

## CAUSES AND IMPACT OF FOOD INSECURITY IN SUDAN

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### ABSTRACT

*Food insecurity and hunger in Sudan have been far too common. Food insecurity has grown in Sudan during the last few decades and the size of food insecure population has increased. This paper attempts to shed light on the causes and the impact of food insecurity in Sudan. The paper relies heavily on secondary data. The paper finds that the main causes of food insecurity are natural hazards, conflict, population growth, Corruption and political instability, Cash crops dependence and Pests, livestock diseases and other agricultural problems. Food insecurity threatens lives of people and drives social and economic problems such as malnutrition, communal conflicts, low income and low productivity. It is recommended that, problems of climate change should be addressed and peace building and peacemaking are important for conflict elimination. Supportive agricultural policies and capacity building of local communities are essential for ensuring food security in Sudan.*

**Keywords:** Causes, Impact, Food insecurity, Sudan.

### INTRODUCTION

Sudan is a country in Northern Africa. It is bordered by Egypt to the north, the red sea, Eritrea, and Ethiopia to the east, South Sudan to the South, the Central Africa Republic to the Southwest, Chad to the west and Libya to the northwest. It is the third largest country in Africa. The Rive Nile divides the country into eastern and western halves. Sudan's population was estimated at 39.6 million in 2016. It is characterized by different climatic zones and all of them are liable to desertification which is regarded as an obstacle to achieving sustainable development (Maha and Mustafa, 2015). Conditions of food insecurity contribute to the outbreak of social, political and military conflict, which in turn produces further food insecurity. The ability to control food production, distribution and consumption constitutes a form of power that lets populations live or die (<http://www.newsweek.com>). About 80 percent of Sudan's rural population relies on agriculture for their food and income ([www.fao.org](http://www.fao.org)). Food is one of the most important items in the world as it is critical to human survival together with clothing and shelter. Food security in Africa has come under extremely threats due to natural and human factors (Fawole et.al 2015). Hunger and food insecurity have been far too common in Sudan. Darfur in particular, was one of the most drought-affected regions (John, 2016). Food insecurity in Sudan threatens lives, livelihoods and stability

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(<https://www.usaid.gov>). Sudan's capacity to feed its population has been compromised by a combination of natural (climate changes) and man-made phenomena that have led to prolonged droughts, conflicts and displacement that undermine food security at the country, state, locality and household levels (ICN2, 2016). Sudan remains low in human development, ranking 167 out of 188 countries in the 2015 Human Development Index. More than two decades of war in southern Sudan, the current conflict in Darfur and insecurity in other parts have left millions in a precarious food situation and abysmal living conditions (FAO, 2006). War is still ongoing in Darfur, Kordofan and Blue Nile states (<http://www.wfp.org>). The aim of this paper is to identify the causes and impact of food insecurity in Sudan. The rest of the paper is structured into A literature review, methodology, Analysis and discussion and conclusion.

## LITERATURE REVIEW

### - Concepts of Food Insecurity

In the literature terms, food insecurity and famine are used (<https://www.bicc.de>). Food insecurity exists whenever the availability of nutritionally adequate and safe foods or the ability to acquire acceptable foods in socially acceptable ways is limited or uncertain ([www.nap.edu](http://www.nap.edu)). Food insecurity is a broader term that describes outright hunger and the coping mechanisms that households use to avoid hunger. Food insecurity is defined by uncertain ability or inability to procure food, inability to procure enough food, being unable to live a healthy life, and feeling unsatisfied (Krista, 2015). The United States Department of Agriculture (USDA) defines food insecurity as a state in which consistent access to adequate food is limited by a lack of money and other resources at times during the year (<https://www.feedingtexas.org>). Food insecurity may be chronic, seasonal or transitory (Wasiu and Burhan, 2017). The World Bank characterizes food insecurity as "lack of access to enough food" and differentiates between chronic and transitory types. Chronic food insecurity involves a continuously inadequate diet caused by the inability to acquire food, because households lack the facilities to buy or to produce enough food. Transitory food insecurity denotes a temporary decline in access of households to enough food due to instability of food prices, food production or household incomes. The worst form of transitory food insecurity is called famine (<https://www.bicc.de>).

Food security is a condition related to the supply of food, and individuals' access to it. Household food security exists when all members, at all times, have access to enough food for an active, healthy life. People are considered food secure when they have availability and adequate access at all times to sufficient, safe, nutritious food to maintain a healthy and active life (<https://www.wfp.org>). The concept of household food security is to ensure that households are able to obtain adequate food, either through home production or through purchases. In any

situation where this cannot be achieved there is therefore food insecurity at the household level (Adelekan, 2013).

#### - Literature Review

Food insecurity is a cause and a consequence of violence. It is linked to increased risk of democratic failure, protests, communal violence and civil conflict (Henk-Jan and Cullin, 2011). The root cause of food insecurity in developing countries is the inability of people to gain access to food due to poverty. Food insecurity affects not only the human health and welfare but also contributes in parts to economic and political stability (Wasiu and Burhan, 2017). Food insecurity, hunger and poverty are closely linked and to some extent, food insecurity is a sub set of poverty. They are interrelated in the sense that, the two are correlated, where poverty incidence is high, food insecurity also tends to be high and vice versa. Food insecurity is an important index of poverty. Food shortages, whenever they occur lead to anxiety and even national insecurity. Household food insecurity is caused by low wages and income, low per capita productivity, crude technology and decreasing productivity, poor processing, distributing and marketing systems, lack of storage facilities and migration to urban centers (Ahmed, 2014). High poverty, low purchasing power and food price inflation contribute to the vulnerability of people to food insecurity (Martins, 2015).

Chronic food insecurity in Sudan threatens lives, livelihoods and stability. Many of Sudan's people are at risk of food insecurity due to prolonged conflict and environmental deterioration and other disasters such as drought and floods (USAID, 2017). Poor development policies and natural disasters such as drought and floods contributed to poverty and food insecurity in Sudan. Conflicts affected all aspects of life and caused massive displacement to urban centers and neighboring countries. Several parts of Sudan have been affected by civil wars and conflict, destruction of physical and human resources, and erosion of institutions and social capital (FAO, 2006). An increase in conflict in the Abyei area and in the state of South Kordofan displaced hundreds of thousands of people from their homes. Strained livelihoods are major concerns and many households are food insecure. Darfur is affected by sporadic tribal conflict and poor rainfall, leading to sudden market fluctuations, livelihood changes and displacement. In West Darfur, 69% out of the 1.3 million population of the state depends on monthly rations of the general food distribution (Joanna and Dominika, 2011.) Famines caused by drought and war have been reported for Darfur region since the rule of Turks. Darfur witnessed the most severe famine of the previous century (1983) and drought was the main cause of this famine. People reacted to drought in different ways. Some diversified their modes of livelihood by wage labor. Some migrated to other areas while others stayed in their home areas

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as long as possible and reduced consumption of food and changed the ingredients of their meals from sorghum and millet to wild crops. Herders sold animals because prices of water, fodder and hired herders were so high. Food aid arrived in the towns of north Darfur and did not reach the poor and the needy in the villages. Aid efforts might be more efficient if they provide a type of assistance by which peasants can strengthen their own means of overcoming famine (<https://www.bicc.de>). Refugee movements to Sudan are putting pressure on local resources and this will impact Sudan's nomadic herding population ([www.fao.org](http://www.fao.org)).

### **METHODOLOGY**

This paper relies heavily on secondary data. The data used is generated from secondary sources such as textbooks, journals, papers, magazines, publications, studies conducted by researchers and websites. Descriptive statistics is used to analyze the data.

### **ANALYSIS AND DISCUSSION**

#### **- State of Food Insecurity**

The recent fighting along the border of Sudan and South Sudan contributed to food insecurity in the region. Fighting is the main driver of food insecurity in Sudan due to direct effects of clashes such as reduced access to farms, damage to harvest and civilian displacement. The size of food insecure population in Sudan has increased to 16.5 million people in 2016 as a result of conflict and reduced access to food (See table 1 below). The majority of Darfur's Internally Displaced Persons (IDPs) who are estimated at 1.8 million faced stressed levels of food insecurity. About one million in the states of Kassala, White Nile and Red Sea are liable to be influenced by stressed levels of food insecurity because of poor rainy season and high increases in the prices of goods and services which led to low purchasing power (Tracy, 2012). By March/April 2017, food insecurity among IDPs and poor residents in some areas of South Kordofan and new IDPs in parts of Jabal Mara in Darfur has already deteriorated to Crisis (FEWS NET, 2017). About 80 percent of households in Nuba Mountains survive on only one meal per day leading to high rates of malnutrition among children. Continued fighting has exacerbated food insecurity by forcing many people to flee their homes and preventing farmers from harvesting or planting crops (John, 2016). Influxes of South Sudanese refugees into Sudan continued in March and April due to persistent conflict and severe acute food insecurity in South Sudan and this represents an additional burden on Sudan (FEWS NET, 2017).

**Table 1: Estimation of Food- insecure Population by Country in 2016**

Country	Total Population Analyzed Number (Millions)	% of Population Analyzed on Total Country Population	Population in Crisis, Emergency and Famine(IPC/CH Phase 3 and Higher)		Population in Stressed Situation (IPC/CH Phase 2)		Total Food-insecure Population(IPC/CH Phase 2 and Higher)	
			Number Millions	% of Population Analyzed	Number Millions	% of Population Analyzed	Number Millions	% of Population Analyzed
Sudan	36.8	89%	4.4	12%	12.1	33%	16.5	45%

**Source:** Adapted and Modified from Global Report on Food Crises, 2017

Note: IPC: Integrated Food Security Phase Classification

CH : Cadre Harmonize- Harmonized Framework

### - Causes of Food Insecurity

Although the causes of food insecurity and hunger in Sudan are often complex, government policies drive these outcomes. The government contributes to hunger and suffering through denial of humanitarian assistance to civilians living in South Kordofan and Blue Nile, misguided economic policies and poor investment in infrastructure (John, 2016). The main causes of food insecurity are natural hazards, conflict, population growth, Corruption and political instability, Cash crops dependence and Pests, livestock diseases and other agricultural problems.

#### (i) Natural Hazards

Natural hazards are one of the main factors that have worsened the problems of food production, distribution and access. More than 65 percent of Sudan's population is rural and depends on agriculture for its livelihood. Natural disasters such as drought and flood contribute to food insecurity. Drought has a unique impact on agriculture and it leads to poor land productivity, loss of biodiversity and desertification. The 1984 drought affected 8.5 million people in Sudan. About one million people and 7 million livestock died. Drought is, therefore, the most catastrophic natural event. Floods are common in Sudan, they destruct crops and drown animals (FAO, 2017). The Nile River and its tributaries represent a particular risk. On average, floods affect some 200,000 people every year. Damage to crops and arable land constitutes a serious risk of long-term food insecurity in many parts of the country and increases the vulnerability of people who were already food insecure (UN Report, 2016).

Climate change leads to food insecurity in Africa, Sudan inclusive. According to the Second International Conference on Nutrition (2016) the

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majority of Sudan's land is quite vulnerable to change in temperature and precipitation. The country's inherent vulnerability may best be captured by the fact that food security is mainly determined by rainfall, particularly in the rural areas.

#### (ii) Conflict

One of the main threats to food insecurity in Sudan comes from conflicts. Because of conflicts agricultural activities have been disrupted in the productive areas of the country and there is upward rising in the prices of food commodities in the country. Food and Agriculture Organization (2017) indicated that Conflicts in Sudan exacerbate the famine and food insecurity triggered by drought. Conflict removes able-bodied men from agricultural production and places an additional burden on women. Conflict exacerbates the vulnerability of poor people, displaces them from their homes and depletes their assets. It makes emergency relief operations directed towards IDPs difficult and dangerous for those involved. Conflict also hinders development efforts, and diverts scarce resources away from development activities into war.

#### (iii) Population Growth

Poor African and Third World countries have the highest growth rate in the world which puts them at increased risk of food crises (Harvest Help, 2012). Population growth increases the demand for food in Sudan. When demand for food increases and supply decreases due to different factors, food insecurity occurs.

**Table 2: Demographic Indicators**

Country	Average annual population growth 1995-2000 (%)	Total fertility rate 1995-2000 (%)	Dependency ratio, 1997	Population per ha of arable land or permanent cropland	Contraceptive prevalence (%)
Sudan	2.1	4.6	78.9	4.7	8.0

**Source:** Adapted and modified from FAO Corporate Document Repository, 2017

Table 2 above shows that population growth rate in Sudan was high (i.e. 2.1 %) during 1995-2000, so the future increases in population remain strong. Fertility rate which was 4.6% between 1995 and 2000 was also high and prevalence of contraception was low and this is a clear indication that fertility is not going to decline in the near future. Dependency burden reached 78.9% and population per ha of arable land or permanent cropland was estimated at 4.7%.

#### (iv) Urbanization

The drivers of urbanization in Sudan are forced displacement due to conflict and drought and seasonal and economic migration from rural to urban

centers (Sara, 2011). Pressure has been put on cultivable land in urban centers and farm lands have been converted into residential areas leading to reduction in agricultural activities. Urbanization brings major changes in demand for agricultural products. There will be rising demand for meat, dairy products, vegetable oil, etc (David et.al 2010). Urbanization affects sufficient availability of food, secured access to food, adequate and need- based utilization of food and long- term stability of food supply (Ira and Stefan, 2014).

#### **(v) Corruption and Political Instability**

Food supplies and other means of help which are sent by the international community to save lives in affected areas did not reach the most vulnerable populations due to corruption and political instability (Harvest Help, 2012). The author found that Sudan has not been on stable democratic political leadership for a long period of time and this has led to inconsistency in agricultural policies, Gezira Scheme which is the largest irrigated agricultural scheme in the world is a true example.

#### **(vi) Cash Crops Dependence**

Many African and Third World governments encourage production of cash crops, the income from which is used to import food (Harvest Help, 2012). The author found that the government of Sudan encourages people to produce cash crops. As a result enough food production is not going to be produced and this would lead to food crises mainly in the vulnerable areas.

#### **(vii) Pests, Livestock Diseases and Other Agricultural Problems**

Besides extreme weather events, failed harvests were also caused by pests. Plant pests and diseases affect food crops, causing significant losses to farmers and threatening food security. Plant pests and diseases can easily spread to several parts of the country and reach epidemic proportions. Animal diseases are considered as the main constraint of biologically efficient livestock production. Animal diseases and other agricultural problems such as erosion and soil infertility contribute to food insecurity ([www.fao.org](http://www.fao.org)).

#### **- Impact of Food Insecurity**

Food insecurity affects adversely both adults and children. It leads to malnutrition which leaves children weak and vulnerable to childhood diseases. Adolescents and adults also suffer negative consequences of food insecurity and malnutrition (Fawole et.al 2015). More than 90% of Sudan's populations suffer from poverty and food insecurity. The prevalence of malnutrition is very high among children under 5 years of age in Sudan ([www.fao.org](http://www.fao.org)). Food insecurity threatens the lives of millions in Darfur and Darfurian women and children are suffering from severe food insecurity ([www.prb.org](http://www.prb.org)). Acute food insecurity has

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countervailing effects on conflict and it can be a source for motivation for rebellion. Food insecurity causes communal conflicts which can increase rapidly to civil conflict. It may produce grievances which may become serious when the government politicizes responses to food insecurity by diverting relief funds to other uses. Food insecurity and grievances over food prices cause urban protests and riots and urban unrest can lead to widespread violence (Hendrix and Brinkman, 2013). Food insecurity and hunger drive social problems such as street children, prostitution, child workers, substance abuse, crime and violence (<http://www.fao.org>). Food insecurity leads to lack of concentration at school, reduced learning for children and adults, loss of productivity, intensification of process of exclusion and feeling of powerlessness, erosion of transfer of knowledge and practices to next generation, decreased constructive participation in social life and threat to harmonious life in a community (Anne et.al 1999). Workers who experienced food insecurity is not prepared physically, mentally, emotionally or socially to perform effectively in the contemporary workforce ([www. lowafba.org](http://www.lowafba.org)). The economic growth of the countries is hindered because a considerable number of population is unable to contribute fully to economic activities as a result of food insecurity (<http://www.fao.org>). Impact of food insecurity includes low income, economic costs of illness and charitable contributions to address hunger and food insecurity ([www. lowafba.org](http://www.lowafba.org)). Food insecurity results to political instability and hinders active political participation at the individual level.

### **- Solutions to Food Insecurity Problem**

To mitigate the impact of food insecurity on Sudanese citizens, we suggest that , proper disaster management strategy is to be developed to control the consequences of natural disasters and comprehensive agricultural policy developed by experts to ensure food security should be adopted .Basic infrastructure such as roads, water, health, education, etc, should be provided to rural people in order to control rural- urban migration which adversely affects the limited services in the Sudanese urban centers and this in turn ensures the availability of labor force in rural areas where it is highly needed. Great concerns should be given to food productivity improvement, reasons behind conflicts should be solved and conflict resolution mechanisms are to be implemented. Transparency and rule of law are so essential to combat corruption and democracy is the only way to political stability. Training programs and awareness campaigns are to be organized regularly in all parts of the country to educate all sectors of the society on birth control.

### **CONCLUSION**

Food insecurity is a state in which consistent access to adequate food is limited by a lack of money and other resources at times during the year. Many of



Sudan's people are at risk of food insecurity due to prolonged conflict and environmental deterioration and the size of food insecure population has increased to 16.5 million people in 2016. Natural hazards, conflict, population growth, Corruption and political instability, Cash crops dependence and Pests, livestock diseases and other agricultural problems are the main causes of food insecurity in Sudan. Food insecurity affects negatively both adults and children .It drives social and economic problems such as malnutrition, communal conflicts, grievances, poor school performance, low income, low productivity and economic costs of illness and charitable contributions to address hunger and food insecurity. Food insecurity results to political instability and hinders active political participation at the individual level. It is recommended that problems arising from climate change and environmental degradation should be addressed. Peace building and peacemaking are to be given great concern to eliminate conflicts. It is necessary to enhance the capacity of local communities and the concerned ministries to build strong and sustainable agricultural sector. Correct and supportive government policies that improve production and productivity in all agricultural sub- sectors are highly needed to ensure food and nutrition security.

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