items) the highest for countries of the region. The analysis then went on to show that this relative level of food insecurity could plausibly be attributed to the general institutional environment, including the above mentioned international trading system, but also the measures forced on these countries by global financial institutions such as the World Bank and IMF in the context of structural adjustment programmes with different countries in the region.

The obvious implication of the study is that a basic food self-sufficiency strategy is indispensable for attaining greater food security for the majority of the populations of the countries of SSA, and any attempt by these countries to break free of the dependent divisions of labour imposed on them. It has to be admitted that the study falls short in respect of the evidence presented in chapter 4, but it is argued that within the limitations imposed on the paper what has been provided is certainly supportive of the general thesis being advanced and unlikely to be contradicted by further evidence.

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