# Food Insecurity in Ethiopia

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## Abstract

Food insecurity is directly related to poverty at the global, regional, national, and local levels. It is a result of lack of income and access to food, which is driven by poverty. Ethiopia, located at Northeastern of Africa is second populated country with a population of about 92.3 million and has a physical size of 1.115 million hectares. Ethiopia is one of the poorest countries in the world, and its poverty, natural resource degradation and food insecurity seem to be part and parcel of the same vicious circle. Majority of the population in country are food insecure. Ethiopia encountered serious famine at different times from 1970s to up to date. About 25 million were directly affected by famine in 1958 and 1977. However, since early 1980s number of populations, especially women and children were affected by famine does not exceed the 10 million. Surprising in 2015/16 in Ethiopia, more than 10 million populations are/being affected by famine. This is caused by the combination of deforestation in the country and world climate change "El-Nino". Currently, greater proportion the population of Ethiopia consumes food of less than 2,100Kcal/day. At different areas food insecure groups employ different survival strategies/mechanisms to handle food insecurity by mobilizing all available resources to resist the food insecurity in the world and specifically in Ethiopia can be addressed through a more equitable distribution and access to food. **Keywords:** Famine, Poverty, Food Insecurity, Natural Resource Degradation

### Introduction

The term food insecurity is defined as lack of capability or access to sufficient, safe and nutritious food by all people to meet their dietary needs and preferences for an active and healthy life (World Bank, 1986; FAO, 1996). Food insecurity describes the state of food shortage for consumption at the household, community, regional, national and international level. Deterioration in food production and lack of income to purchase adequate food leads to poverty and food insecurity. Concepts such as hunger, famine and under nutrition are used to describe food insecurity.

**Hunger** is defined as the condition resulting from an individual's inability to eat sufficient food to lead a healthy and active life (Berhanu, 2001. Famine is a severe shortage of food (as through crop failure by drought) resulting in violent hunger and starvation and death.

**Under nutrition** is defined as the measurable nutrient deficiency in a diet that can lead to illness (lack of energy, retardation, blindness) or even deaths. Under nutrition can be classified into *Acute under nutrition* which refers to short-term inadequacy of food intake, in cases such as famine or war and Chronic *under nutrition* refers to long-term inadequacies. Chronic under nutrition may have physical effect in height, weight and intellect (Berhanu, 2001. Ethiopia, the second most populous with 92.3 million people is one of the largest country with a physical size of 1.115 million hectares. The country is located in the northeastern part of the Horn of Africa. Ethiopia is landlocked and shares boundaries with Djibouti, Eritrea, Kenya, Somalia, and Sudan. She is one of the most famine-prone countries and known for food shortages and famine in the Horn Africa for long history. The study from south central Ethiopia indicated that more than half of the populations of the country were poor and food insecure of which the largest group is rural people with insufficient assets to produce and purchase food (Sisay and Adugna, 2001). With rainfall highly erratic, Ethiopia is usually at a high risk of annual droughts as well as intra-seasonal dry spells (World Bank 2007). Development level indicators suggest that Ethiopia is one of the poorest countries in the world.

## History and extent of food insecurity in Ethiopia

Ethiopia has nine regional states and two municipal states (i.e. Dire Dawa and Addis Ababa are municipal city). The country has faced famines and numerous famine-like situations in the past decades. The recurrent of famine in 1970s, 80s and 90s has affected significantly the country's food production. During the period between 1958 and 1977 over 25 million people were directly affected by famine and drought, while about 3 to 5 million people were died. The 1984/85 famine alone had taken the lives of 300,000 people (Berhanu, 2001). Ethiopia has experienced the worst famine in 1983 to 1985, with a series of rain failures and substantial livestock loss. According to Brhanu (2001), during this time about 8 million Ethiopians were affected, and 1 million were estimated to have died. The famine also had longer term effects in that many of the poor had depleted their assets to deal with the famine, which left them even more vulnerable to future crises. It was estimated that close to 58 million were affected by famine between 1973 and 1986.Famine vulnerability continued through the mid-1990s

owing to conflict in the northern regions and protracted drought in other regions of the country (Webb and von Braun 1994).

In 2002 about 6 million people were in need of urgent food aid and 15 million faced the threat of starvation (Berhanu, 2001). Unable to supply adequate food to keep people alive, the Government of Ethiopia reached out to the international community for assistance. As cited in Berhanu (2001) Ethiopian Prime Minister, Meles Zenawi, said that "*Even if we had the food available in the domestic market, the government doesn't have the money to buy this surplus food for redistribution*" (BBC 2002). The following table shows that more than five million people were at the risk of food insecurity and need relief food assistance during the 2002 drought. The figure of populations in the need of relief from one municipal city, Addis Ababa, was not accounted in this table. Table 1: Population in Need of Relief food assistance in 2002

Region	Number of	Percentag	Population in need as % of rural
	beneficiaries	e	population
Tigray	917,200	17.7	26.8
Afar	225,400	4.3	20.3
Amhara	1,724,800	33.3	11.0
Oromiya	1,051,400	20.3	5.0
Somali	894,800	17.3	28.9
Benishangul Gumuz	9,000	0.2	1.7
SNNP	303,300	5.9	2.5
Gambella	32,800	0.6	19.7
Harari	13,000	0.3	20.0
Dire Dawa (Municipal city)	10,000	0.2	10.5
Total	5,181,700	100.0	9.2
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Source: Climate Risk Management in Africa, 2007.

In the southern highlands it is said that the dependence on perennial crops (coffee, *chat, Ensete, etc*) and the adoption of traditional farming systems have reduced the subsistence crop yield and hence decrease food production which pushes to food insecurity (Eyasu, 1998). In the northern part the country, in Tigray region many people live in conditions of chronic hunger and take a low energy supply food (Devereux, 2000). The combined problems of environmental degradation, irregular rainfall, high population pressure, recurrent cycle of drought, lack of diversification in economic activities as income source, and institutional factors threaten food security in the region. In Ethiopia, food insecurity among the population is widespread (Van der Veen and Tagel, 2011). Serious food shortages and high levels of malnutrition continue to affect a large number of people in several parts of Ethiopia still today. Degye et al. (2013), determined food security status of households based on their daily calorie availability in Central and Eastern highlands of Ethiopia and found that majority of households were food insecure or calorie-deficient. The study identified 26 food items consumed in each food group. Of these food items only 40% of the households consumed more than three food groups.

Decline in production of cash crops, livestock productivity and price instability are associated with income shortage which leads to insecurity. In 2002 Ethiopia was hit by famine, despite good harvests in 2000/2001 and 2001/2002. Grain prices fell below the historic average. Maize prices in surplus regions fell by almost 80 percent (Berhaanu, 2001). These reduced prices created a disincentive for input use by producers. Shumete (2009) quoted the notion of one woman concerning food insecurity anxiety in Southern part of the country as "When you would get up in the morning, you would begin to worry if you are going to have enough food to make dinner and if you did have enough food to get through today and tomorrow would be another headache".

Nowadays, conflicts, floods and failed rains caused by El-Nino have sparked a sharp rise in the number of people going hungry in the different parts of the world. Currently Ethiopia is also confronted the worst drought because of climate change. Triggered by El-Nino, the drought has a significant impact by limiting agricultural production, straining livelihoods and exacerbating food insecurity among poor and vulnerable households. From 92.3 million people of the country, United Nations (UN)<sup>1</sup> said about 8.2 million people need emergency food due to El-Nino problem. This figure could be raise to 15 million next year unless the international community stepped up with donations (Al-Jazeera News, 2015)<sup>2</sup>. According to Humanitarian Requirements Document (HRD, 2016), about 10.2 (about 6 million are children) million people need urgent relief food assistance. This figure is greater than the number of population in the need of food assistance in 2002. It is possible to conclude that 2015/16 drought is more serious than 2002 drought. Mass media of the country reported that the country had never experienced such serious food shortage in the past 50 years. At present different nations are providing financial support the country. It is expected that, as the impact of El-Nino continues throughout 2016, Ethiopia is likely to

<sup>&</sup>lt;sup>1</sup> An organization of independent states formed in 1945 to promote international peace and security.

<sup>&</sup>lt;sup>2</sup> Al-Jazeera News on November, 2015.

experience both prolonged drought and intense flooding in various parts that will further deteriorate food security. Moderate and severe terms are used to describe the level of severity of food insecurity (Devereux, 2006). For emergency program it is important to know the magnitude of food gap than the duration for how long the affected population has faced the food gap. The intensity of food insecurity can be categorized in terms of the levels of food intake calorie. Taking 2, 100 Kcal/day as an average daily energy requirement (Devereux, 2006), the following intensities of food insecurity can be identified.



Figure 1: Food insecurity severity levels (source: Devereux, 2006).

Greater proportion the population of Ethiopia consumes food of less than 2,100Kcal/day. Vulnerable groups employ different survival strategies/mechanisms to handle hazard situations of food insecurity by mobilizing all available resources to resist the food insecurity problem in Ethiopia. These mechanisms range from adjusting available resources to involving in criminal activities to cope up with food insecurity problems (Shumete, 2009). If the poor lost every hope and without the intervention of other external body, there is a probability that one or more of the household members will involve in criminal activities like theft, robbery etc. The last and critical stage is begging. Households in Ethiopia perform different survival strategies at different severity levels of food insecurity and the survival strategies differ among household and communities of the country. Farmers in Wonago district of Gedeo zone are far below the national standard food poverty line Shumete (2009); and the study pointed out that households employs different survival mechanisms to address food insecurity problems (figure 2).

Severely food insecure	Survival strategies/mechanisms	
Severity levels of food insecurity	<ul> <li>→ Begging</li> <li>→ Looking for help from religious and social institutions</li> <li>→ Farmland pledging and then sale</li> <li>→ Daily wage labour, use of child labour</li> <li>→ Firewood collection and charcoal burning</li> <li>→ Crop and livestock adjustment, asset disposal</li> </ul>	
M ildly food insure		

Figure 2: different survival strategies at different severity levels of food insecurity (Source: Shumete, 2009).

### Women and food insecurity in Ethiopia

Women's contribution to their households, food production, local and national economies is immense; however, they have no better access to family resources or decision-making powers. As a result, women remained to be the poorest of the poor constituting 70% of the global poor (Women's Affairs Sub Sector, 2004). Women in Ethiopia face similar constraints; they have little control over family resources or income. In Ethiopia poverty and food insecurity in most part of Ethiopia is not gender-neutral. Although Ethiopian women play a significant role in livestock maintenance, crop production and marketing of rural produce, they bear the greatest pressures due to food insecurity (Ethiopian Ministry of Foreign Affairs, 2010). Due to the different roles and responsibilities men and women have in the family/society, the causes and experience of poverty also differs by gender. Still today in order to pursue survival strategies for food insecurity women farmers still face multiple gender inequalities, including difficulty obtaining credit, land, extension services and other productive resources (Frank, 2009). Women and girls suffer the most from food insecurity in Ethiopia. Recent study of food security in southwest Ethiopia shows that girls who are food insecure are twice as likely to report suffering from an illness compared to boys (Tefera, et al., 2011).



Figure 3: Women suffered from food insecurity in Ethiopia.

#### **Causes of Food Insecurity in Ethiopia**

The country has been encountering food insecurity problem for a long period of time because of the low technological bases of agriculture, limited rural infrastructure and off-farm employment compounded by inappropriate policies over time (Devereux, 2000). In Ethiopia agriculture and livestock production are mostly traditional and heavily depends on the erratic and unpredictable rainfall. As a result, yields are low and post-harvest losses are high, creating widespread food insecurity. Low productivity due to pests and diseases, drought, declining soil fertility, and poor farming methods hinder households to create food reserves. Limited options for alternative income sources left a majority of households susceptible to negative coping mechanisms, which are exacerbated by the recurrence drought. Drought shocks have weakened the productive capacity of pastoral and smallholder farmers, leading to high dependency on humanitarian support. Consequently, many populations are unable to recover and rebuild herbs and food stocks between consecutive drought events. Small land holding in different parts of country, frequent drought due to climate change /EL-Nino/ and environmental degradation has contributed to increased food insecurity for households, especially in moisture deficit and pastoral areas.

#### Rural Poverty, Food Insecurity and Natural Resource Degradation in Ethiopia

In Ethiopia there is a vicious cycle of natural resource degradation and food insecurity driven by absolute poverty and population growth. Deterioration of income from agriculture forced the households to find another source of income by cutting wood for sale. Food insecurity is driven by natural resource degradation that leads to low agricultural productivity and the other way round. This is a complex and multi-dimensional problem and has no single solution. The comparative and historical experiences of societies that have succeeded in this regard demonstrate that the solutions must involve long term and sustained investment in people, specifically in those areas that enhance the capability and knowledge of individuals and communities to combat poverty and manage natural resources in efficient and sustainable manner.

Forest cover of the country was decreased and exposed the land for high erosion and flooding. Purchasing power of households for consumers goods were decreased and could not possible to afford them from their too little income. In such circumstances, households have other alternative except utilizing whatever resource available in environment to meet their basic needs. This results in environmental degradation. Natural resource degradation i.e. deforestation is often is linked to reduced agricultural productivity that leads to food insecurity and contrariwise in a vicious circle. The nature of mass poverty and the alarming rate of environmental degradation are closely related. Poverty in the rural area is resulted mainly from the reduction of agricultural productivity or stagnation of the agricultural sector.

The solution to poverty and food insecurity is productivity growth. Unless productivity grow, incomes and employment cannot raise much over the long run, and redistribution cannot be effective if there is not much to redistribute. Growth is itself an effective option for reducing poverty and food insecurity.



Figure 4: Food Insecurity, Poverty and Natural resource degradation cycle in Ethiopia

Study by (Berhanu, 2001) revealed the negative impact of chronic under nutrition on intellectual development and achievement, especially among children. According to the study it is shown that if a mother suffers from under nutrition during pregnancy, her baby can suffer from reduced intellectual capacity and cognitive functions. Chronic malnutrition for children especially during the first two or three years of life can impair mental development. Food insecurity not only affects physical growth and health of children but also their intellectual development, school attendance and academic performance (Tefera, 2011).

#### Conclusion

Food security situation of rural households in Ethiopia is very poor and that a great majority of people suffer from deficiencies in their daily calorie intake and from problems relating to dietary diversity. In the highlands of Ethiopia natural vegetation cover is almost cleared, consequently, there is a massive run-off from all over the area floods the farm plots all along the plain. This decreased proportion of crop yield and the area of cultivable land significantly. Lack of income is associated with food insecurity. Poor people are forced to over exploit their land resource. Poorness leads to environmental degradation and vice-versa. Ethiopia currently encountered a serious food shortage because of climate change and variability that never been occurred in past 50 years. Rural people have adopted various coping and adaptive mechanisms in different parts of the country and the government has is taking actions intending to mitigate poverty and food insecurity. Ethiopia faced challenges of reducing absolute poverty, food insecurity, natural resource degradation and abolishing recurring famines by pursuing poverty focused economic growth strategy which enables the country to improve low productivity agricultural sector. Growth is the best available alternative to move away from poverty and food insecurity. In order to enhance agricultural production and productivity, an intensive effort is required to generate, introduce, integrate and disseminate appropriate agricultural technology packages, which, in turn, alleviate poverty and hence will improve food security. Furthermore, to accelerate sustainable food production and augment the food security conditions of rural households, the functioning of input and output agricultural marketing chains, including technological inputs and their expected net returns, need to be enhanced.

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