

## REVIEW ON CAUSES AND COPING STRATEGIES OF RURAL FARM HOUSEHOLDS’ FOOD INSECURITY IN ETHIOPIA

*Melese Abebaw*

*Research Scholar, Department of Rural Development and Agricultural Extension, Mekdela Amba University, Ethiopia*

### **ABSTRACT**

Regular reviews and syntheses of the literature is important for researchers to build upon existing knowledge to identify key knowledge gaps and new research directions. A Significant amount of study has been conducted causes of rural farm households’ food insecurity in Ethiopia. This paper review focuses on reviewing the research’s results which focuses on identifying causes and coping strategies of food insecurity in different parts of Ethiopia. As several studies argue in Ethiopia, most of the rural farm households are food insecure. This is due to different causes which vary from place to place, sex to sex and even vary from time to time. Generally, this review concludes that the government of Ethiopia and the responsible bodies must work towards alleviation of food insecurity in Ethiopia.

**KEYWORDS:** Food Insecurity, Food Security, Coping Strategies, Review, Ethiopia

---

### **Article History**

**Received: 21 Apr 2021 | Revised: 30 Apr 2021 | Accepted: 05 May 2021**

---

### **INTRODUCTION**

#### **Background of the Review**

Even though the problem of food insecurity has been the concern of developing countries for long time, now a days it is a world-wide issue. Estimates indicate that about 925 million people worldwide were chronically malnourished of which 906 million are in developing countries, in which two-thirds of these live in just seven countries (Bangladesh, China, Democratic Republic of Congo, Ethiopia, India, Indonesia and Pakistan) and the rest 19 million in the developed countries. Moreover, the proportion of undernourished people remains highest in sub-Saharan Africa, at 30 percent (that is, 239 million) in 2010 (FAO, 2010). Ethiopia with an estimated population of over 90 million is the second populous nation in Africa. Out of the total population of the country 85 percent is found in rural areas (ECSA, 2011). The country is predominantly agrarian and agriculture plays an important role in the national economy (Di Falco et al., 2011). It accounts for about 46 percent of the total GDP, employing and supporting about 84 percent of the total population and accounts for about 90 percent of the exports (Workneh, 2004; FDRE, 2008; CIA, 2011), but its productivity and performance in terms of feeding the country’s population which is growing at 2.6 percent per annum is dismal (Habtom et al., 2005; FDRE, 2008). The performance of agriculture in terms of feeding the country’s population is poor. Currently in Ethiopia, there are more than 10 million people who have been affected by drought. Some 4.6 million people are threatened by hunger and malnutrition and require urgent food assistance. The deteriorating situation is compounded by high food prices (WFP.,

2009). Several studies indicated that, 41 % of the Ethiopian population lives below the poverty line and 31.6 million people are undernourished. The latest undernourishment numbers show a positive trend (1990-92: 71% of the population; 1995-97: 64%; 2000-02: 50%; 2004-06: 44%) (FAO., 2010). The concentrations of food insecurity and malnutrition are prevalent in rural areas, with a population of six to seven million chronically food insecure and up to 13 million seasonally food insecure (Bill and Melinda Gates Foundation, 2010). The main causes of food insecurity are high population growth rate, high reliance on small-size and rain-fed agricultural holdings, lack of access to input, lack of access to credit, high susceptibility to drought, limited access to basic service, lack of access to market, land degradation and decreased productivity, lack of income generation opportunity and alternatives, lack of access to technology and lack of access to information on market, agricultural technology (FSP, 2003; WFP, 2006; EU, 2012). However, the households used different mechanisms in order to recover their needs. Causes and coping strategy of food insecurity could vary from place to place and even household to household in the same area. Reviewing on causes and coping strategy of food insecurity is very important for the researchers to identify the knowledge gap for future research direction.

### **Objective of the Review**

- To review causes of food insecurity
- To review the identified coping strategies of food insecurity

## **REVIEW OF LITERATURE AND DISCUSSION**

### **Definition of Key Terms**

The term food security originated in international development literatures in the 1960s and 1970s. Food security is defined as a situation where all people at all times have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (Hoddinott, 1999). World Food Summit in 1974 defined food security as availability at all times of adequate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices. Later, World Bank (1986) defined food security as access by all people at all times to sufficient food for an active and healthy life.

The USAID (1992) defined food security as a situation achieved when all people at all times have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life. In contrast, food insecurity is the lack of access to sufficient food that leads to poor health, reduced energy and other physical and physiological deterioration i.e., failure of livelihoods to guarantee access and entitlement to sufficient food at the household and individual levels.

FAO (2001) on its part defines food security as ‘a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life’. Food, here, is defined as any substance that people eat and drink to maintain life and growth. As a result, safe and clean water is an essential part of food commodities.

Food security is defined, in its most basic form, as access by all people at all times to the food required for a healthy life. Access to the needed food is necessary, but not a sufficient condition for a healthy life. A number of other factors, such as the health and sanitation environment and household and public capacity to care for vulnerable members of society, also come in to play (Von Broun et al., 1992).

On the other hand, According to FAO (2000) defined food insecurity as it is a situation that exists when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development and an active and healthy life. It is also an underlying cause of malnutrition and in extreme cases results in mortality. A high degree of food insecurity when compounded with other undesirable factors can threaten livelihoods. High risks of food insecurity and livelihoods can be expressed in terms of malnutrition, morbidity, and in extreme cases mortality (Beruk, 2003). \_As different authors argue that, there are two types of food insecurity i.e. Chronic 'and transitory food insecurity.

Chronic food insecurity: is defined as the inability of a household or an individual to meet the minimum daily food requirements for a long period of time' (IFAD, 1997); persistent inability on the part of the household to provide itself adequately with food' (FAO, 2005) and \_when households are unable in normal times to meet food needs because they lack sufficient income, land or productive assets, or experience high dependency ratios, chronic sickness or social barriers' ( WFP,2004).

Transitory food insecurity: is usually defined as a sudden (and often precipitous) drop in the ability to purchase or grow enough food to meet physiological requirements for good health and activity' (Barrett et al., 2001), the sudden reduction of a household's access to food to below the nutritionally adequate level' (IFAD, 1997) and \_When there is a temporary inability to meet food needs, usually associated with a specific shock or stress such as drought, floods or civil unrests' (DFID, 2002).

It can be further divided into cyclical and temporary food insecurity (CIDA, 1989, cited in Maxwell and Frankenberger, 1992). Temporary food insecurity occurs for a limited time because of unforeseen and unpredictable circumstances; cyclical or seasonal food insecurity when there is a regular pattern in the periodicity of inadequate access to food. This may be due to logistical difficulties or prohibitive costs in storing food or borrowing.

Dimensions of food Security: Jrad et al.(2010) elaborated four dimension of food security as food availability, food accessibility, food utilization and stability.

Food Availability: The availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports including food aid (Haddad, 1997; Kifle and Yoseph, 1999). It also refers to the physical existence of food stocks for consumption be it from own production or on the market. On the national level it is the function of the combination of domestic food stocks commercial food imports, food aid and domestic food production as well as the underlying determinants of each of these factors (Gregory et al ., 2005).

Food Access: is the ability to maintain sufficient food of guaranteed quality and quantity to meet nutritional requirements of all household members. Here the food should be at the right place at the right time and the people should have economic freedom or purchasing power to buy adequate and nutritious food (Jrad et al., 2010). It is access of food by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet. Entitlements are defined as the set of all commodity bundles over which a person can establish command given the legal, political, economic and social arrangements of the community in which they live (including traditional rights such as access to common resources) (Haddad, 1997; Kifle and Yoseph, 1999).

Food Utilization: refers to ingestion and digestion of adequate and quality of food for maintenance of good health. This means proper biological use of food, requiring diet that contains sufficient energy and essential nutrients as well as knowledge of food shortage, processing, basic nutrition, child care and illness management (Jrad et al., 2010). Similarly, It

is utilization of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met (Haddad, 1997; Kifle and Yoseph, 1999).

Stability of food: Refers to the continuous supply of adequate food all year round without shortage (Jrad et al., 2010). To be food secure, the household or individual must have access to adequate food at all times. They should not be at risk of losing access to food as the consequence of a shock. Therefore the concept of stability refers to both the availability and access dimension of food security.

Coping strategy: could be defined as a mechanism by which households or community members meet their relief and recovery needs, and adjust to future disaster-related risks by themselves without outside support (Dagneu, 1993; as cited in Tesfaye, 2005). Dagneu (1993) defined coping strategies as mechanisms by which households or community members meet their relief and recovery needs, and adjust to future disaster-related risks by themselves without outside support.

### **Causes of Food Insecurity**

Food insecurity emerged as a key problem and development challenge in Ethiopia in the early 1970s and became pervasive in the subsequent decades. The occurrence of food insecurity is due to the combinations of natural and human made factors and the main causes directly or indirectly laid their root in environmental, demographic, economic, social, technological, infrastructural, and/or political aspects of the country. The causes are multifaceted and complex in their nature. The causes of food insecurity are temporary and structural as well as multifaceted and complex in their nature.

The government of Ethiopia have witnessed that a combinations of factors such as adverse changes in climate; draught, poor technology, soil degradation, and inefficient water management are the major factors for poor agricultural performance in Ethiopia (Berhanu, 2001; Berhanu, 2004; FAO, 2009), and policy induced, as well as program implementation problems have resulted in serious and growing problems of food insecurity in Ethiopia.

Devereux (2010) indicated that food insecurity in Ethiopia derives directly from dependence on undiversified livelihoods based on low-input, low-output rainfed agriculture. Ethiopian farmers do not produce enough food even in good rainfall years to meet consumption requirements. Since the country is dependent on agriculture, crop failure usually leads to household food deficit. The absence of off-farm income opportunities, and delayed food aid assistance, poor access to credit, lack of access to inputs, leads to asset depletion and increasing levels of destitution at household level (FDRE, 2002; 2003).

Moreover, Adugna and Wegayehu (2011) revealed that lack of information, lack of access to input, lack of access to credit, high susceptibility to drought, limited access to basic service, high degradation and decreased productivity, lack of income generating activities and alternatives, lack of access to technology were causes of food insecurity. And rainfall variability, soil degradation, inappropriate storage facility, pre and post-harvest crop loss, inability of the household to purchase the food, small and fragmented land size, lack of off-farm income opportunity, the underdevelopment of livestock sub sector, inadequate credit and extension service and land tenure insecurity are the causes of food insecurity ( Bewket, 2009)

### **Coping Strategies of Food Insecurity**

Coping strategies practiced by food insecure households are different depending up on the degree of food shortage. Coping mechanisms are adapted depending on how bad the crisis are and what is available to help them manage their situation. For

Example, Eshetu (2000) further revealed that the most common coping practice that are sequentially used during food crisis consisted of reducing number and size of meals, sale of small ruminants and draft oxen, consuming wild food, and borrowing of cash and/or food from better-off neighbours and/or relatives. Another less frequently used strategies were: postponing wedding and other ceremonies, sale of fire wood, with drawing children from school and eating toxic taboo foods.

Coping mechanism in Ethiopia include livestock sales, agriculture employment, certain type of off-farm employment and migration to other area, requesting grain loans, sales of wood or charcoal, small scale trading, selling dung and crop residues, rising of food consumption of wild plants, reliance on relief assistance, relying on remittances from relatives, selling of clothes, and dismantling of parts of their houses for sale (Yared, 2001).

Additionally, Coping mechanism used by in Ethiopia include livestock sales, agriculture employment, certain type of off-farm employment and migration to other area, requesting grain loans, sales of wood or charcoal, small scale trading, selling dung and crop residues, rising of food consumption of wild plants, reliance on relief assistance, relying on remittances from relatives, selling of clothes, and dismantling of parts of their houses for sale (Yared, 2001). Inability to cope, or vulnerability, is conventionally related to assets, particularly physical assets such as land, labour and capital (Elizabeth, 2004).

Moreover, Sale of more livestock than usual, borrowing of food, reduce number of meal, reduce size of meal, sale firewood and charcoal, seasonal migration, seeking alternative or additional job, rely on less preferred and less expensive food, seeking relief assistance, becoming temporary trade, household splitting, consume wild food, remittance, participating in cash basis project works (Abdirahman A., 2015).

## **CONCLUSIONS AND RECOMMENDATION**

### **Conclusions**

This review of the literature on food security in Ethiopia has showed that much progress is being made, and new research directions are being pursued. Much of the research remains within its disciplinary echo chamber, and more effort is needed to transfer across disciplines, particularly involving those outside of academia, namely decision makers and practitioners.

Food insecurity is one of the major problems of rural farm households in Ethiopia. This problem is caused by different demographic, socio-economic and institutional factors including population pressure, drought, shortage of farm land, soil erosion, lack of oxen, detoration of food production capacity, outbreak of plant and animal disease, poor soil fertility, chronic shortage of cash income, poor farming technologies, weak extension services, high labor wastage, poor social and infrastructural facilities and pre and post-harvest crop loss.

The food insecure households used different coping strategies such as livestock sales, agriculture employment, certain type of off-farm employment and migration to other area, requesting grain loans, sales of wood or charcoal, small scale trading, selling dung and crop residues, rising of food consumption of wild plants, reliance on relief assistance, relying on remittances from relatives, selling of clothes, and dismantling of parts of their houses for sale to copout from the food insecurity. Generally, the food security status, the determinants and coping strategies of food insecurity is vary from place to place, sex to sex, time to time. This is because they are determined by area specific, time specific and households' sex specific factors and determinants.

## Recommendation

Since causes and determinants of food insecurity is area specific, So that it is important to study on all parts of Ethiopia and the government and the responsible bodies should ready to solve the identified constraints of the specific area.

## REFERENCES

1. *Abdirahman Ahmed. 2015. Food insecurity and coping strategies of agro-pastoral households in Babile district of Somali regional state, Ethiopia, Unpublished MSc Thesis, Haramaya University, Haramaya, Ethiopia.*
2. *Adugna Eneyew and Wogayehu Bekele. 2011. Causes of household food insecurity in Wolayita: Southern Ethiopia. Journal of Stored Products and Postharvest Research, 3(3): 35–48.*
3. *Barrett, C. and S. David. 2001. Food Policy in Crisis Management. Draft Report for the World Bank Food Policy Tool Kit Series (Ithaca, NY: Cornell University Press).*
4. *Berhanu A (2004). The Food Security Role of Agriculture in Ethiopia. Agricultural and Development Economics Division (ESA) electronic. J. Agric. Dev. Econ., 1(1): 138-153.*
5. *BerukYemane. 2003. Food security situation in the pastoral areas of Ethiopia.pp.1-3. National Pastoral Programme Coordinator, Oxfam GB.*
6. *Bewukt, W.,2009. Rain water harvesting as alivelihood strategy in the drought prone areas of the amhara region of Ethiopia. Organization for Social Science research in Eastern and Southern Africa (OSSREA) Publication, Addis Ababa, Ethiopia, ISBN-13:9789994455300, page:168*
7. *Bill and Melinda Gates Foundation, 2010. Accelerating Ethiopian agriculture development for growth, foodsecurity and equity. Bill and Melinda Gates Foundation, Addis Ababa, Ethiopia, July 2010, pp: 1-116.*
8. *CIA 2011. The World Fact Book. <https://www.cia.gov/library/publications/the-worldfactbook/geos/et.html> (Accessed in 12/08/2012).*
9. *Devereux S (2010). Food insecurity in Ethiopia. Department For International Development (DFID): <http://www.nesglobal.org/node/129>.*
10. *DFID (Department for International Development).2002.Food Security Strategy and Priorities for Action Eliminating Hunger, London.*
11. *Di Falco, S. Veronesi M. and M. Yesuf. 2011. Does Adaptation to Climate Change Provide Food Security? A Micro-Perspective from Ethiopia.American Journal of Agricultural Economics., Volume 1–18.*
12. *ECSA 2011. Central Statistical Agency Population Estimates. Ethiopia, Addis Ababa.*
13. *Elizabeth, C. 2004. Food Security and Social protection: 111 Westminster Bridge Road, SE1 7JD, UK*
14. *Eshetu Belay. 2000. The root causes of food insecurity and coping mechanisms of rural households: A case study of Wereilu Woreda. M.Sc. Thesis, AAU, Ethiopia*
15. *EU (European Union). 2012. Effectiveness of European Union development aid for food security in Sub- Saharan Africa. Special report No. 1, 2012.*

16. FAO (2009). *Livelihood assets protection and improvement to mitigate effects of soaring food prices on vulnerable households in Afar, Amhara, Oromia, SNNPR, Somali and Tigray Regions.*
17. FAO (Food and Agricultural Organization of the United Nations). 2000. *The State of Food Insecurity in the World. Rome, pp. 26.*
18. FAO (Food and Agricultural Organization).2001. *The State of Food Insecurity in the World:When People Live with Hunger and Fear of Starvation. UNFAO. Rome, Italy.*
19. FAO. 2005. *Assessment of the World Food Security Situation, Committee on World Food Security, Thirty-first session, 23–26 May 2005.*
20. FAO, 2010. *The state of food insecurity in the world 2010: Addressing food insecurity in protracted arises. Food and agriculture organization of the United Nation, Rome, Italy, ISBN-13*
21. FDRE (2002). *Dimensions and causes of food insecurity. Ministry of Foreign Affairs, Addis Ababa.*
22. FDRE (2003). *The new coalition for food security in Ethiopia Food security programme Volume I, Addis Ababa.*
23. FDRE 2008. *Summary and statistical report of the 2007 population and housing census: Population size by age and sex. Addis Ababa, Ethiopia.*
24. FSP (Food Security Program). 2003. *The new coalition for food security in Ethiopia, Vol. I, Addis Ababa, Ethiopia.*
25. Gregory, P.J.,J.S. Ingram and M.Brklacich, 2005. *Climate change and food security. Philos. Trans.R.Soc.B: Biol. Sci., 360:2139-2143.*
26. Habtom K. Z. Gudeta and G. Kundhlande. 2005. *Causes o fhousehold food insecurity in koredegaga peasant association oromiya zone, Ethiopia. J. Agric., 44: 543-560.*
27. Hoddinot, J., 2001a. *Choosing outcome indicators of household food security.IFPRI, Washington, D.C.*
28. Hoddinott J (1999). *Choosing outcome indicators of household food security. International Food Policy Research Institute. Washington, D.C.*
29. IFAD (International Fund for Agricultural Development). 1997. *Food Security, Poverty and Women: Lessons from Rural Asia.*
30. Kifle and Yoseph (1999) *The food security situation in Ethiopia, in TayeAssefa (ed), foodsecurity through sustainable land use, proceeding of the first National work shopof NOVIB partners forum on sustainable land use, Addis Ababa, Ethiopia.*
31. Maxwell S, Frankenberger F (1992). *Household Food Security: Conceptual indicators and measurements; A technical review. UNICEF, New York and IFAD, Rome.*
32. MoFED (Ministry of Finance and Economic Development). 2008. *Ethiopia: Sustainable Development and Poverty Reduction Program. pp. 34, 71 & 76.Federal Democratic Republic of Ethiopia (FDRE) Ministry of Finance and Economic Development (MoFED) Addis Ababa Ethiopia.*

33. Smith LC, Alderman H, Aduayom D (2006). *Food Insecurity in Sub-Saharan Africa New Estimates from Household Expenditure Surveys: International Food Policy Research Institute Washington, DC.*
34. Tesfaye K (2005). *Household Food Insecurity in Dodota-Sire District, Arsi Zone: Coping Strategies and Policy options. A Thesis Presented to the School of Graduate Studies Alemaya University.*
35. United Nations World Food Programme (WFP) (2004). *Baseline Food Security Analysis in Iraq, WFP Iraq country office.*
36. USAID (United States Agency for International Development) 1992. *Definition of Food Security.*
37. Von Braun, J.; Bouis, H.; Kumar, S. and Pandya-Lorch, R. 1992. *Improving Food Security of the Poor: Concept, Policy, and Programs. International Food Policy Research Institute. Washington, D.C, U.S.A.*
38. Weibe, K. and D. Maxwell. 1998. *Land tenure and food security. A review of concepts, evidence and methods. Research Paper. University of Wisconsin, Madison.*
39. WFP (World food program), 2006. *A review of emergency food security assessment practice in Ethiopia. A study commissioned and prepared for World Food Programme, Rome.*
40. WFP (World Food Program). 2009. *Emergency Needs Assessment, WFP/BE.1/2009/9-A Rome.*
41. WorknehNega. 2004. *Reasons for food insecurity of farm households in south wollo, Ethiopia: Explanations at the grassroots. Institute of Development Research, Addis Ababa University in collaboration with BASIS CRSP. <http://crsps.net/resource/reasons-for-food-insecurity-of-farm-households-in-south-wollo-ethiopiaexplanations- at-grassroots/>*
42. World Bank (1986). *Poverty and Hunger: Issues and Options for Food Security in Developing Countries. A World Bank Policy Study, Washington, D.C.*
43. YaredAmare. 2001. *Livelihood Strategies and Food Security policy in Ethiopia PP. 9-36, Proceedings of the Symposium of the Forum for Social Studies, 10-11 march 2000, Addis Ababa.*