Pictures of food insecurity in Amhara region

Tadesse Negash¹

University of Gondar, College of Social Science and the Humanities, Department of Development and Environmental Management Studies, Gondar, Ethiopia.

Abstract

The physical access to food in Africa south to Sahara is complicated due to weak and inappropriate infrastructures. Poor roads, ports, communication, food storage facilities and other installations are among factors that facilitate the functioning of markets, particularly in rural areas... steady progress has been recorded in the reduction of the number of people without access to safe drinking water, improved sanitation and electricity over the past 20 years. This article assessed the overall picture of food insecurity in Amhara region in line with the three pillars (access, availability and utilization). Cross sectional research, design was applied. Primary and secondary data sources were employed. Both qualitative and quantitative analysis approaches were employed. The study found out that the average degree of vulnerability in the study area (Amhara Region) is about 52.3%. With this, of the current food insecure households, about 84% are chronically food insecure or likely to remain insecure in the future (vulnerable) whereas the remaining are not vulnerable to future food insecurity. On the other hand, about 20.8% of the current food secure households are vulnerable to food insecurity (likely to be food insecure in the future) in the Amhara region).

Key words: vulnerability, insecurity, availability

Introduction

Food security is a serious issue in the globe especially in the developing countries. Birara, et al (2015), states by indicating FAO, (2014) global hunger reduction continues and about 805 million people are estimated to be chronically undernourished in 2012-14, down more than 100 million over the last decade and 209 million lower than in 1990-92. In the same period, the prevalence of undernourishment has fallen from 18.7-11.3% globally and from 23.4-13.5% for developing countries. However, Hilderink, et al (2012) in their explorative study they indicate that over the last decades in sub-Saharan Africa the number of undernourished has increased with 41%, from 169 million around 1990 to 239 million in 2010. This increase is particularly remarkable since the first of the Millennium Development Goals (MDG) is to halve the 1990 level of hungry people by 2015.

In focus with east Africa i.e. the five African countries with the most number of people in a state of hunger/under nourishment have between 10 million and 32 million people each in a state of hunger/under nourishment (Ethiopia 32.1 million; Tanzania 15.7 million; Nigeria 12.1 million; Kenya 11 million and Uganda 10.7 million). Significantly, four out of the five countries with the most number of people affected by hunger/under nourishment are in the Horn/East of Africa (Ethiopia, Tanzania, Kenya and Uganda) (Birara, et al, 2015).

Likewise the number is much higher in Ethiopian food security strategy document (1996), which describes Food insecurity is one of the defining features of rural poverty in Ethiopia, particularly in the moisture deficit northeast highland plateaus and some pastoral areas. The incidence of food poverty is higher, estimated at 50% of the population; 52% in the rural areas and 37% in the urban areas.

As Degefa and Furgasa (2016) states by quoting Degefa (2002) and Hussein (2006) the major causes of food insecurity in Ethiopia are closely related to environmental, demographic, economic, social, infrastructural and political factors. Hence having such problems coupled with the country poor economy which depends mainly on agriculture, citizens cannot be easily withdraw from poverty and food insecurity.

Ethiopia is one of the most food-insecure and famine affected countries. A large portion of the country’s population has been affected by chronic and transitory food insecurity. The situation of chronically food insecure people is becoming more and more severe. Food security situation in
Ethiopia is highly linked to recurring food shortage and famine in the country, which are associated to recurrent drought (Abduselam, 2017).

Amhara region which is one of four major productive regions in Ethiopia 48 Woredas (Districts) out of 105 considered food insecure (Dereje et al., 2008). Hence the region is part of the most affected by food insecurity in the country as well as in the Globe. And the region fourth term PSNP Report in (2016) shows a total of 1,890,985 clients targeted in 1,457 kebele which marks there are much more peoples who are vulnerable to food insecurity.

As the majority of the people lives in the region depend it’s livelihood on subsistence agriculture and even if the government attempts to uplift the sector its performance in the country as well as in the region the result is not enough and citizens are still in need of basic need like food which hampers the other sector from improvement.

Food Security situation in Ethiopia (Review of Empirical Literature)

Ethiopia is a highly famine affected country in the world as Abduselam, (2017) states by citing(Catleyet al., (2016), DFID (2014), Webb et al., (1992) the Year of event and Major relative incidences of famine after 1953 were 13 famine seasons till 2016. Which indicates as the country is highly vulnerable to food insecurity.

Food insecurity situation in Ethiopia is highly linked up to severe, recurring food shortage and famine, which are associated to recurrent drought /ibid/. Thus Ethiopia is a predominantly drought prone country as history shows and following that famine were occurred, and food security problems are always the homework of every government that administers the country whether they tackle it successfully or not.

Besides according to FAO, (2017) situation report 5.6 million People are food insecure in 2017... At the start of 2016, more than 10.2 million people were in need of emergency food aid, 1.7 million household’s seed insecure and 2.4 million households in need of livestock support.

The Ethiopian 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 (Fayera, 2016). Likewise about 4 to 6 million people are estimated to suffer from chronic/transitory food insecurity across the country as a result of weather related hazards. Average daily food consumption is 1880 Kcal/Capita/day compared to 2,199 for sub Saharan Africa (Dereje et al, 2008).

Biraraet hl., (2015), illustrates the causes for food insecurity in Ethiopia are mainly backward agriculture, land degradation Drought, Population Pressure, poor infrastructure facility, low level of off farm/ non-farm activity.Recently El Niño is becoming the main reason for the livelihood problems which in turn results food insecurity in the country. FAO, (2016) indicates In Ethiopia, El Niño crisis is first and foremost a livelihoods crisis. The drought has had a profound impact on the livelihoods of agriculture- and livestock-dependent households, causing thousands to rely on food aid.

The estimates reveal that: the share of people in Ethiopia who are undernourished in 2014-16 is 32 percent, a reduction from 74.8 percent in 1990-92 (FAO, IFAD and WFP, 2015). But the number is still high which shall be reduced through hard work. In addition, an estimated 7.6 million (or 11 per cent of the rural population) are currently considered chronically food insecure, meaning each year they are relying on resource transfers to meet their minimal food requirements. Over the past four years between 2.2 and 6.4 million additional people were food-insecure or not able to meet their food needs in the short term due to transitional factors. They are temporarily dependent on relief food assistance (FAO, 2015).

The country tries to minimize the food insecurity through different ways through Food Security Strategy of Ethiopia of 2002 and PSNP for instance FAO, (2015) indicates PSNP in the country has grown immensely since its inception in 2005-2006 from a $ 70 million budget to 175 million in Phase II (2007-2009) and 1.3 billion in Phase III (2010-2014). Through the Household Asset Building Program (HABP), rural people can become not only food sufficient but also sustainably food secure, enabling them to graduate from the PSNP and eventually the Food Security Programme (FSP) altogether. Yet till 2015 no additional capacity have been created in building stocks of emergency food
grain reserve apart from maintaining the stock at 405,000 metric tons which is equal to the level at the begining of the plan (2009/10) (National Planning Commission 2016).

**Picture of Food security in Amhara region (Review of Empirical Literature)**

The Amhara region, formerly known as Region 3, has an estimated population of over 17.214 million, of which about 12.3% was urban population (CSA census report, 2007). More than 37% of the total population is living in absolute poverty (earning less than a dollar a day), which makes the region’s food security situation more precarious compared to the national average 44.4 % (WFP, 2009).

In 2011 in Amhara region the headcount ratio, short-fall and severity of food insecurity were 48%, 18% and 8.7%, respectively. The results revealed that the incidence of household food insecurity was 0.48. This implies that about 48% of the sampled households were not able to meet the daily recommended caloric requirement (Mesfin, 2014).

Ethiopian public Health institute, (2016), indicates in their study of food insecurity and its association with under five children nutritional status in Amhara region sekelayworeda they state that Under five children in Amhara Region affected by undernutrition is more than other regions.

The Amhara region suffers from recurrent droughts and pest invasions. Of the 105 woredas in the region, forty-eight are drought-prone and chronically food insecure there has been no single year since 1950 where there was no drought in the eastern part of the region...On the other hand, much of the western half of the region has good soils and adequate rainfall and typically produce agricultural surpluses (USAID, 2000).

Therefore the empirical literatures reveal that the region is the most Food insecure in the country since it’s below the national average and almost half of the region woredas are food insecure especially the eastern region parts i.e South Wollo, Oromo liyu, Waghimira and half part of South Gondar zones.

**Sufficiency of food in Amhara region**

CSA in 2005 states that farmers in Amhara had a total of 9,694,800 head of cattle (representing 25% of Ethiopia’s total cattle population), 6,390,800 sheep (36.7%), 4,101,770 goats (31.6%), 257,320 horses (17%), 8,900 mules (6%), 1,400,030 donkeys (55.9%), 14,270 camels (3.12%), 8,442,240 poultry of all species (27.3%), and 919,450 beehives (21.1%) (WFP-Ethiopia, 2009).

In meher the total product of farm in Amhara was 90.6 million quintal in 2007/8 E.C which is less than 2006/2007 E.C in 200,000 Quintal(BoARD, 2017). Hence with such progress the needed food for the region population is in question since the report shows that still the problem is huge even if the other factors (access, utilization and stability) are not seen since the domestically produced farm products are not sufficient to meet the need of the region.

In the study conducted by Veen, (2000), and reported by WHO in South wollo Amhara region it indicates that Nutrition surveys carried out by the Disaster Preparedness and Prevention Commission and NGOs states that malnutrition rates, since May 1999, have been higher than usual in south wollo. During the first six months of 2000, pockets of high levels of acute malnutrition, passing the threshold of 15%, persisted in at least three woredas. In similar zone Alem (2007), indicates also Based on the recommended daily food intake of 2,100 kilo calorie, he finds that 69.2% of the sampled households of the study Woreda were food insecure in south wollo. As well Arega (2013) Revealed that Compared with the recommended per capita daily calorie intake of 2100 lay gayintworeda which is in Amhara region found out that about 74% of the households were food insecure Therefore, food security is a challenge task since only 26% of the sample households were food secure. Which illustrate the availability of food in the hands of these households is low to meet their daily calorie need.

Arega (2013) as the same study write that seasonal migration was the highest during Kiremt season mainly because of shortage of food in the households. And his study revealed that some 34% of the family members had migrated to search for jobs in the Amhara Region as the available food in the households will be finished.The same writer shows in his study at Amhara region Lay GayintWoreda
survey data revealed about 20% of the poor households had no livestock at all, while all of the better-off owned more than 6 livestock and 97% of the middle households owned one or more livestock. It points out that majority of the households have a livestock at list. (Mesfin, 2014), wrote also that Households in Amhara region rural areas, to coup with vulnerability due to low availability of food in the household they most often depend on reducing the quantity of meals (55.6%), borrow food (50%) and restrict household food consumption to secure the need of children for food strategies (45%).

Yared et al, (2000) states that:

*Key informants in 10 of the 21 kebeles (48%) stated that a large number of families in their communities experienced 3 to 4 months of food shortages per year, whereas informants in 9 kebeles (43%) said that seasonal food shortages could be as long as 6 to 8 months. Seasonal hunger is therefore a widespread and serious problem in the region, although there is considerable variation in its severity.*

In the other areas of the region like farata District Worku et al, (2014) wrote that (67.6%) of the heads of the households had worries about the availability of enough food for their family. Similar proportions of the household heads (68.3%) reported the absence of the preferred food to eat and 66.7% of respondents reported that they consumed a limited variety of food.

Therefore the region is in serious problem in terms of food availability since the empirical evidences showed that the yearly produced farm is not sufficiently meet the demands of households.

### 6.2 Access to food (Economic and Physical) in Amhara region

Fekadu and Mequanent (2010) deals with access by citing Sen (1981) natural and other resources endowment determine Individual’s entitlement that can be transformed via production and trade into food. Hence, analysis of determinants of food security can capture how the existing institutions and households assets (physical and non-physical) determine one’s capacity to transform these assets into capability to secure food.

WFP-Ethiopia, (2009) in their study for food security and vulnerability in Amhara and afar region directs that considering expenditure by category of commodity, the majority of responses indicated most expenditure were on cereals and other foods. Gondar took the highest share of expenditure for cereals (64%), followed by Dessie (62.42%), Bahir Dar (59.18%) average expenditure on other foods was Bahir Dar (40.77%), Dessie (37.58%) and Gondar (35.83%). Insignificant number of households reported about their expenditure on entertainment (alcohol, chat, tobacco and celebrations) Hence this big towns of the region which possess almost one million people of the region pays much of their income for the food they are need for life.

An important means of acquiring food in rural areas, where the farmers face crop failure and livestock product is inadequate are transfer income earned from relatives and migrated household member. Accordingly, the success of farm households and their family members in coping with food insecurity is highly determined by their ability to get access to migration network opportunities (Mesfin, 2014).

Bishop and Hilhorst (2010) in their study in Wag HimiraSekota in Amhara region they found that 50% of the households in these three categories were defined as poor due to the fact that the authorities had just started implementing a land reform that declared all slopes of over 30% steepness as unfit for agriculture. This dispossessed many families from their land, and they were consequently categorised in the poorest wealth which led them to be the beneficiaries of PSNP due to their incompetence to meet their daily calorie need.

A study conducted by Worku et al, (2014) in Farta district of Amhara region also shows that the overall prevalence of food insecurity was 70.7% in the district. As wellAchenef et al, (2016) revails that sixty percent (59.20 %) of the households in east Gojjam zone and more than half of the households from West Gojjam zone (which is categorized as a food surplus area) were food insecure Achenef et al, (2016). Which shows even the better zones of the region in agricultural production are with food insecurity.
Table 5: Wealth categories and compiled resource indicators for assessed areas North and South Gondar

<table>
<thead>
<tr>
<th>Resource indicator</th>
<th>&quot;The Destitute&quot;</th>
<th>&quot;The very Poor&quot;</th>
<th>&quot;The Poor&quot;</th>
<th>&quot;The Middle&quot;</th>
<th>&quot;The Rich&quot;</th>
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<tbody>
<tr>
<td>Number and Type of animals</td>
<td>No animals</td>
<td>Have Poultry</td>
<td>No Oxen, a couple of sheep, some poultry</td>
<td>1 to 2 Oxen, some cattle’s, can have up to 40 sheep</td>
<td>2 Oxen, 5 cattle’s, 2 Donkeys/Mules and 40 Shoats</td>
</tr>
<tr>
<td>Amount of cultivable land</td>
<td>No land only one plot</td>
<td>0.5 to 1 hectare</td>
<td>1.5 to 2 hectare</td>
<td>Enough land for subsistence farming usually more than 4 hectare</td>
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Source: Guinand (1999)

Ejiga (2006) states the access to asset in enebsesarmidir district in her/his study regarding food crisis. Accordingly, rich people in the area are those who have 1.0 - 1.5 ha of farm land, two oxen, one cow, one donkey, four sheep or goats, and enough food for the whole year and enough seed for the coming planting season. Those who have 0.75-1.0ha of farm land, one ox, one cow, one donkey, have not enough food for the whole year, have not enough seed for the coming planting season and can be forced to sell their ox or cow are medium level households. On the other hand households in the poor category are characterized by having 0.5 – 0.75ha of farmland, having no livestock in most cases, having not enough seed for planting and often exposed to hunger between March and the next harvest (November/December).

6.3 Utilization of food in Amhara region

In Ethiopia, cereals, mainly teff, are the basic constituents of the daily diet and legumes and livestock products are added to the diet with increases in income. Ethiopian food characteristically consists of spicy vegetable and meat dishes, usually in the form of wat (or wot), a thick stew, served on top injera, a large sourdough flatbread, which is about 50 centimeters (20 inches) in diameter and made out of fermented teff flour Henze, (2000) cited in (Yidnekachew, 2009). In Amhara region they use the same food items described in the above. Achenef et al, (2016) in their study conducted in East and West Gojjam zones of Amhara region found that the prevalence of undernutrition among mothers was 12.6%. Which was very much lower than the 2011 Ethiopian Demographic and Health Survey findings (27%) due to factors they explain as interventions on maternal health and nutrition and other woman-empowering programs of the government and other agents to have an effect on maternal nutritional status.

Ethiopian public health Institute, (2016) finds that the overall prevalence of stunting, underweight and wasting was 36.9%, 19.8% and 11.5% respectively in Sekela District of Amhara region. Which shows there are differences in the region various districts in terms of having and utilizing the food but all empirical studies that I cover shows that there is a low level of food utilization in my viewpoint.

The three study towns of Amhara region i.e. Bahir Dar, Gondar and Dessie; majority of poor households in Amhara earned an average monthly income of 150 Birr. Dueto food prices increased, people were affected nutritionally and Number of meals in a family significantly reduced money shifted to less preferred and cheap food, to less nutritious food, meaning quality of food was decreased. Although children were given priority for food, neither parents nor children benefited much. It was a day-to-day practice to forego meals and people were dissatisfied of their food it caused hunger and malnutrition (WFP-Ethiopia, 2009).

Lack of dietary diversity and micronutrient-dense food consumption, and problematic child feeding practices contribute to the high rates of child undernutrition. Children in rural areas are more likely to be stunted, and in Amhara, the rate is 52 percent (USAID, 2014). Which makes the region more severely affected from the rest regions, which constitutes Affar (50 percent), and Benishangul-
Gumuz (49 percent) more severely, affected, while Addis Ababa (22 percent) and Gambela (27 percent) as the USAID, (2014) Ethiopian nutrition profile indicates.

6.4 Stability of the other three dimensions over time in Amhara region

The above three components of food security are in worse condition in the region as the empirical evidences tolled us thus stability component did not look like in a question since it is far from achievement rather the first two i.e. are the major components that requires a quick response in the region. Mesfin, (2014) wrote the vulnerability and food security condition in the region will be in problem by stating:

The average degree of vulnerability in the study area (Amhara Region) is about 52.3%. With this, of the current food insecure households, about 84% are chronically food insecure or likely to remain insecure in the future (vulnerable) whereas the remaining are not vulnerable to future food insecurity. On the other hand, about 20.8% of the current food secure households are vulnerable to food insecurity (likely to be food insecure in the future) in the Amhara region.

However, GTP II states that the performance of major crops has surpassed the target set in the base case scenario that enabled the country to become food self-sufficient at national level. Even if we do not know the access and utilization of this food produced yearly in the nation and regional states are not in the same way to achieve the plan as their report shows, (Amhara region 2006/7 and 2007/8 BoARD report) thus stability of the three components of food security is in question.

As well, SARDP, (2005), reviles that the local farmers of south Wollo repeatedly mentioned falling terms of trade in agriculture, i.e., falling price of crops compared to high prices of fertilizers and improved seeds, compounded by crop pests and diseases are the major problems in their efforts to secure adequate food and cash income. Production losses due to crop pests and diseases and poor post-harvest handling, as estimated by the woreda agriculture offices, can amount to 20-30%. Besides we are also observing the spread of the Fall Armyworm (migratory insect pest) in 2017/8 which affects the farmer’s crop as a consequence they are becoming vulnerable for reduced food production and food insecure in the future unless or not they are assisted through integrated effort.

Conclusion and Recommendation

All over the region (Amhara) food security is a serious and long rooted problem which cannot solved to this days. The availability is not well grown due to the backward and rain feed agriculture practices with no effective help given for improving the situation, in the meantime, the economy is dependent on agriculture and poor infrastructure that binds the progress.

Hence, food security, which requires a multi-dimensional change, is not in a position to be achieved in the near future in the region, as the natural and human induced problems are causing the region not to go in line with the plans as the sustainable development agenda and government plans. The region Bureau of agriculture and rural development report in 2007/8 E.C the annual product of agriculture falls in 200,000 Quintal from the preceding year which inclined as the availability of food for households in the region is in question.

The majority of the region urban population spends their income for food consumption yet due to the low income it is not possible to use a balanced diet for household, and stability of the three components for the secured is not too much trusted.

With such huge food insecurity, the region must identify the resources available and ready to develop and use for solving the problem of food security like modern livestock rearing, small irrigation dams that will benefit the residents of at list kebeles in every woreda that have potential. Easy and timely access for fertilizer, conservation of natural resources must be undertaken based on the needs of the farmers, community participation in project implementation, access to credit and developing saving tradition are too much essential. Regarding the urban resident’s weather or not the market is bad for consumers there must be a real consumer protection practices by government offices and minimum wage policy shall be adopted with enough employment opportunity creation to increase the consumer buying capacity.

Education and training for household leaders concerning nutrition issues are essential as
nutrition determine the citizens thinking and analyzing ability and since childres are the future for the country.

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