

## THE GLOBAL FOOD SECURITY CONUNDRUM THROUGH THE LENS OF THE RIGHT TO FOOD

Gituku M<sup>1\*</sup>



Muringo Gituku

\*Corresponding author email: [bm.gituku@gmail.com](mailto:bm.gituku@gmail.com)

<sup>1</sup>Nairobi, Kenya

## ABSTRACT

Working through the complexities of food insecurity with the intention to address issues requires taking a step back to the drawing board to firm up the understanding of food security through the principles that inform the governance framework of the right to food in the context of the current global food security crisis. Considering the multi-dimensional nature of food security in relation to the right to food alongside concepts such as food sovereignty, and issues such as climate change, food loss and food waste, economic and political turmoil is paramount in determining exactly why all people at all times do not have access to adequate food, or the means for its procurement. This commentary delves into the intricacies of the concept of food security, and the hindrances to realising food security for all by considering what food security is, and where, therefore, the challenges in effecting the right to food are. Through careful consideration of the components of the food security equation, this commentary seeks to show how the right to food comes down to more than ensuring that food is physically available. By connecting the right to food to the factors that affect food security and exploring the ways in which those factors can be broken down and addressed separately, this commentary ultimately advocates for the realisation of food security through collaboration. The consideration of the singular concepts that form the food security equation in solving the multi-dimensional food security problem through conjoined and synchronised efforts influenced by obligations of states and international organisations with mandates directly connected to, and influencing the different aspects of the food security equation. Using reports, statistics, theories and academic opinions, this commentary seeks to explore the different components, which form the concept of food security to draw conclusions and analyse existing systems in an attempt to determine what approaches could be considered in addressing the growing food security crisis and the concerns attached to it.

**Key words:** Food security, right to food, climate change, crisis, malnutrition, food loss, food waste

## Definition of Concepts

### i. Food Security

When all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs, and food preferences for an active and healthy life [14].

### ii. Food Sovereignty

The right of individuals, peoples, communities, and countries to define their own agricultural, labour, fishing, food and land policies which are ecologically, socially, economically and culturally appropriate to their unique circumstances. It includes, the true right to food and to produce food, which means that all people have the right to safe, nutritious and culturally appropriate food, and to food producing resources, and the ability to sustain themselves and their societies [15].

### iii. Food System

Encompasses the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption, and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded [6].

### iv. The Right to Food

The right to have regular, permanent and unrestricted access - either directly, or by means of financial purchases - to quantitative and qualitative adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensure a physical and mental, individual and collective, fulfilling and dignified life free of fear [3].

### v. Food Loss

Occurs before the food reaches the consumer as a result of issues in the production, storage, processing, and distribution phases [16].

### vi. Food Waste

Refers to food that is fit for consumption, but consciously discarded at the retail or consumption phases [16].

### vii. Sustainability

Meeting the needs of the present without compromising the ability of future generations to meet their own needs [17].

### viii. Climate Change

Refers to long-term shifts in temperatures and weather patterns [18].

## INTRODUCTION

The global food security crisis which, according to the World Food Program (WFP), has reported that, the world is facing a global crisis of unprecedented proportions with the number of people facing, or at risk of acute food insecurity rising rapidly from 135 million in 53 countries before the pandemic to 349 million in 89 countries in 2022 [1]. The global food insecurity crisis which has been significantly worsened by the effects of the COVID 19 pandemic, economic hardship, political conflict and civil unrest as well as, climate disasters has led to 828 million people unsure where their next meal will come from. The biggest precipitator of hunger and eventually famine is conflict. Seventy percent (70%) of those who suffer most from food insecurity are from conflict and war-torn regions [2]. In addition to this, erratic climate conditions are responsible for contributing significantly to the global food crisis as destruction of crops, natural resources and livelihoods undermines the ability of people to feed themselves [2]. In typical nature of a crisis, the global food crisis has denied persons of the ability to feed themselves, and therefore, are rendered unable to exercise their right to food for reasons that are beyond their control.

The multifaceted definition of the right to food encapsulates the significant necessity of access, adequacy and sufficiency. The right to food is the right to have regular, permanent and unrestricted access- either directly, or by means of financial purchases- to quantitative and qualitative adequate, and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensure an individual and collective, fulfilling and living a dignified life free of fear. Further, the right to adequate food is realised when every man, woman and child alone or in a community with others, has physical and economic access to adequate food or means for its procurement [3].

It is not enough for food to be available but rather, for preferred food to be available always so as not to deny any individual their dignity. The nature of the right to food being available is that, it is tied not only to an individual's economic capacity but factors well beyond their control, which may render their economic capacity useless such as climate change and conflict. A short-sighted theory to consider would be one that pre-supposes that, safeguarding the supply of food is sufficient enough to satisfy demand, rendering poverty and hunger and malnutrition long-forgotten indignities once suffered. The supply of food is something to consider in the face of hunger and malnutrition. Any guest on earth upon hearing the staggering statistics of the ongoing global food security crisis would not be mistaken in assuming that food production is low, and, therefore, the population is unable to feed itself efficaciously. In reality, enough is produced; however, an individual's access to the food already produced is limited and in some instances, almost impossible. An argument to consider is that, an individual's capacity to enforce their right to food is

currently more dependent on individual economic limitations, which are influenced considerably by economic patterns globally, often in a domino effect rather than the availability or lack, therefore, of food. This argument can be explored by understanding and interrogating the components of the food security equation and what really constitutes food security. According to the Food and Agricultural Organisation (FAO), food security 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. Congruently, food insecurity exists when people do not have adequate physical, social and economic access to food [4].

The existence of food security is best understood in a four pronged approach where: physical availability, economic accessibility, nutritional adequacy and production sustainability are the core determining factors for whether or not food security exists [5]. Physical availability is dependent on the supply of food and the level of food production on a national and international level. Simply put, there needs to be enough food for all people to consume. According to the Food and Agriculture Organisation (FAO), enough food is produced to go around despite the fact that a copious amount of food is also wasted [6]. Economic accessibility is dependent on individuals having the wherewithal to purchase and produce food often determined by factors such as, income levels and market prices. Nutritional adequacy is determined by whether food consumed by individuals guarantees them the most nutritional value through preparation, diversity of diet and food practices. Production sustainability concerns the utilisation of resources in a manner that promotes food security for present and future generations.

Given the aforementioned food waste statistics, the major challenge in the food security equation is not the physical availability of food. Were this in question, the solution would lie somewhere in the spectrum of producing more food and ensuring that it is distributed and made available accordingly to support wider access.

Availability becomes inconsequential when food loss and food waste are inserted into the equation. There is seemingly enough food to ensure food security for all if it were as simple as redistributing what would be wasted. Where statistics are concerned, 1.3 billion tonnes of food are wasted annually; 2.6 billion people suffer from malnutrition. Of these people, 794 million people suffer from hunger and 2 billion people do not have sufficient access to essential micronutrients necessary for growth and development. On the flipside, 1.3 billion tonnes of food is wasted globally, annually, 1.9 billion people overeat and 600 million of those are obese [7]. Realistically, a reduction in food waste does not necessarily mean more food will instantaneously become available to those suffering from hunger and malnutrition. This theory fails to consider economical, logistical and societal implications when



simplifying food waste to problem which could be solved through redistribution thus rendering the food security crisis a thing of the past. Food waste is categorised differently depending on when it occurs. Food loss is the decrease in the quantity or quality of food resulting from decisions and actions during the agricultural production chain, during post-harvest, post-slaughter or post-catch losses and operations, storage, transportation and processing; excluding the actions from retail, food service and consumers. Food waste is the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food services and consumers even at household level [8].

It is important to note that. when considering food loss and food waste, food loss includes complexities, that is, inedible parts of food, the parts of food that are transformed into animal feed and industrial use, while food waste generally considers food that is edible and produced with the intention of consumption by humans [8]. Therefore, there is a case to be made when it comes to food waste which occurs as a result of social and economic actions and consequences coming together. For instance, if food waste and loss is reduced, there would be more available food, increased nutrition and food quality and a higher possibility of food redistribution which may still not be guaranteed. These factors may also lead to the reduced demand for food which inevitably will lead to the underproduction of food as a result of reduced supply, and possibly lower incomes for industry players- small and large-scale farmers alike [8]. Without understating or ignoring the significant effects of food waste on the climate and on millions of people who suffer from hunger and malnutrition, reducing food waste will have some impact. However, it cannot be said to be the solution that will yield food security for all, once and for all.

The physical availability of food is dependent on economic accessibility at different levels. A person will either need to be in a position to produce their own food, or be in a position to purchase their own food. All of these come at a different cost. On a production level, it would include considering the cost of farming from seed and livestock purchase, to the maintenance costs of the land itself. On a purchasing level, it would include the economic wherewithal to purchase food. A consistent source of income is necessary in realising the right to food and SDG No. Two – Zero Hunger. Therefore, one would not be wrong to argue that the Right to Food and Zero hunger are intricately connected to SDG No. One - No Poverty; and SDG No. Eight - Decent Work and Economic Growth. The persons who suffer most from food insecurity are those who have no economic accessibility to food as a result of not having access to work and opportunities to make a living. In recent years, many factors have contributed to the exacerbation of the food security crisis including Russia/ Ukraine war, global inflation, the ramifications of the pandemic among others on a global and national level. Market prices of food have increased globally and nationally, causing

many to begin to cut down on costs in order to make ends meet. The economic element to realising food security can hardly be ignored as it is the first step to ensuring that people are able to access the food that is already physically available. Therefore, if more people had more economic access to food, the demand for food may increase, thereby setting in motion the need to increase supply, ultimately increasing production cost and, therefore, price of food.

The body is wired to run on nutrients and minerals made available to it by way of food. Short of just providing energy, food is required to provide essential components that facilitate proper functioning of organs. When food is produced in a manner that results in essential nutrients and minerals being stripped from it, there is a risk of the food being useful only for providing some energy and relieving the body from the discomfort resulting from the sensation caused by hunger. Realising food security also means that the food available to people contains all essential nutrients, vitamins and minerals that the body requires to function. The demand for food and the agricultural practices around industrial agriculture can sometimes compromise the quality of the food, rendering it sub-par where nutritional adequacy is concerned. The stipulation for food to be nutritionally adequate is connected to SDG No. Three – Good Health and Well-Being. Good health and well-being has its foundations in what is consumed and whether the body has a constant supply of elements required to enable it to fight and prevent infections. Nutrition is the first line of defence in most cases and with most diseases, long before healthcare is considered. The promotion of nutritional adequacy can be done in a number of ways. While sensitising and educating people on what nutrients the body requires and how to access them is one factor, these efforts may be futile if the food that they are consuming does not contain essential nutrients which satisfy dietary needs based on age, health status, occupation and, gender. When food does not contain nutrients that an individual requires based on these factors, it is not adequate [3]. In some instances, food inadequacy exists when individuals are unable to feed themselves in the ways that the body requires and in other instances, the food is rendered inadequate as a result of the presence of substances such as, contaminants which come into contact with the food through industrial pesticides and fertilisers used in agriculture or veterinary medication which may compromise the quality of the food [3].

Overall, the adequacy of food is determined by quantity, quality, and appropriateness, which encompasses physiology and cultural stipulations. The nutritional adequacy of food can, therefore, be considered a shared responsibility which requires that the food available to people is appropriate for them and they are able to afford the food they require, in the quantities required, and in the best quality possible. This supposes that agricultural practices and economic conditions must create an equilibrium that makes this possible. It goes without saying that food is a

need, without which, people cannot survive. The production practices of food today have an impact on food that we consume, and an impact on the food that future generations will consume. Therefore, the methods of food production have to be sustainable so as to support humankind today and future generations. Sustainable food production is dependent on the existence and preservation of sustainable food systems. A food system gathers all the elements and activities (environment, people, inputs, processes, infrastructures, institutions) that relate to the production, processing, distribution and preparation and consumption of food, and the outputs of these activities including socio-economic and environmental outcomes [6]. A sustainable food system is one that delivers food security and nutrition in a way that economic, social and environmental bases to generate food security and nutrition for current and future generations is not compromised [6].

Sustainability in many sectors has become a common place conversation as it relates to the climate change crisis, and the effects of traditional and conservative activities across industries that have created adverse environmental effects which are a matter of urgency. One of the major hindrances to realising the effects of food security is the environmental impact of food waste and loss. When food is discarded, it ends up in landfills and the decomposition process emits methane, a greenhouse gas which when produced in high quantities has a ripple effect on climate change. Discarded food also wastes the resources that were used in the production, transportation and preparation of the food, processes, which emit significant amounts of carbon dioxide, another greenhouse gas [9]. Food systems, including agriculture, livestock, soils and croplands, aquaculture and inputs, storage, processing, storage and transport all contribute to emission of greenhouse gases. A report by the Intergovernmental Panel on Climate Change (IPCC) states that, food loss and food waste is responsible for eight to ten percent of all greenhouse gas emissions [10]. The effects of greenhouse gases on the environment include: flooding of coastal cities, desertification of fertile land, melting of glacial masses and the proliferation of devastating natural disasters.

The correlation between food security and sustainability is dependent on the ability of all components in the food system working together to ensure that there is efficient use of resources in order to produce food today and for generations to come. Currently, natural resources are under pressure with sources of fresh water running dry or suffering severe pollution, soils degrading and biodiversity under threat as many plants and animals are endangered- problems which are exacerbated by the actions that contribute to climate change [7]. These limitations can be addressed by moving from transitional and conservative food systems to a more holistic food system that considers all the factors and components that collectively constitute a food system and the ways in which revised approaches can contribute to the



formation of a food system that delivers food security. Considering the specificities of food security and the intricacies that form the different elements that ultimately contribute to food security comes down to understanding that none of these factors exists in a vacuum, and therefore, streamlining and improving their functionality depends on collaboration. Cross-cutting policies which foster transformation of social, economic and environmental variables, simultaneously as is a solution proposed by adapting sustainable food systems looks so far, to be the most promising in yielding solutions to the limitations resulting from traditional approaches [7].

Food Sovereignty is a more recent concept developed as an expansion to the concept of food security. According to La Via Campesina, Food Sovereignty is the right of people to healthy and culturally appropriate food produced through ecologically sound and sustainable methods and their right to define their own food and agricultural systems [11]. Food sovereignty vouches for the localisation of food production by valuing food providers and fostering knowledge and skills while working with nature to produce food for the people, by the people [12]. If one were to compare the concepts of food security, the right to food and food sovereignty, it would seem as though the concepts are cross cutting issues with similar connotations. However, each concept plays a fundamental role in addressing the multi-dimensional nature of food security. One must remember that, the right to food does not imply that one has the right to be fed. The ability to feed oneself is dependent on more than just the availability of food as, there is more than enough to go around. However, for current and future populations to be able to feed themselves in dignity, there needs to be collaboration. The ability to feed oneself is determined by factors beyond any one individual's control- social, political and economic conditions, climate change and the working of various factors that may enable an individual to create an ideal livelihood for him/herself. The responsibility therefore, is a collaborative one that requires a holistic and multidimensional approach where systems work together to create food security and the onus is simply not one industry or factor. It is not enough for food rights to exist and be enshrined into international and national law, there are obligations, well beyond the right to be fed but rather the creation of conditions that support individuals in their attempts to realise the right to food and consequently the food security. These obligations can only be realised when small and large-scale industries, national and international organisations synergise and synchronise their efforts so that all factors are considered. This, however, does not invalidate the fact that states have an obligation to ensure that there is access to food and international organisations have an obligation to hold states accountable. The Committee on Economic, Social and Cultural Rights in General Comment 12 provides guidance for the obligations of states in order to implement the right to food. These obligations allow for member

states to be held accountable in the quest to ensure that citizens have access to adequate food, while not taking any measures to prevent that access, to ensure no institutions or individuals deprive others of the access to food and to proactively engage in activities that facilitate provision of access to food, and providing food when individuals or groups of individuals are unable to provide themselves with food [13].

## REFERENCES

1. **World Food Program (WFP).** Global Food Crisis. <https://www.wfp.org/emergencies/global-food-crisis#:~:text=The%20world%20faces%20a%20global,in%2079%20countries%20in%202022> 2022. Accessed 26<sup>th</sup> May 2023.
2. **World Food Program (WFP).** A Global Food Crisis. <https://www.wfp.org/global-hunger-crisis#:~:text=More%20than%20900%2C000%20people%20worldwide,hunger%20and%20malnutrition%20by%202030> 2022. Accessed 26<sup>th</sup> May 2023.
3. **UN Office of the High Commissioner for Human Rights (OHCHR).** Fact Sheet No. 34, The Right to Adequate Food, 2010, No 34 <https://www.ohchr.org/sites/default/files/Documents/Publications/FactSheet34en.pdf> Accessed 26<sup>th</sup> May 2023.
4. **Food and Agriculture Organisation of the United Nations (FAO).** Trade Reforms and Food Security Conceptualising the Linkages, 2003. <https://www.fao.org/3/y4671e/y4671e.pdf> Accessed 26<sup>th</sup> May 2023.
5. **Committee on World Food Security (CFS).** Global Strategic Framework for Food Security & Nutrition, 2014. [https://www.fao.org/fileadmin/templates/cfs/Docs1314/GSF/GSF\\_Version\\_3\\_EN.pdf](https://www.fao.org/fileadmin/templates/cfs/Docs1314/GSF/GSF_Version_3_EN.pdf) Accessed 26<sup>th</sup> May 2023.
6. **Nguyen H** Food and Agriculture Organisation of the United Nations (FAO). Sustainable Food Programs Concept & Framework. <https://www.fao.org/3/ca2079en/CA2079EN.pdf> Accessed 29<sup>th</sup> May 2023.
7. **Lomax, J** United Nations Environment Program (UNEP). Food and Food Waste. <https://www.unep.org/explore-topics/resource-efficiency/what-we-do/sustainable-lifestyles/food-and-food-waste> Accessed 29<sup>th</sup> May 2023.
8. **Food and Agriculture Organisation of the United Nations (FAO).** The State of Food and Agriculture 2019. Moving forward on food loss and waste reduction. <https://www.fao.org/3/ca6030en/ca6030en.pdf> Accessed 29<sup>th</sup> May 2023.
9. **Buzby J** United States Department of Agriculture (USDA). Food Waste and its Links to Greenhouse Gases and Climate Change, 2022. <https://www.usda.gov/media/blog/2022/01/24/food-waste-and-its-links->

- [greenhouse-gases-and-climate-change#:~:text=Food%20loss%20and%20waste%20also,even%20more%20potent%20greenhouse%20gas](#) Accessed on 30<sup>th</sup> May 2023.
10. **Mbow C, Rosenzweig C, Barioni L, Benton T, Herrero M, Krishanpillai M, Liwenga E, Pradhan P, Rivera-Ferre M, Sapkota T, Tubiello F and Y Xu** Food Security. In: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems, 2019. <https://www.ipcc.ch/srccl/> Accessed on 3<sup>rd</sup> June 2023.
  11. **La Via Campesina.** What is Food Sovereignty, 2023. <https://viacampesina.org/en/video-explainer-what-is-food-sovereignty/> Accessed on 9<sup>th</sup> June 2023.
  12. **Gordillo G and O Jeronimo** Food and Agricultural Organisation of the United Nations (FAO). Food Security and Food Sovereignty, 2013. <https://www.fao.org/3/ax736e/ax736e.pdf> Accessed on 9<sup>th</sup> June 2023.
  13. **United Nations Committee on Economic, Social and Cultural Rights.** Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social And Cultural Rights: General Comment 12, 1999. <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G99/420/12/PDF/G9942012.pdf?OpenElement> Accessed 17<sup>th</sup> June 2023.
  14. **Food and Agriculture Organisation of the United Nations (FAO).** Food Security Information for Action: <https://www.fao.org/3/al936e/al936e00.pdf> 2008. Accessed 27<sup>th</sup> September 2023.
  15. **Vétérinaires Sans Frontières (VSF) International.** Food Sovereignty, Brief Outline of the basic concepts. 2009. [https://vsf-international.org/wp-content/uploads/2015/03/Food\\_Sovereignty\\_booklet.pdf](https://vsf-international.org/wp-content/uploads/2015/03/Food_Sovereignty_booklet.pdf) Accessed 27<sup>th</sup> September 2023.
  16. **Harvard TH Chan School of Public Health - The Nutrition Source.** Food waste. (n.d.). <https://www.hsph.harvard.edu/nutritionsource/sustainability/food-waste/#:~:text=Food%20%E2%80%9Closs%E2%80%9D%20occurs%20before%20the,the%20retail%20or%20consumption%20phases> Accessed 27<sup>th</sup> September 2023.

17. **United Nations.** Our Common Future: Report of the World Commission on Environment and Development (WCED). 1987.  
[https://www.un.org/esa/sustdev/csd/csd15/media/backgroundunder\\_brundtland.pdf](https://www.un.org/esa/sustdev/csd/csd15/media/backgroundunder_brundtland.pdf) Accessed 27<sup>th</sup> September 2023.