|  |
| --- |
| OKELLO SAMUEL  ID UB79342NU88557 |
| FOOD ECONOMICS |
|  |
| An Assignment Presented  To The Academic Department  Of The School Of Science And  Engineering in Partial Fulfillment Of The  Requirements for the Bachelor Degree in Nutrition |
|  |
|  |

|  |
| --- |
| ATLANTIC INTERNATIONAL UNIVERSITY |

Table of Contents

[Introduction 1](#_Toc137761543)

[What we're fighting for today 1](#_Toc137761544)

[Food processing and Value addition 2](#_Toc137761545)

[Benefits of value addition 2](#_Toc137761546)

[Food Security 2](#_Toc137761547)

[Food security 2](#_Toc137761548)

[Food insecurity 3](#_Toc137761549)

[**Measurement** 3](#_Toc137761550)

[Food Wasting 4](#_Toc137761551)

[Examples of Food wasting 5](#_Toc137761552)

[Conclusion 5](#_Toc137761553)

[Reference 5](#_Toc137761554)

**List of Acronyms**

1. USAID United State Aids
2. SDG Sustainable Development Goals
3. FIES Food Insecurity Experience scale
4. FAO Food and Agricultural Organization
5. CSI Coping Strategies Index
6. FANTA Food and Nutrition Technical Assistance
7. USDA United States Development of Agriculture
8. GDP Gross Domestic Products

**FOOD ECONOMICS**

# Introduction

Food economics is a collection of principles and techniques related to food production, markets and distribution. It is concern with questions of food security, sustainability and methods for producing food that obtains a premium price in the market as opposed to being viewed as a commodity.

Food production provides a stable source of employment, plays an important role in local economies, contributes to innovation in the food system, responds to increased demand for

exports, contributes to food affordability, address consumer demand. [1]

# What we're fighting for today

Championing high standards throughout the food supply chain and shifting government, policy to ensure good practice becomes commonplace, particularly in public sector settings e.g. serving certified sustainable fish, organic and fairly traded food, more fruit and vegetable, less but better meat.

Encourage better infrastructure and tailored business advice, to support shorter supply chains focused on agroecological farming and good food enterprises – and ensure these are accessible to everyone no matter their income, recognised as essential contributors to public health, the green economy and a just transition.

Create a target for increase in the market share of food traded through smaller, collaborative and diverse enterprises – including Real Bread bakeries, Better Food Traders, neighbourhood markets, social enterprises and other better routes to market – that champion accessible healthy and sustainable food, ethical trading, and who are farmer- and fisher-focused.

# Food processing and Value addition

Value-added food products are raw or pre-processed commodities whose value has been increased through the addition of ingredients or processes that make them more attractive to the buyer and/or more readily usable by the consumer.

Value addition in agriculture is needed for the profitability of the farmers, to empower the farmers and weaker sections of the society, to provide safe, quality and branded food to the consumers, to reduce post-harvest losses, reduction in import and increasing exports, encourage the growth of subsidiary industries. [2]

# Benefits of value addition

* Creates employment opportunities.
* It increases a business's profit prospects.
* Increases the business' profit margins.
* Mitigates the imbalance of trade/ Reduces trade deficits.
* Increases the host country's Gross Domestic Product (GDP) value.

# Food Security

Based on the 1996 World Food Summit, food security is defined 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.

Food security speaks to the availability of [food](https://en.wikipedia.org/wiki/Food) in a country (or [geography](https://en.wikipedia.org/wiki/Geography)) and the ability of individuals within that country (geography) to access, afford, and source adequate foodstuffs. According to the United Nations [Committee on World Food Security](https://en.wikipedia.org/wiki/Committee_on_World_Food_Security), food security is defined as meaning that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life. The availability of food irrespective of class, gender or region is another element of food security. There is evidence of food security being a concern many thousands of years ago, with central authorities in [ancient China](https://en.wikipedia.org/wiki/Ancient_China) and [ancient Egypt](https://en.wikipedia.org/wiki/Ancient_Egypt) being known to release food from storage in times of famine. At the 1974 [World Food Conference](https://en.wikipedia.org/wiki/World_Food_Conference), the term "food security" was defined with an emphasis on supply; food security is defined as the "availability at all times of adequate, nourishing, diverse, balanced and moderate world food supplies of basic foodstuffs to sustain a steady expansion of food consumption and to offset fluctuations in production and prices". Later definitions added demand and access issues to the definition. The first World Food Summit, held in 1996, stated that food security "exists 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.

Similarly, [household](https://en.wikipedia.org/wiki/Household) food security is considered to exist when all members, at all times, have access to enough food for an active, [healthy](https://en.wikipedia.org/wiki/Health) life.[[5]](https://en.wikipedia.org/wiki/Food_security#cite_note-usda_measuring-5) Individuals who are food secure do not live in [hunger](https://en.wikipedia.org/wiki/Hunger) or fear of [starvation](https://en.wikipedia.org/wiki/Starvation).

Food insecurity, on the other hand, is defined by the [United States Department of Agriculture](https://en.wikipedia.org/wiki/United_States_Department_of_Agriculture) (USDA) as a situation of "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways". Food security incorporates a measure of resilience to future disruption or unavailability of critical food supply due to various risk factors including droughts, shipping disruptions, fuel shortages, economic instability, and wars.]

The [Food and Agriculture Organization](https://en.wikipedia.org/wiki/Food_and_Agriculture_Organization) of the United Nations, or FAO, identified the four pillars of food security as availability, access, utilization, and stability. The [United Nations](https://en.wikipedia.org/wiki/United_Nations) (UN) recognized the [Right to Food](https://en.wikipedia.org/wiki/Right_to_Food) in the [Declaration of Human Rights](https://en.wikipedia.org/wiki/Universal_Declaration_of_Human_Rights) in 1948, and has since said that it is vital for the enjoyment of all other rights.

The concept of food security has evolved to recognize the centrality of agency and sustainability, along with the four other dimensions of availability, access, utilization, and stability. These six dimensions of food security are reinforced in conceptual and legal understandings of the right to food.

The 1996 World Summit on Food Security declared that "food should not be used as an instrument for political and economic pressure". Multiple different international agreements and mechanisms have been developed to address food security. The main global policy to reduce hunger and poverty is in the [Sustainable Development Goals](https://en.wikipedia.org/wiki/Sustainable_Development_Goals). In particular [Goal 2: Zero Hunger](https://en.wikipedia.org/wiki/Sustainable_Development_Goal_2) sets globally agreed targets to end hunger, achieve food security and improved nutrition, and promote [sustainable agriculture](https://en.wikipedia.org/wiki/Sustainable_agriculture) by 2030.

The [International Monetary Fund](https://en.wikipedia.org/wiki/International_Monetary_Fund) cautioned in September 2022 that "the impact of increasing import costs for food and [fertilizer](https://en.wikipedia.org/wiki/Fertilizer) for those extremely vulnerable to food insecurity will add $9 billion to their balance of payments pressures - in 2022 and 2023." This would deplete countries' foreign reserves as well as their capacity to pay for food and fertilizer imports. [3]

**Measurement**

Food security can be measured by calories to digest out to intake per person per day, available on a household budget. In general, the objective of food security indicators and measurements is to capture some or all of the main components of food security in terms of food availability, accessibility, and utilization/adequacy. While availability (production and supply) and utilization/adequacy (nutritional status/anthropometric measurement) are easier to estimate and therefore, more popular, accessibility (the ability to acquire a sufficient quantity and quality of food) remains largely elusive. The factors influencing household food accessibility are often context-specific.

Several measurements have been developed to capture the access component of food security, with some notable examples developed by the USAID-funded Food and Nutrition Technical Assistance (FANTA) project, collaborating with Cornell and Tufts University and Africare and World Vision. These include:

* Household Food Insecurity Access Scale – measures the degree of food insecurity (inaccessibility) in the household in the previous month on a discrete ordinal scale.
* Household Dietary Diversity Scale – measures the number of different food groups consumed over a specific reference period (24hrs/48hrs/7days).
* Household Hunger Scale - measures the experience of household food deprivation based on a set of predictable reactions, captured through a survey and summarized in a scale.
* Coping Strategies Index (CSI) – assesses household behaviors and rates them based on a set of varied established behaviors on how households cope with food shortages. The methodology for this research is based on collecting data on a single question: "What do you do when you do not have enough food, and do not have enough money to buy food?

Food insecurity is measured in the United States by questions in the Census Bureau's [Current Population Survey](https://en.wikipedia.org/wiki/Current_Population_Survey). The questions asked are about anxiety that the household budget is inadequate to buy enough food, inadequacy in the quantity or quality of food eaten by adults and children in the household, and instances of reduced food intake or consequences of reduced food intake for adults and children. A [National Academy of Sciences](https://en.wikipedia.org/wiki/United_States_National_Academy_of_Sciences) study commissioned by the USDA criticized this measurement and the relationship of "food security" to hunger, adding "it is not clear whether hunger is appropriately identified as the end of the food security scale."

Recently, FAO has developed the Food Insecurity Experience Scale (FIES) as a universally applicable experience-based food security measurement scale derived from the scale used in the United States. Thanks to the establishment of a global reference scale and the procedure needed to calibrate measures obtained in different countries, it is possible to use the FIES to produce cross-country comparable estimates of the prevalence of food insecurity in the population. Since 2015, the FIES has been adopted as the basis to compile one of the indicators included in the Sustainable Development Goals (SDG) monitoring framework. [1]

# Food Wasting

Food waste often refers to food that was not ultimately consumed by humans that is discarded or recycled, such as plate waste (i.e., food that has been served but not eaten), spoiled food, or peels and rinds considered inedible. [4]

**Causes of Food Waste**

There are a number of factors that can contribute to food loss and waste (FLW) at the consumer level:

* Improper storage – food not being used before it goes bad.
* Over-Preparing – cooking or serving too much food.
* Large Portions – commonly observed at restaurants, increased portion size largely contributes to waste.

# Examples of Food wasting

Five of the most wasted foods include milk, cheese, potatoes, apples, and bread. Sound familiar? Climate/Environmental Impact: This is the type of food waste that we want to reduce as much as possible. [5]

# Conclusion

Food availability, accessibility, affordability, quality and safety are key in the control of food market. Food always flows to the direction of scarcities and affordability lessens with scarcity.

Food quality and safety help in promoting Health.

# Reference

1. OECD-FAO Agricultural Outlook 2021-2030 Report.
2. <https://www.sustainableweb..org>
3. <https://www.wageningenacademic.com>
4. <https://table2table.org>
5. <https://www.epa.gov>