

# **Understanding the Relationship Between Economic Growth and Food Insecurity in Ethiopia**

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## **1. Introduction**

Recently some scholars have tried to question the economic growth achieved in Ethiopia during the last twelve years because of food insecurity which was arisen due to Elino weather. The arguments of these scholars were the current food insecurity in the country could not have been happened, if there is the broad based, continuous and fast economic growth in the county. My question is why these scholars went to question the decade long economic growth of the country just due to specific or exceptional events that occurred due to the change in the weather condition. Few of the scholars who denied the economic growth were due to their political stand. These people are not willing to appreciate the positive performances of the current government in Ethiopia. However, the majority of the writers who question the economic growth as a result the recent food insecurity believe that economic growth and food security have negative relationship. That means, when economic growth increases, food insecurity decline.

These individuals may know only the traditional explanation of the relationship between food security and economic growth in the country. These people are not interested to see the nature and sources of economic growth and food insecurity. Further they are not eager to see the accessibility and affordability of the households that would affect by the food security at household level. Therefore, the major purpose of this brief article is to fill such knowledge gap in understanding the relationship between the economic growth and food insecurity in Ethiopia.

The article is consisting of seven sections including introduction. The second section explains the theoretical relationship between economic growth and food insecurity. The third section presents the nature of the recent economic growth of Ethiopia. This section tries to show the trends and

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characteristics of Ethiopia economic growth during the last decade. The fourth section discusses the trends of food security and economic growth in Ethiopia. The fifth section highlights the impact of food security policy and strategy on food insecurity in the country. The last section is summary

## **2. Relationship Between Economic Growth and Food Security**

Economic growth refers to an increase in the national output/income in the given country. National output or income can be measured by Gross Domestic Product (GDP). Therefore, economic growth indicates the percentage changes in the national output in the domestic economic in the given year (usually one year). Food security refers to food availability at the national and regional level and stable and sustainable access at the local level. In other words it is the access by all people at all times to enough food for an active and health life. This definition of food security includes four main dimensions: physical availability of food, economic and physical access to food, food utilization and stability of the other three dimension over time you (FAO, 2001).

From these definitions it can be understood that that economic growth is a single dimension while the food security is multidimensional which involve various activities. Economic growth can raise income and reduce hunger, but higher economic growth may not reach everyone. It may not lead to more and better jobs for all, unless policies specifically target the poor, especially those in the rural areas (FAO, 2013). The simple change in the national outputs does not able to and sustains food security by its own. There are many factors that affect food security in addition to increase in the economic growth. The only economic growth cannot improve food entitlement. Amartya Sen(1981) has identified four main categories of food entitlement: trade base, production base, own labor base and inheritance and transfer.

These four categories of food entitlement mainly determine the food security of the household. Even at the time of during green revolution (1980) few Asian countries experienced surplus agricultural production, they could not achieve food security for all their people or household. Food insecurity occurred in situations where food was available, but not accessible because of the erosion of people's entitlement to food consumption. Therefore, it is wrong to generalize that

only economic growth of the given country reduces the food insecurity or achieve food security within a short period. Economic growth can facilitate the food security, but it is not the only means for achieving the food security.

In other words, economic growth may be necessary conditions for improving food security, but it not sufficient conditions. This was witnessed in most of developing countries during the last few decades. Most of developing countries who achieved high economic growth could not control food insecurity. Food security is a complex sustainable development issue, linked to health through malnutrition, but also to sustainable economic development, environment, and trade. The simple economic growth cannot reduce food insecurity. There are various factors that influence the impact of economic growth on food security. The major factors are the nature of economic growth, the macroeconomic stability and the initial situations of the country economy. In addition to this, the infrastructure development and market development significantly influence the relationship between economic growth and food insecurity.

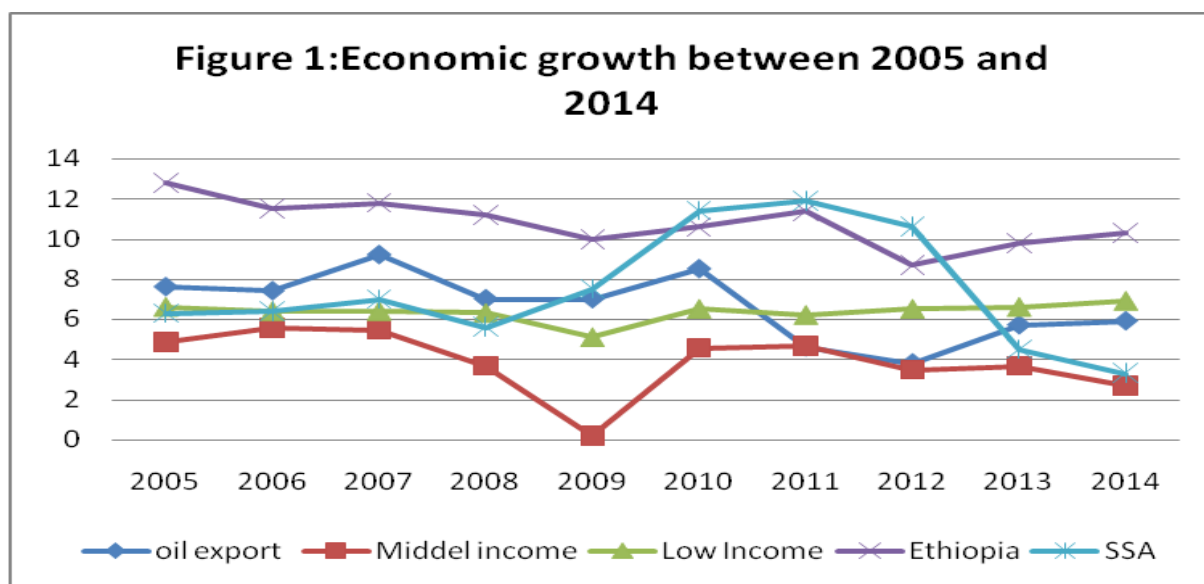
### **3. Nature of Recent Economic Growth in Ethiopia**

The nature of economic growth can be seen by presenting the characteristics of the economic growth during the study period. In 2006, the total market value of the national output in Ethiopia was only 14.5 Billion USD. Today in 2014 the country managed to produce 53.9 Billion USD national output (GDP). During the last eight years, the national output was increased by more than double. As compared to the rest of the Sub Sub-Saharan African (SSA) countries, Ethiopia has achieved higher economic growth. According to IMF (2015) report, Ethiopia has achieved faster economic growth as compared to oil exporting, middle income, low income and the average SSA countries economic growth. As you can see in the Figure 1 below Ethiopia average economic growth between 2005 and 2015 was 10.8 percent. In the same period the average SSA economic growth was only 7.5 percent.

The country economic growth was higher than the middle and low income countries who achieved 4 percent and 6 percent economic growth respectively in the same period. In addition

to higher economic growth, the economic growth in Ethiopia was characterized with continuous<sup>2</sup> and stable economic growth which was not experienced by many of African Countries. In 2013/14, Ethiopia's economy grew by 10.3 percent, making the country one of Africa's top performing economies and this strong growth is expected to continues in 2015 and 2016(OECD, 2015).

The country has achieved higher economic growth with less irregularity. Ethiopia<sup>3</sup> achieved the minimum of 8.7 percent economic growth in 2012 and the maximum of 12.8 percent economic growths in 2005. The minimum Ethiopia's economic growth during the last decade was higher than the average SSA countries economic growth during the study period. Such higher economic growth facilitates the fast growth in the per capita income. According to IMF (2015), Ethiopia average annual per capita income growth was 7.6 percent between 2011 and 2014. This was higher than the 1.8 percent of the middle income and 2.2 percent the oil export countries.

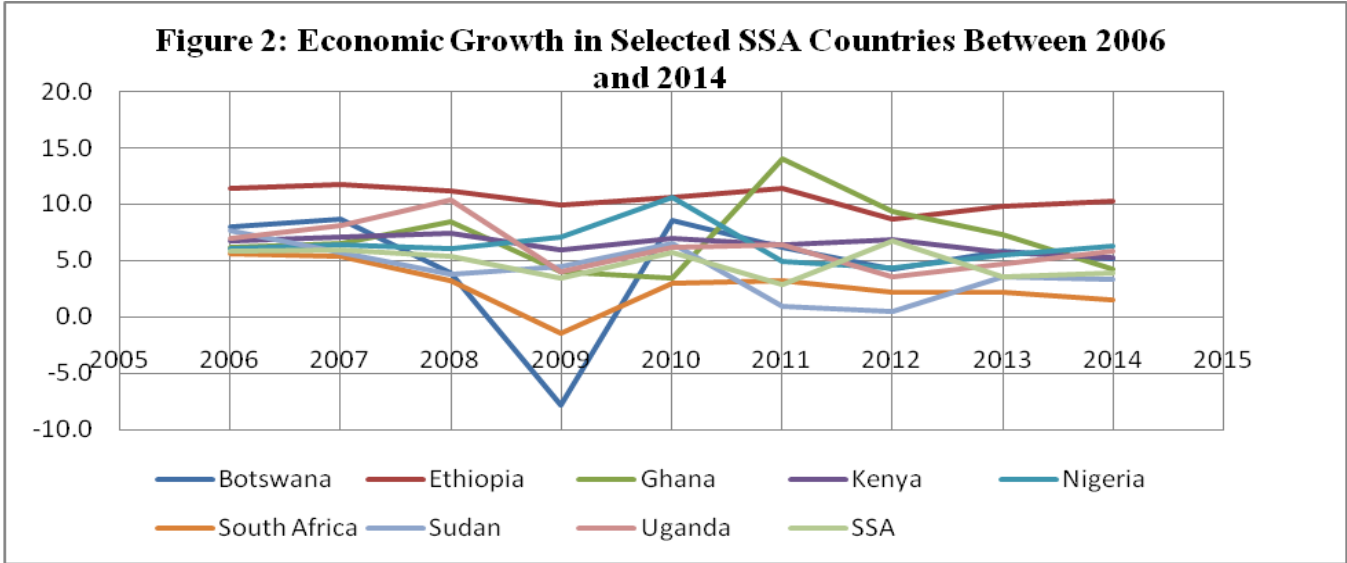


Sources: IMF, 2015

<sup>2</sup> The International Monetary Fund (IMF) ranks Ethiopia as among the five fastest growing economies in the world. After a decade of continuous expansion (during which real GDP growth averaged 10.8% per annum), in 2013/14 the economy grew for its 11th consecutive year posting 10.3% growth(OECD,2015)

<sup>3</sup> During the last ten years the country achieved higher economic growth as compared to 7 percent required to reduce poverty by half in 2015.

Between 2006 and 2014, Ethiopia also achieved fast and continuous economic growth as compared to South Africa, Botswana, Ghana, Kenya and Uganda. As you can see in Figure 2, Ethiopia is the only country that achieved higher and continuous economic growth. South Africa higher economic growth during this study period was not more than 6 percent. In the years between 2006 and 2014, South Africa has achieved an average of 3.1 percent economic growth. In the same period, Nigeria the first Africa oil exporting country has achieved an average of 7.1 percent. In the same period Kenya and Uganda has achieved average of 7.3 percent and 7.1 percent economic growth respectively. Ethiopia has achieved an average of 11.9 percent economic growth between 2006 and 2014. This indicates that the country economic growth was one of the fast and stable economic growths as compared to SSA countries.



Source: OECD, 2015

The other nature of Ethiopia economic growth was broad based economic growth. During the last five years the average agriculture, service and industrial sector were increased by 6.6 percent, 10.7 percent and 20 percent respectively between 2010/11 and 2014/15. At the national level all the economic sector has shown higher growth as compared to before 2002. In addition to this broad based economic growth, the recent economic performance in Ethiopia was pro-poor economic growth. In other ward, the economic growth in the country was accompanied by higher

pro-poor spending. During the last ten years, the government spending<sup>4</sup> on poverty and social development was significantly increased. The poverty related expenditure increased from Birr 47 billion in 2009/10 to Birr 126 Billion in 2013/14. In 2013/14, the poverty reduction spending was 68.2 percent of the national total government spending.

The high economic growth<sup>5</sup> in the country boosts government expenditure on poverty related activities which enhanced human development. The Human Development Index (HDI) was increased from 0.284 in 2000 to 0.442 in 2014 (UNDP, 2015). The poverty oriented government spending has increased the national human development between 2002 and 2014. In 2000, Ethiopia HDI value was 0.284 which ranked the country 171 out of 174 countries. This year the country human development was better than only three countries (Niger, Sierra lion and Burkina Faso).

After thirteen years, Ethiopia human development index<sup>6</sup> was better than fourteen African countries<sup>7</sup>. The pro-poor and broad based economic growth has increase total national investment, increase domestic resource mobilization; reduce deficit GDP ratio and continuous economic growth. In this regard we have to recognize that Ethiopia was not only achieved economic growth, but it changed the structure and capacity of the national economy. According to World Bank (2014), Ethiopia economic growth reflected a mix of factors, including agricultural modernization, the development of new export sectors, strong global commodity demand, and government-led development investments. The economic changes during the last ten years have been trickled down various social and economic services to the majority of the

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<sup>4</sup> Huge public investments with focus on infrastructure and pro-poor sectors explain much of the economic performance from the expenditure side (UNDP, 2014).

<sup>5</sup> Private consumption and public investment have driven demand side growth, with the latter assuming an increasingly important role in recent years. On the supply side, growth was driven by an expansion of the services and agricultural sectors, while the role of the industrial sector was relatively modest(World Bank,2014)

<sup>6</sup> This indicates that health status of the population has been improved through increasing life expectancy, education and health service provisions. Further the fast growth rate of human development in Ethiopia has also maintained the lowest income inequality<sup>6</sup> which is 33.6. Ethiopia income inequality is less than South Africa (63.1), Kenya (47.7) and Nigeria (48.8) in 2013(Teshome A, 2015).

<sup>7</sup> These fourteen countries include Malawi, Liberia, Mali, Guinea Bissau, Mozambique, Ginea, Brundi, Burkina Faso, Erteria, Sierra Leon, Chad, Central Africa, Congo and Niger.

population in the country. The higher government spending on social development, infrastructure, new program and hydro-power has been improving the capability and functionality of the population in the country. Such situations have been providing equal opportunity for the people to involve in various sectors that can change the fundamental base of the national economy.

#### **4. Economic growth and food insecurity in Ethiopia**

The preceding section presented the recent nature of economic growth in Ethiopia which was characterized as fast and continues economic growth. This section explains the relationship between food insecurity and economic growth in Ethiopia between 1991 and 2015. Between 1991 and 2003, the average annual economic growth in Ethiopia was only 3.7 percent. In these years the national output was increased from Birr 125 Billion in 1991 to Birr 220 Billion in 2003. In other ward between 1991 and 2003, the national output increased by 76 percent. In the last twelve years (between 2003 and 2014) the country national output has increased from Birr 220 Billion to Birr 1,146 Billion. In these years, the economy has showed an average of annual growth rate of 11 percent economic growth. Just within a decade the country has managed to increase its Gross National Output by more than five folds.

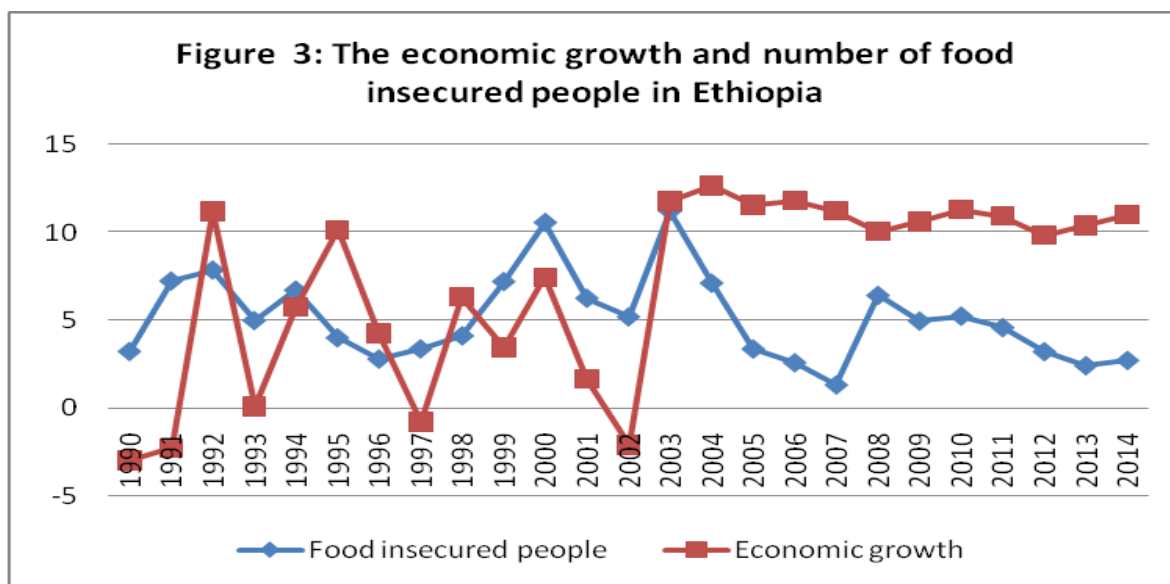
The average number of food insecure people between 1991 and 2003 and between 2003 and 2014 were around 7 and 4 million people respectively. As you can see in the figure 2 below, the higher economic growth<sup>8</sup> after 2003 enable the nation to reduce the number of food insecured people while the unstable and lower economic growth before 2003 lead to the higher number of food insecured people. For instance, in 2000, when the country achieved only 3 percent economic growth, the numbers of food insecured people were 10.2 million people. This year the country experienced with higher number of food insecured people with low economic growth. In 2014, the number of food insecure people was only 2.7 million at this time the economic growth was 10.8 percent. This means when the country achieved stable and higher economic growth, the vulnerability of people for food insecurity declined or the individual household can have the

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<sup>8</sup> High economic growth, however, has helped reduce poverty in both urban and rural areas. Since 2005, 2.5 million people have been lifted out of poverty, and the share of the population below the poverty line has fallen from 38.7 percent in 2004/05 to 29.6 percent in 2010/11 (using a poverty line of close to USD1.25/day).

capacity to resist the food insecurity challenges by higher economic growth. But these were happened when the high economic growth in the country supported with suitable weather (climate) condition and market development.

In 2008 the numbers of food insecure people were 6.4 million while the country experienced 10.4 percent economic growth. In the same way currently in 2015 around 10 million people need additional food assistance at the time the country expected to achieve double digit economic growth. Here we have to understand that the simple economic growth without favorable economic environment at household level in the country cannot reduce food insecurity. In addition to economic growth, household food entitlement would play the major role in reducing food insecurity. Economic growth can be necessary condition for achieving food security, but economic growth alone cannot be sufficient condition for controlling for insecurity in Ethiopia. This must be clear for everyone who can relate economic growth with food insecurity.



Sources: Various Issues of World Bank and DRMFS<sup>9</sup>

The nature and the structure of the national economic strongly affect the influence of economic growth on food insecurity. There are various reasons for food insecurity in Ethiopia. The rain<sup>10</sup>

<sup>9</sup> Disaster Risk Management and Food Security Sector

<sup>10</sup> The ongoing El Niño contributing to the worst drought in more than 50 years in Ethiopia has led to well below average *Meher* harvests in most eastern cropping areas. It has also contributed to massive livestock deaths, poor livestock body conditions and very low livestock production in Afar and northern parts of Somali Region. Between January and March 2016, large populations in the east of the country will experience very significant food



based agricultural sector, infrastructure problem, market imperfection and subsistence agricultural sector. The interesting argument is the recent Ethiopia economic growth was achieved with the higher domestic price which seriously affects the food entitlement of the rural household. In this regard the lower productivity growth and market imperfection consider as the major reason for higher inflation which increase for food insecurity. Affordability of the household in the rural areas was affected by the inaccessibility and inefficient market food supply chain. These may be the major reason to see the higher food insecure people in Ethiopia with higher economic growth.

## **5. Impacts of food security program in Ethiopia**

Food security policy in Ethiopia started during the Monarchy government. Until 2003, most of the food security policy in Ethiopia was based on relief and emergency service. Such food security policy increase more dependency of the household rather than self-sufficient by them. Since 2003, the Government of Ethiopia with donors' countries and organization initiated the new Food Security Program (FSP) which includes Productive Safety Net Program (PSNP), Household Asset Building Program (HABP<sup>11</sup>), Complementary Community Investment (CCI) and Voluntarily Resettlement Program. Further the government implements various measures to enhance social capability to reduce food insecurity.

According to FAO (2015), Ethiopia developed several food security and nutrition policies and strategies to support its development goals. These include the National Nutrition Strategy and the National Nutrition Program (2008), the Growth and Transformation Plan (GTP) covering 2011-15, the Agriculture Sector Policy and Policy Investment Framework (PIF) 2010-2020, aligned to the CAADP, and the National School Health and Nutrition Strategy (2012). In addition to this, the government implemented Protection of Basic Service, MERET<sup>12</sup> , EMLE and SLM. The two

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consumption gaps (FWS NET, 2015). This does not mean that we do not have economic growth in 2015 when the country faces this number of food insecure people.

<sup>11</sup> The objective of HABP are Extend credit to food insecure H/H of PSNP and Enhance Graduation out of food insecurity.

<sup>12</sup> [Managing Environmental Resources to Enable Transitions to](#)

fundamental principle of that guide the implementation of FSP in Ethiopia are reliance to the extent possible on helping farmers use their own resources to overcome food insecurity, and a shift away from reliance on food aid.

The PSNP<sup>13</sup> was designed to address the following problem: - Smoothing of food consumption in chronic food insecure rural households, preventing household asset depletion, rehabilitating natural resources and creating access to community services. The program objectives were to reduce household vulnerability, to improve resilience to shock and to promote rural development. The Food Security Strategy rests on three pillars, which are: (1) Increase supply or availability of food; (2) Improve access/entitlement to food; (3) Strengthening emergency response capabilities. The program became operational in 2005 in 192 districts by including 4.8 million people. Currently, the number of district including under the PSNP are 411 in eight regions in the country. Three PSNP has been implemented between 2005 and 2014. The number of beneficiary has reached 8.4 million in the third PSNP.

The PSNP<sup>14</sup> has contributed significantly to improve food security in Ethiopia over the past ten years, consistently meeting its development objectives. More than 7 million people benefited in the program through direct financial support or employment opportunity. The program reduces the number of people needing humanitarian assistance by eight million by providing cash transfers to 318 food-insecure districts (Tewodros Emiru, 2016). The PSNP provides other infrastructure development in various part of the country. The program has also helped to build roads, watersheds and 4,300 school rooms, 39,000 kilometers (km) of roads 500 health posts and 4,300 school rooms, helping to address root causes of vulnerability and poverty (World Bank, 2014). The PSNP is now in its fourth phase of implementation, with International Development Association (IDA) investments of \$600 million, and a total budget of approximately \$3.6 billion from 11 development partners.

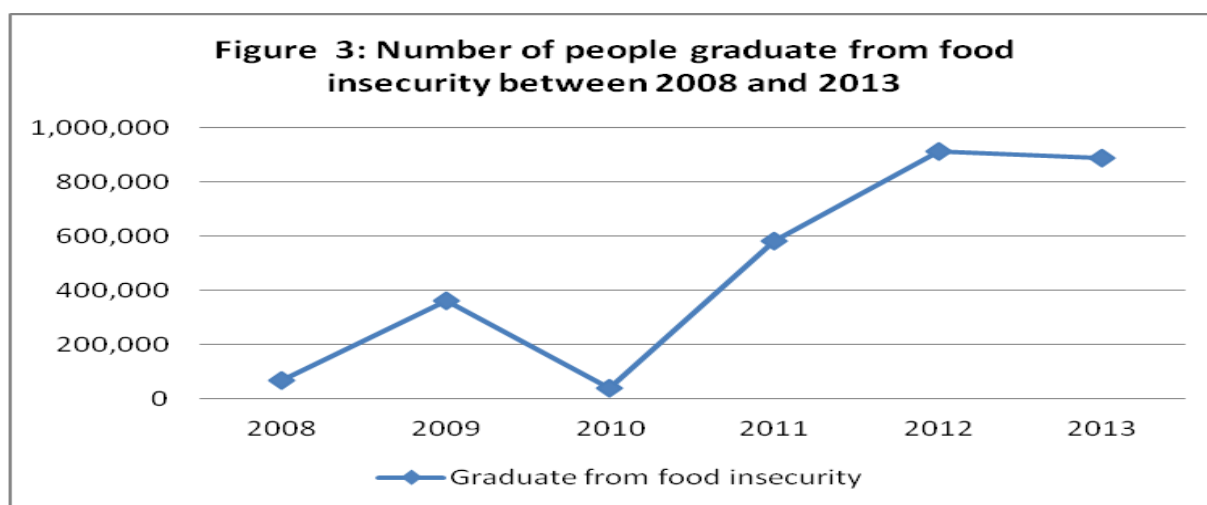
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### more sustainable livelihoods)

<sup>13</sup> The program has three components: Public work, Direct support and Institutional Support

<sup>14</sup> The public works program addresses root causes of vulnerability and food insecurity by supporting the development of a productive watershed and linking rural communities to small towns where they can access inputs, markets, and services(World Bank, 2014)

This program<sup>15</sup> facilitated the graduation<sup>16</sup> of the household from food insecurity. Between 2008 and 2013, the total of 2.8 million people has been graduated from food insecurity. As you can see in the Figure 3 below the number of graduate people increased from 69 thousand in 2008 to 888 thousand in 2013. The existed economic growth in the country gave more capacity for the government to allocate more financial and non financial resource for the program. About USD 1.1 Billion has been allocated for PSNP between 2005 and 2014 (World Bank, 2014). . Therefore the economic growth usual the most important precondition even for deep intervention of the government in social development. Such government intervention was highly supported by the recent fast and broad based economic growth.



Source: World Bank, 2014

According to the World Bank (2014) and, Ejegu Ayalew (2015) the PSNP program in Ethiopia has the following impact on the household:

<sup>15</sup> “This has been a moving experience for me,” said Ban Ki-moon, Secretary-General of the United Nations, during his recent visit to Dugda. “I am impressed by how different stakeholders like the World Bank, along with the Government of Ethiopia and the World Food Program have pulled their resources together to address this challenge.”

“I am very pleased to see first-hand how PSNP is helping to address food insecurity and promote sustainable community development in the poorest societies,” said Carolyn Turk, World Bank country director for Ethiopia. “(World Bank, 2014).

<sup>16</sup> Graduation occurs once a year. Household assets and income are assessed and compared to regional benchmarks to determine whether the household is ready for graduation

- Average months of food security increased from 8.4 months in 2006 to 10.1 months in 2012.
- In highland areas, distress sales have declined with 62% of households avoiding selling assets (90% due to PSNP) and 36% of households avoiding using savings to buy food (90% due to PSNP)
- PSNP has increased access to social services such as education and health in all regions.
- Based on 12 samples micro-watersheds, the decrease in soil loss is estimated at more than 12 tones/ha, and the decrease in sediment loss is estimated at 15.3 tones/ha/annum,
- Public works payments for five years improve household food security by 1.05 months.
- Public works payments increased the number of children's meals consumed, per recipient household, during the lean season between 2006 and 2010 by 0.152.
- Five years' participation in the public works programs raises livestock holdings by 0.38 tropical livestock units (TLU) relative to receipt of payments in only one year.
- Direct support payments improve food security as measured by the number of months that the household reports that it can meet its food needs. In the very few cases where average direct support transfers have been large (2,500 Birr), this effect is two months, which is a substantial livelihood impact. This impact is statistically significant.
- Relative to having no program benefits, the target communities had experienced increased food security by 1.53 months.
- For households receiving the program supports an increase in food security of 0.61 months was recorded.

This indicates that economic growth only cannot reduce food insecurity; rather it needs an in-depth government intervention in improving household entitlement. The ten years economic growth may not be sufficient, but necessary to achieve food entitlement at household level in all rural people in the country. The initial situation of the economy and speed of economic development affects the impact of economic growth on the food in security at the household level in the country.

## 6. Summary

Ethiopia experienced fast and continues economic growth during the last ten years. Such economic growth increases the national economy and at the same time it started to change the structure of the national economy. However, occasionally the country has been facing food security due to change in the external or internal shock. Usually the change in the weather conditions condition strongly affects the food insecurity in the country. Though the number of food insecurity has shown decline between 2003 and 2014, still the country has faced high number of food insecure people in 2015. Around 10.2 million people need food insecure. To achieve food security or control food insecurity the country must modernize the agricultural sector and change the existed structure of the agrarian economy to industrial economy. In the short term the country must create the agricultural sector that resist any impacts of climate change through providing irrigation, ground water and efficient marketing system. Further the government should facilitate for households to improve theory asset ownership to resists any external and internal shock. Therefore, the government, scholars, private sector and donors must work together to make the food insecurity history in Ethiopia.

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