

**Victor N. ITUMO**  
University of Economic Studies (ASE)  
Bucharest, Romania

# FOOD SECURITY DYNAMICS | Viewpoint

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## **JEL Classification**

*I30, I31, I39*

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## **Abstract**

*The paper provides insight into various definitive concepts of food security. It explains the dynamics of food security with the most important factors when discussing food security issues. It would do an assessment of global food security shortages highlighting the countries that are currently most affected by hunger and scarcity of food. The paper outlines the dangers of food scarcity, both immediate negative effects and longtime effects. The paper highlights hindrances and impediments to food security and sufficiency including environmental, atmospheric as well as man-made causes. The research approach or methodology is to do a holistic assessment of the incisive issues listed above regarding food security and subject them to holistic analysis with a view to proffering suggestions and recommendations that would assist with ensuring food security the world over.*

## **DEFINITIVE CONCEPT OF FOOD SECURITY**

The concept of food security has seen various definitions over the years from various global bodies working on food security issues. But more definition seems to have emanated from the Food and Agricultural Organization over the years. Some of the food security definitions from the Food and Security Organization have been highlighted below. In the 1974 World Food Security Summit, food security was defined as the “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” (United Nations, as cited in FAO, 2002, pp. 1-2). In a further step, the Food and Agricultural Organization (1983), provided enlarged definition of food security to include access to helpless people to available supplies in such a way that balance is achieved between demand and supply in the food security equation. The Director General’s report of FAO 1983 specifically defined food security as “ensuring that all people at all times have both physical and economic access to the basic food that they need” (as cited in FAO, 2002, pp. 1-2). In the World Bank report of 1986, the discussion on the theme of hunger and poverty out focus on temporal dynamics of food security. The idea of differentiation between protracted food insecurity that comes from subsisting structural poverty and low incomes, and transient food insecurity brought about by natural disasters, conflicts and economic collapse. The World Bank report 1986 on hunger and poverty defined food security as the “access of all people at all times to enough food for an active, healthy life” (World Bank, as cited in FAO, 2002, pp. 1-2). A multifaceted definition of food security was also espoused by Food and Agricultural Organization (1996) at the 1996 World Food Summit as thus. “Food security, at the individual, household, national, regional and global levels [is achieved] when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO.,1996, as cited in FAO, 2002, pp. 1-2). But during the conference on the ‘State of Food Insecurity in the world 2001’, the definition of food security was seen 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” (as cited in FAO, 2002, pp. 1-2). However, the (FAO, 2002) saw food security as a phenomenon involving individual’s nutritional status of the various household members with regards to being met or the risk posed for not being met. It explains the

vulnerabilities that may ensue as the result of subsisting and transient food insecurities that may exist. The paper defined food security in two important working perceptions. “Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern” (FAO, 2002, pp.1-2). The same report tried to explain food insecurity as “when people do not have adequate physical, social or economic access to food as defined above” (FAO, 2002, p.2).

Food security could be defined in three major concepts which are availability, access and sustainability. By availability, it means the presence of sufficient balanced and diverse kinds of food as people may require at all times within a given society. By access, it means people have financial or economic wherewithal and environmental unrestricted freedom to buy purchase available foods that they want. By sustainability, it means the continuous availability of food and access to it by people in a given society. On the other hand, food insecurity is when either of food availability, access or sustainability is lacking, distorted or subverted in food provision.

## **VITAL FACTORS IN FOOD SECURITY**

When the issue of food security is mentioned, there is what could be considered in the perception of this write-up as vital variables or factors that need be taken into account as a way of ensuring wholesomeness in food security. Five of these variables and factor have been discussed below.

a. **Availability:** the initial premise for food security is availability of food stuff. There has to be the presence of various kinds of food sufficient and enough to cater for any given society at a time to for it to be said there is food security. Despite what the condition may be, whether famine, drought, pest destruction of crops or otherwise, if food stuff is not available, then there is no food security. The other factors are seriously associated with this first one on availability of food.

b. **Quality:** quality of available food stuff is important in ensuring total or good food security. The food available in any given society for the people must have quality both in specie, type and product in order to rightfully assert the existence of food security.

c. **Quantity:** also in similar line is the quantity of the available food stuff. There has to be more than sufficient balanced varieties of food such that the [people in a given society have choice of which or what kind of food they want and could

actually purchase any quantity needed even on short notice.

d. **Access:** when there is food availability that has quality and quantity, the people for whom the food is available for must also have access to it. When referring to access to food, it means the people have employment and jobs personal or public through which they are able to earn income and buy the food that is available in their society. The implication of this is that people would at least buy the food they need in various levels and quantities based on their earning capacity, but enough to fulfill their food needs at any period of time. By access, it implies also that there is no environmental limitation to available food in the society for the people such as war or any government policy that makes it hard for people to buy or get any food of their choice. The people must have free and complete access to available food for it to be said that there is circle of food security.

e. **Sustainability of a to d above:** in order to ensure as observed above the complete circle of food security, there has to be the sustainability of availability of food, quality of food, quantity of food and access of people to available food on a continuous bases in any given society. It is when the variables and/or factors above is sustained endlessly that it could be adjudged to exist food security.

#### **ESSENTIAL DYNAMICS AND ELEMENTS OF FOOD SECURITY**

There is what could be considered as essential dynamics or elements of food security. These include those premises or bases that would help to ensure that there is food security for the people in any given society. Some of these elements which have been discussed below include Government or public sector's role in food security as well as the individual or private sector's roles in food security.

**Government's role** – the government or public sector of any society has the duty and function of ensuring food security for the teeming inhabitants. The actions that must be taken at this level must be at the various levels of government such as Federal, State or Provincial and the Local Government or mayoral levels. All the tiers of government and segments of government – Executive, legislature and Judiciary all have a role to play to ensure food security for the people. Some of those functions the government or the public sector would undertake to ensure and enhance food security include:

a. Government has the role of articulation, implementation and continuous assessment of the right policies aimed towards stimulation of the process of food production and actual provision of food in the society.

b. Government also has a role through land policies and reforms to enact friendly land laws for farmers including land ownership for the purpose of ensuring land provision and availability to everyone who desires to farm for food production, especially those involved or seeking to be involved in commercial farming and food production.

c. Government also has a role of ensuring relevant farm inputs for the use of farmers in enhancing crop production and yields. Some of such inputs include fertilizers which could be subsidized by Government for the use of all categories of farmers.

d. Government should also position itself in readiness for provision of agriculture loans where necessary for farmers, mainly those entering into large scale farming as a way for ensuring food security.

e. Government also has a role to encourage farmers in other ways such as the development of food processing centers and provision of mechanism for storage and preservation of food products for the people. These could be achieved either in total loan provision to famers, in partnership or by government's sole absorption of such roles since it has to ensure that the people are not plagued by hunger and famine. Government could further build access roads in rural areas for evacuation of food products from there to city centers as well as establish purchasing boards where necessary for purchase of critical cash crops from famers engaging in them for processing and exports.

**People's role** – the people also have roles to play in ensuring food security in the society. Government would only do its part in policies formulation and interventionist programmes, but the interest and involvement of people in farming and food production would have to be individuals in the society. At whatever level, people need to be involved in ensuring food security by indulging in some kinds of farming activities, especially when the right Government policies are in place. Some of the ways people's roles can be contributed towards food security are discussed below.

a. Everybody in the society or at least majority of the people should get involved in the production of food through big or little acts of farming. This way, cumulative production of various individual persons would amount to availability of food at household levels, thereby reducing possible pressure on food that would ordinarily be purchased by those whose nature of routine or engagements may not opportune to do any kind of farming.

b. As part of the effort towards food security, everyone has the responsibility to engage in some kind of farming, even if through paid proxies, unless in a situation where it is also not feasible.

c. People have the duty to adopt and work with government support policies and programmes as they may present better opportunity and convenience with some processes in farming.

d. People should not just focus on subsistent farming for self and family alone, but additional effort should be made to produce more that be shared with others or at least sold out for the consumption of others. The process helps to ensure greater availability of food in the society.

e. People should also through deliberate plans get involved in commercial farming as doing so does not only provide food and employment, but could help a person become an employer of labour while making huge investment profits. It must be understood that commercial farming is one element that is usually present in societies that enjoy food security.

#### **GLOBAL FOOD SECURITY SHORTAGES AND COUNTRIES CURRENTLY AFFECTED BY FOOD INSECURITY**

There are many countries currently affected by food shortages and insecurity. The fact that some parts of the world do not have food implies that there is food insecurity. The situation appears to be growing with many cases of wars occasioned by terrorism, militancy, struggle for political power, etc. some countries are also suffering because of economic challenges which are now spiraling into food provision for the society. According to Food and Agricultural Organization (2016) records, some regions and countries currently experiencing food shortages globally as a result of various kinds of problems are mentioned below. The countries are thirty seven (37) in number and spread out in some regions of the world. In the Africa region, countries affected by food shortages for various reasons include, Central African Republic, Zimbabwe, Chad, Democratic Republic of Congo, Djibouti, Eritrea, Ethiopia, Malawi, Niger, Nigeria, South Sudan, Burkina Faso, Burundi, Cameroon, Congo, Guinea, Kenya, Lesotho, Liberia, Madagascar, Mali, Mauritania, Mozambique, Sierra Leone, Somalia, Sudan, Swaziland, Uganda. In the Asian region are Iraq, Syrian Arab Republic, Democratic People's Republic of Korea, Yemen, Afghanistan, Myanmar and Nepal. In the Latin America and the Caribbean is Haiti. In the North America, Europe and Oceania is Papua New Guinea. All the above countries are affected for one reason or the other by food insecurity, meaning that the numerous numbers of people are experiencing food shortages on a large scale. The conditions in some of the countries are particularly worrisome as some of those affected die out of starvation, hunger and diseases. To be precise, some of the situations require emergency response in order to save lives.

#### **IMMEDIATE AND LONGTIME EFFECTS OF FOOD SHORTAGES**

There are several effects and impacts of food shortages which may be immediate or on a long time bases. Some of these effects and impacts have been listed and discussed below.

#### **IMMEDIATE EFFECTS/IMPACTS OF FOOD SHORTAGES OR INSECURITY**

a. **Malnourishment:** malnourishment is one of the immediate effects of food insecurity. When there is decrease or unavailability of quality food stuff, as well as required quantity, it results in malnourishment as the people lose the various kinds or quantity of food they need for nourishment.

b. **Hunger and Starvation:** hunger and nourishment are the other consequence of food insecurity. This results mainly from enormous food shortages, food scarcity or complete food unavailability. This is a serious stage of immediate impacts of food insecurity.

#### **LONG TIME EFFECTS/IMPACTS OF FOOD SHORTAGES OR INSECURITY**

a. **Emaciation:** on the long time effect of food shortages is the emaciation of an individual. From continuous conditions of malnourishment, hunger and starvation, a person begins to lean over accumulated loss of essential body nutrient and support for healthiness.

b. **Decrease in Body's immunity:** the body also begins to lose immunity which could have ordinarily been built up with adequate quality and quantity of food nourishment, availability and access.

c. **Illness and sicknesses:** following the loss of essential nutrients and immunity, the body becomes susceptible and vulnerable to illnesses and sicknesses which would ordinarily be fended off were the body to be in shape with high level of immunity. Illness and sicknesses that attack the body because of low level of immunity often leaves the body even more exposed and unable to rebound if no changes takes place.

d. **Death:** the occurrence of accumulated shortage of food in unhealthy conditions such as malnourishment, hunger, starvation, body leanness or emaciation, decrease in body's immunity, illness and sicknesses could result in the death if no intervention is introduced early.

## **HINDRANCES AND IMPEDIMENTS TO FOOD SECURITY AT GLOBAL LEVEL**

- a. **Wars and Armed Conflict:** The occurrences of wars or armed conflicts have been known to cause food shortages and/or lack of access to available sources of food. This has been the case in some world's climes where war has been ongoing for months and years. A lot of people in these areas are usually caught in the plight of war, eliciting food insecurity, disease and death in worst case scenarios. The different kinds of wars and armed conflicts including guerilla warfare, civil wars, acts of terrorism, communal clashes, struggle for land ownership, etc., in some cases do not only cause food shortages, but total devastation of the societies involved as people migrate due to fear of loss of lives or reprisal attacks. In North East Nigeria, where Boko haram terrorist group have killed more than 20,000 and displaced over 2 million people, this had been the case as people ran away from the towns. Book haram insurgency has not only seen to deaths of several calibers of people in the society, but has also led to serious increase of internally displaced people (IDPs) in the neighboring communities. Some of those countries currently affected by conflicts/war leading to variant levels of food shortages include Syria, Iraq, Libya, South Sudan, Central African Republic, Eritrea, Pakistan, Afghanistan, Yemen, etc.
- b. **Drought:** the lack of rainfall in requisite levels potentially leads to drought and dearth of farm output. This in turn leads to food shortages and negatively affects communities across the globe where it happens. There had been reported case in Asian regions and the Middle East.
- c. **Flooding:** flooding is another major cause of food insecurity as its occurrence potentially demise crops which ordinarily would be harvested and made available for consumption. In cases where the flooding remains for longer time in large scale, more crops are even destroyed as some land surfaces are also washed away by erosion during such times. It even further leads to death of people just as it has happened in India and America in 2016.
- d. **High temperatures:** high temperatures could be very harmful to farming and food production. When the temperature is very high along with no rains, the condition potentially dries up water on the upper surface of the ground which is where plants normally absorb nutrients for good production. The sun is good for plants in the chlorophyll and photosynthesis processes, however, when the sun is too high, the rays could scorch the plants and the ground, leading to low produce or complete destruction.
- e. **Pests and insects attack:** Some kinds of dangerous pests and insects attack farms and destroy their produce to the detriment of the

society. Such attacks by harmful pest and insects leads to food shortages as some crops are even destroyed even before maturity.

f. **Lack of adequate level of pollination by Bees:** inadequate acts of plants pollination by wild bees may also be a cause of food shortages, though it is left to be confirmed the extent to which this negatively affects food production and shortages. Nevertheless, inadequacy may be a factor in food production and shortages.

g. **Lack of involvement in farming:** if the people of a given society refuse to engage in farming, it could lead to food shortages. This would be especially so if the few engaging in farming are doing so at subsistent level instead of commercial levels. The negative effect of greater percentage of people in a society not engaging farming is that the subsistent little produced by few is not always enough or able to go round whichever way.

h. **Absence of right government policy towards farming and farmers:** the absence of right government policies towards agriculture could hamper interest in farming and indirectly lead to food shortages. Some of such areas where absence, poor or inadequate government policies in agriculture could affect food outputs and availability include land availability/tenure of use systems; provision of farm inputs like fertilizer, pesticides and beneficial cereal/crop species; provision of other forms of support for famers like loans, credit facilities and insurance, etc.

i. **Inadequate storage facilities:** the lack of adequate storage facilities could also lead to food shortages as huge quantities of food stuff produced could be destroyed. Ordinarily, if farm outputs are destroyed yearly due to lack of storage facilities, it would potentially discourage the people from further engaging in large scale farming, which in turn results in food shortages and insecurity.

## **CONCLUSION**

Whatever the circumstance may be, it is important to have food available. The simple reason is not unknown to both great and small as even a hungry baby cries uncontrollable. Even though it is asserted that people could survive without food for some time, but not without water; the truth remains that the same reasons that lead to food shortages and insecurity also lead to lack of good drinking water. Besides the foregoing analysis, there are dire consequences of man going for a long time without needed food quantity and quality. Food for man is one of the basic needs he has for physical survival. In fact, the expediency of having various kinds of food needed available cannot be overemphasized as people of all ages from infants to very old ages need food for nourishment and care of the human physical being.

It is in the light of these inalienable and inexcusable premises that issues were discussed herein. Some of the issues discussed include the definitive concepts of food security, vital factors in food security, essential dynamics and elements of food security, global food security shortages and countries currently affected by food insecurity, the immediate and long time effects of food shortages and hindrances and impediments to food security. The idea had been to bring out the critical issues in food security and provide a number of recommendations for ensuring food security at global level, especially areas affected by the scourge of food insecurity and shortages.

#### **Recommendations**

Following the foregoing discussions and the investable need to ensuring food security and sufficiency for all peoples globally, some recommendations have been proffered below as the way forward in this regard. The recommendations hinges on actions that must be taken by the government (public sector), the people (private sector), International Organizations and Non-Governmental Organizations (NGOs) in the society.

a. Government must evolve policies that would encourage the people and especially farmers at all levels to get involved in farming, particularly in the dimension commercial food. Part of the efforts that government needs to put in place is measures that would mitigate the negative impacts of food production or unexpected incidences such as insurance cover for large scale farmers.

b. Government should also ensure there is no environmental limitation of the people inform of man-made problems that would impede freedom and access of its people to processes in food production or consumption.

c. Government should also ensure peaceful co-existence of the people as conflicts, wars and societal discord potentially affects food production, access and security.

d. On the side of the people (private sector), everyone should get involved in some kind of farming as a way of making food available for both self and others.

e. Wars been fought in various regions of the world must be ended immediately in order to avert the humanitarian crisis of acute food shortages, insecurity and lack of access in many of the conflict zones.

f. Governments of various countries, International organizations and Non-governmental Organizations (NGOs) should help to provide promptly food aid to countries or regions being affected by food shortages and insecurity. This effort must include rushing food aid to countries in recession like Venezuela currently experiencing food shortages/insecurity.

### **BIOGRAPHICAL SKETCH OF MANUSCRIPT AUTHOR, VICTOR N. ITUMO**

The author of this manuscript, Mr. Victor Nwaoba ITUMO is a Doctoral student at the University of Economic Studies (ASE), Bucharest, Romania. He holds a Master of Science (M.Sc.) degree in International Relations from University of Uyo, Akwa Ibom State, Nigeria and a Bachelor of Science (B.Sc.) degree in Government and Public Administration from Abia State University, Uturu, Abia State, Nigeria. He has been working in Nigeria's public service since 2008. His research interest is on issues that would improve human lives and hasten social and economic development, especially in developing nations like his native country of Nigeria. The author has written a few books that focused on improving human lives. ([victoritumo@yahoo.com](mailto:victoritumo@yahoo.com)).

#### **REFERENCES**

- [1] Food and Agricultural Organization (1983). *World Food Security: a Reappraisal of the Concepts and Approaches*.
- [2] Director General's Report. Rome. In FAO (2002). *Food Security: Concepts and Measurements*. Retrieved from <http://www.fao.org/docrep/005/y4671e/y4671e06.htm#fn21>.
- [3] Food and Agricultural Organization (1996). *Rome Declaration on World Food Security and World Food Summit Plan of Action. World Food Summit 13-17 November 1996. Rome*. In FAO (2002). *Food Security: Concepts and Measurements*. Retrieved from <http://www.fao.org/docrep/005/y4671e/y4671e06.htm#fn21>.
- [4] Concepts and Measurements. Retrieved from <http://www.fao.org/docrep/005/y4671e/y4671e06.htm#fn21>.
- [5] Food and Agricultural Organization (2002). *The State of Food Insecurity in the World 2001*. Rome. In FAO (2002).
- [6] *Food Security: Concepts and Measurements*. Retrieved from <http://www.fao.org/docrep/005/y4671e/y4671e06.htm#fn21>.
- [7] Food and Agricultural Organization (2002). *Food Security: Concepts and measurement*. Retrieved from <http://www.fao.org/docrep/005/y4671e/y4671e06.htm>.
- [8] Food and Agricultural Organization (2016). *Countries requiring external assistance for food: 37 Countries*. Retrieved from <http://www.fao.org/GIEWS/English/hotspots/in dex.htm>
- [9] United Nations (1975). *Report of the World Food Conference, Rome 5-16 November 1974*. New York. In FAO (2002) *Food*

Security: Concepts and Measurements.  
Retrieved from  
<http://www.fao.org/docrep/005/y4671e/y4671e06.htm#fn21>

[10] World Bank (1986). *Poverty and Hunger: Issues and Options for Food Security in Developing Countries.*

[11] Washington DC. In FAO (2002). Food Security: Concepts and Measurements.  
Retrieved from  
<http://www.fao.org/docrep/005/y4671e/y4671e06.htm#fn21>