

Chapter One: The International Dimensions of Development Project

1.1. Introduction

Decolonization gave development new meaning, linking it to the ideal of sovereignty, the possibility of converting **subjects** into **citizens**, and the pursuit of economic development for **social justice**. After decolonization, the **host countries** were left in more or less a poor state as their resources were exhausted, there was widespread ecological degradation, and their labor systems had been altered in a way that only benefitted the colonizers. The host countries had to develop their **economy**, and at the same time be independent **sovereign states**. They needed to establish accessible markets and generate revenue sources to fuel their economy. However, instead of following their own development model, they were forced to adopt the **development project**, which was produced by **Colonial powers** in order to manage economic growth.

The political independence of the colonial world gave birth to the development project, a blueprint for national political-economic development as well as a “protection racket,” insofar as **international aid, trade, and investment** flows were calibrated to military aid from the West to secure Cold War perimeters and make the “**free world**” safe for business. Third World states became at once independent, but collectively defined as “**underdeveloped**.”

The **development project** was a political and intellectual response to the condition of the world at the historic moment of **decolonization**. Under these conditions, development assumed a specific meaning. It imposed an essentially economic (reductionist) understanding of social change. In this way, development could be universalized as a market culture common to all, driven by the **nation-state** and **economic growth**. The two international ingredients of the development project include *Nation States and Economic Growth*.

The nation-state was to be the framework of the development project. **Nation-states** were **territorially** defined political systems based on the government **citizen** relationship that emerged in nineteenth-century. Colonialism exported this political model (with its military shell), framing the politics of the decolonization movement, even where national boundaries made little sense.

The second ingredient of the development project was economic growth. A mandatory UN System of National Accounts institutionalized a universal quantifiable measure of national development. The UN Charter of 1945 proclaimed “a rising standard of living” as the global objective. This “material well-being” indicator is measured in the commercial output of goods and services within a country: capita gross national product (GNP), or the national average of per capita income.

The development project provided a basic national framework for economic growth and agro-industrialization. The developed countries established the concept of Foreign aid, grants to have continued access to natural and human resources of the independent states.

Economic growth depended on international relations because a lot of support material such as foreign aid, technology transfer, stable currency exchange, and international trade was attainable only by international economic arrangements. Many colonizers established aid and trade relationships with their colonies for example the UK established bilateral trading with Jamaica for bananas. The definite international dimensions introduced by the United States were bilateral Marshall Plan and multilateral Bretton woods program. Construction of Bretton woods system shaped national development strategies and reshaped the international division of labor.

Marshall Plan was bilateral transfer of billions of dollars to Europe and Japan, which the US used to achieve their geopolitical goals in the cold war. It restored development because it restored trade, price stability and expanded production. The bilateral aid was used to facilitate trading and investments in European national economies which was good for the Europeans and the US because Europeans actually wanted to achieve social peace and full employment through whereas the US wanted an open world economy.

The demand for European manufactured goods increased due to US investments in colonial and postcolonial territories once again reinforcing the trade imbalance and favoring the colonial powers directly and indirectly. The Bretton wood system is "*a complex multilateral arrangement whereby infusions of American dollars would stimulate the world economy*". The other major change and impact was the creation of multilateral institutions such as World Bank and IMF to

reconstruct the world economy. World Bank and IMF's goal was to restore trade in regions devastated by war, which would be done through the redistribution of funds in these regions to stimulate new production. The World Bank's job was to borrow money in international markets to raise money for development whereas; IMF's job was to give money in order to stabilize national currency exchanges. The third world countries aimed to achieve development by importing technology from the first world countries, which helped them in increasing their production and boosting their manufacturing sector. Their cost of production and total number of final goods and services increased. The first world benefitted as they received resources that they lacked and at the same time the third world countries provided the consumer markets for the obsolete technology and products.

The World Bank made large-scale loans to the states for national infrastructural projects such as dams, highways, and power plants as these basic utilities were essential for growth. Furthermore, two thirds of the World Bank's loans were enough to purchase goods to build new transportation and electric power systems. The bank invested in large-scale cash crops for example rubber and cacao, which resulted in the international division of labor, which was good for the first worlds that specialized in agriculture as it resulted in comparative advantage. The Bretton woods institutions moved funds to regions that needed purchasing power and they also trained third world officials in the theory and practice of development as understood in the first world. Hence, the Marshall Plan and The Bretton woods helped promote/ reform development.

In general, *The Origin of Development Project lies within the bilateral Marshall Plan and become formalized under the multilateral Bretton Woods program.*

U.S. Bilateral: The Marshall Plan

The **Marshall Plan** (officially the **European Recovery Program, ERP**) was an American initiative to aid Europe and Asia, in which the United States gave \$13 billion (approximately \$120 billion in current dollar value) in economic support to help rebuild European economies after the end of World War II. The initiative is named after Secretary of State George Marshall.

The goals of the United States were to rebuild war-devastated regions, remove trade barriers, modernize industry, and make Europe prosperous again. The Marshall Plan required a lessening of interstate barriers, a dropping of many petty regulations constraining business, and encouraged

an increase in productivity, labour union membership, as well as the adoption of modern business procedures. The Marshall Plan required a lessening of interstate barriers, a dropping of many petty regulations constraining business, and encouraged an increase in productivity, labour union membership, as well as the adoption of modern business procedures.

The Marshall Plan aid was divided amongst the participant states roughly on a per capita basis. A larger amount was given to the major industrial powers, as the prevailing opinion was that their resuscitation was essential for general European revival.

Multilateral: The Bretton Woods System

The idea of international bank was part of the plan to reconstruct the world economy in the 1940's. Trade was to be restored by distributing credit to revitalize regions devastated by cold war/colonialism. Through a global banking operation, funds would be redistributed to these regions to stimulate new production. This result for the chartering of the foundation of World Bank and IMF at Bretton Woods IMF and World Bank become a Bretton Woods Agencies

1.2.The Post War food Order

The post war food order, explains the situation of food system in post WWII periods. In the post –World War II era, the United States set up a *Food Aid Program*, that channeled food surplus to the 3rd World countries.

The Food for Aid Program (FAP) issued by the U.S. government in 1954 (Public Law 480) represented the onset of the second food regime era. The FAP was a set of policies that allowed the U.S. to get rid "of surplus food commodities on concessionary terms to client states to serve foreign policy goals". Arguments in favor of the FAP highlighted that the program was beneficial for low-income economies in dealing with their restricted commercial import capacity and their lack of natural resource endowments that were needed to achieve food security without causing significant alterations or distortions to local farmers' production.

Surplus arose out of the farm model persuade in United States, heavenly protected by Tariffs and subsidies (Institutionalized in the GATT, *General Agreement on Tariff and Trade*). The farm subsidies encouraged this by setting prices for farm goods above their price on the world market.

The resulting surplus subsidized third world industrial labor force with cheap food. The post war food order was a massive transfer of agricultural resources to the Third world urban-industrial sector. In this model, farmers specialized in one or two commodities (such as Corn, Rice, Sugar, And Dairy Products), and with technological support from the public purse, American Farming entered an era of Over Production.

- During this period, 80 percent of U.S. wheat exports were in the forms of food aid.
- During the 1960s, the U.S. share of the world food aid was more than 90 percent, although this fell to 59 percent by 1973.
- By then aid had become increasingly multilateral, building on a supplementary system of food aid to needy countries

Arguments against Food Aid Program (FAP) argues that first, the output aspect of food aid gives disincentives for local agricultural production through the price mechanism. As a result, low income countries receiving food aid changed their internal production patterns. Second; the allocation aspect of food aid has not used unbiased selection criteria but rather has been influenced by the economic, geo-political, and military interests of donor countries. Third, the dependency aspect of food aid is associated with forces leading developing countries not to greater self-reliance, but rather to greater dependence on food aid goods.

1.3. Food Dependency

Across the third world in general, wheat importing rose from a base of practically zero in the mid-1950s to almost half of world food imports in 1971. By 1978, the third world was receiving more than three-quarter of American wheat exports. At the same time, third world per capita consumption of wheat rose by almost two-third, with no change in first world wheat consumption pattern. In addition, third world per capita consumption of all cereals except wheat increased 20 percent while per capita consumption of traditional root crops declined by more than 20 percent. In Asia and Latin American urban diets, wheat progressively replaced rice and corn. Wheat (and rice) imports displaced maize in Central America and parts of the Middle East. The rising consumption of imported wheat in third world countries was linked to two changes in that period.

- The increasing weak condition of peasant agriculture,

- The expansion of an industrial labor force: small producers(outside the agro-export sector) left the land and sought low wage job in the rapidly growing cities

Thus, through the development project, these social trends assumed international dimension as the first world farmers supplied third world industrial labor. Therefore, food dependency is about the rising Consumption of imported good because of the above and other factors, thus, the 3rd world become dependent on the imported food.

1.4. The Green Revolution

The Green Revolution was the technological response to a worldwide food shortage, which became threatening in the period after WWII. The Green revolution was a “package” of plant-breeding agricultural technologies originally developed under the sponsorship of Rockefeller Foundation (in Mexico in the 1940s) and then in combined venture with Ford Foundation (in the Philippines in the 1960s. Scientists focused on producing high yielding varieties of seeds that allowed intensified cropping patterns. The new hybrid seeds were heavily dependent on disease- and –pest resisting chemical protections in the forms of fungicides and pesticides. The expansion of green revolution agriculture in the 3rd world embodied the two sides of the development project:(*The national and international*)

- **Nationally:** Government sought to improve agricultural productivity and the delivery of maize, wheat, and rice to urban centers.
- **Internationally:** the green revolution was an import substitution strategy.

The Green Revolution transformed farming practice in many regions of the tropics and sub-tropics where the principal food crops were rice, wheat, and maize, From the time of independence in 1947 until 1965, agricultural production in India was unable to meet the country’s needs.

For Example: Severe droughts in the mid-1960s threatened famine, which was averted only by substantial shipments of food grains from the United States. With the success of green revolution, India attained food self-sufficiency within a decade by the end of the 1970s. The second wave of the Green Revolution, however, reached India finally in the 1980s. Thus, the second Green Revolution in the 1980s was essential for the history of Indian economic development

Chapter Two: Issues in Food security

2.1. Introduction and Defining Food Security

Food security is a flexible concept as reflected in the many attempts at definition in research and policy usage. Even a decade ago, there were about 200 definitions in published writings. Whenever the concept is introduced in the title of a study or its objectives, it is necessary to look closely to establish the explicit or implied definition.

The continuing evolution of food security as an operational concept in public policy has reflected the wider recognition of the complexities of the technical and policy issues involved. The most recent careful redefinition of food security is that negotiated in the process of international consultation leading to the World Food Summit (WFS) in November 1996. The contrasting definitions of food security adopted in 1974 and 1996, along with those in official FAO and World Bank documents of the mid-1980s, are set out below with each substantive change in definition underlined. A comparison of these definitions highlights the considerable reconstruction of official thinking on food security that has occurred over 25 years. These statements also provide signposts to the policy analyses, which have re-shaped our understanding of food security as a problem of international and national responsibility.

Food security as a concept originated only in the mid-1970s, in the discussions of international food problems at a time of global food crisis. The initial focus of attention was primarily on food supply problems - of assuring the availability and to some degree the price stability of basic foodstuffs at the international and national level. That supply-side, international, and institutional set of concerns reflected the changing organization of the global food economy that had precipitated the crisis. A process of international negotiation followed, leading to the World Food Conference of 1974, and a new set of institutional arrangements covering information, resources for promoting food security and forums for dialogue on policy issues.

The issues of famine, hunger, and food crisis were also being extensively examined, following the events of the mid 1970s. The outcome was a redefinition of food security, which recognized that the behavior of potentially vulnerable and affected people was a critical aspect.

A third, perhaps crucially important, factor in modifying views of food security was the evidence that the technical successes of the Green Revolution did not automatically and rapidly lead to dramatic reductions in poverty and levels of malnutrition. These problems were recognized as the result of lack of effective demand.

Official concepts of food security

The initial focus, reflecting the global concerns of 1974, was on the volume and stability of food supplies. Food security was defined in the 1974 World Food Summit 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”

In 1983, FAO expanded its concept to include securing access by vulnerable people to available supplies, implying that attention should be balanced between the demand and supply side of the food security equation:

“Ensuring that all people at all times have both physical and economic access to the basic food that they need”

In 1986, the highly influential World Bank report “Poverty and Hunger” focused on the temporal dynamics of food insecurity. It introduced the widely accepted distinction between chronic food insecurity, associated with problems of continuing or structural poverty and low incomes, and transitory food insecurity, which involved periods of intensified pressure caused by natural disasters, economic collapse, or conflict.

This concept of food security is further elaborated in terms of,

“Access of all people at all times to enough food for an active, healthy life”.

By the mid-1990s, food-security was recognized as a significant concern, spanning a spectrum from the individual to the global level. However, access now involved sufficient food, indicating continuing concern with protein-energy malnutrition.

However, the definition was broadened to incorporate food safety and nutritional balance, reflecting concerns about food composition and minor nutrient requirements for an active and healthy life. Food preferences, socially or culturally determined, now became a consideration. The potentially high

degree of context specificity implies that the concept had both lost its simplicity and was not itself a goal, but an intermediating set of actions that contribute to an active and healthy life.

The 1994 UNDP Human Development Report promoted the construct of human security, including a number of component aspects, of which food security was only one. This concept is closely related to the human rights perspective on development that has, in turn influenced discussions about food security.

The 1996 World Food Summit adopted a still more complex definition:

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”.

This definition is again refined in The State of Food Insecurity 2001:

“Food security [is] 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”.

This new emphasis on consumption, the demand side and the issues of access by vulnerable people to food, is most closely identified with the seminal study by Amartya Sen. Eschewing the use of the concept of food security, he focuses on the entitlements of individuals and households.

The international community has accepted these increasingly broad statements of common goals and implied responsibilities. However, its practical response has been to focus on narrower, simpler objectives around which to organize international and national public action. The declared primary objective in international development policy discourse is increasingly the reduction and elimination of poverty. The 1996 WFS exemplified this direction of policy by making the primary objective of

international action on food security halving of the number of hungry or undernourished people by 2015.

Essentially, food security can be described as a phenomenon relating to individuals. It is the nutritional status of the individual household member that is the ultimate focus, and the risk of that adequate status not being achieved or becoming undermined. The latter risk describes the vulnerability of individuals in this context. As the definitions reviewed above imply, vulnerability may occur both as a chronic and transitory phenomenon. Useful working definitions are described below.

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.

Food insecurity exists when people do not have adequate physical, social, or economic access to food as defined above.

Household measurements: the focus on chronic hunger and poverty

Sub-nutrition, often assumed in official literature to be synonymous with the more emotive term hunger, is the result of food intake that is continuously insufficient to meet dietary energy requirements.

Measurement is typically indirect and based on ***food balance sheets*** and national income distribution and consumer expenditure data. Linking hunger and sub-nutrition with inadequate food intake allows the measurement of food insecurity in terms of the availability and apparent consumption of staple foods or energy intake. This type of measurement corresponds to the earlier narrower definitions of chronic food insecurity.

2.2. Dimensions of Food Security

Food security exists 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. - 1996 World Food Summit

- Physical AVAILABILITY of food
- Economic and physical ACCESS to food
- Food UTILIZATION
- STABILITY of the other three dimensions over time

One way to understand these four dimensions of the broad food security concept is to examine how the meaning and common understanding of food security has evolved over time. In modern times, the interest in “food security” was reignited following the **world food crisis of 1972-74**. The crisis originated from a combination of factors, including adverse conditions in several parts of the world, which reduced global grain supplies. Subsequently, a dramatic increase in demand for grain imports doubled international grain prices, which threatened the food security status of food importing nations.

As a result, the first World Food Conference held in 1974 focused on the problem of **global production, trade, and stocks**. Hence, the original food security debate focused on adequate supply of food and ensuring stability of these supplies through food reserves. Subsequent food security efforts focused primarily on food production and storage mechanisms to offset fluctuations in global supply and ensure the ability to import food when needed.

1. AVAILABILITY

The first World Food Conference (1974) focused on the problem of global production, trade and stocks. Hence, the original food security debate focused on adequate supply of food and ensuring stability of these supplies through food reserves. Subsequent food security efforts focused primarily on food production and storage mechanisms to offset fluctuations in global supply and ensure the ability to import food when needed.

Food availability addresses the “supply side” of food security and is determined by the level of food production, stock levels and net trade. This dimension addresses supply side of the food security and expects sufficient quantities of quality food from domestic agriculture production or import. This is

simple mathematical calculation whether the food available in certain territory/country is enough to feed the total population in that particular territory and calculated from the level of local agriculture production at that territory, stock levels, and net import/export.

This dimension of food security at different levels can be assessed by precipitation record, food balance sheet, food market survey, agricultural production planet. Similarly, indicators of food security for this dimension at different levels are fertility rate, food production, population flows, harvesting time, staple food production, food storage, consumption of wild foods etc.

2. ACCESS

From the early 1980's, the importance of food access was increasingly recognized as a key determinant of food security. Hence, food production is just one of several means that people have to acquire the food that they need. It became obvious that an adequate supply of food at the national or international level does not in itself guarantee household level food security.

For example, the Green Revolution in Asia of the 1960s and 1970s, with its package of improved seeds, farm technology, better irrigation and chemical fertilizers, was highly successful at augmenting food supplies, but this was not automatically translated into improvements in food security of all people. Having sufficient food at national level or at certain territory cannot be taken as the proof that all the household or individuals in the country/territory have enough food to eat. Hence, Food access is another dimension of food security, which encompasses **income, expenditure and buying capacity** of households or individuals. Food access addresses whether the households or individuals have enough resources to acquire appropriate quantity of quality foods.

In this regard, **Amartya Sen's Entitlement Theory of Famine** (Sen, 1981) forms the conceptual basis of all agencies' approaches to assessing food security. Sen explained that famines occur not because there is not enough food, but because people do not have access to enough food. Of course, the availability of food near to the household is a prerequisite of food security. Availability is influenced by factors such as a community's proximity to centers of production and supply, or by market forces, restrictions on trade and international policies that affect food supplies.

All of these are key to food-security analysis. Sen's work was nonetheless a radical breakthrough; before him, the availability of food was thought to be the **overriding** determinant of famine.

Sen sub-divided entitlements to food as follows:

1. ***Production-based Entitlements*** (crops and livestock);
2. ***Own-labour Entitlements*** (waged labour and professions);
3. ***Trade-based entitlements*** (trading artisan products and natural resources like forestry products); and
4. ***Inheritance and transfer entitlements*** (from the state, or private gifts and loans)

Therefore, According to Amartya Sen, a famine occurs when a large number of people suffer a complete collapse in their exchange entitlements over food

- **Other means to access food**

- Food can be accessed through trade, barter, collection of wild foods and community support networks; it can also be received as a gift (or even through theft).
- Remember that access to food is influenced by market factors and the price of food as well as an individual's purchasing power, which is related to employment and livelihood opportunities.

Concerns about insufficient food access have resulted in a greater policy focus on incomes and expenditure in achieving food security objectives. This has brought food security closer to the poverty reduction agenda.

3. UTILIZATION

A third dimension – food utilization – has become increasingly prominent in food security discussions since the 1990s. Utilization is commonly understood as the way the body makes the most of various nutrients in the food. This food security dimension is determined primarily by people's health status.

Food utilization addresses not only how much food the people eat but also what and how they eat. It also covers the food preparation, intra-household food distribution, water and sanitation and health care practices. The nutritional outcome of the food eaten by an individual will be appropriate and optimum only when food is prepared/cooked properly, there is adequate diversity of the diet and proper feeding, and caring practices are practiced. Stunting rate, wasting rate, prevention of diarrheal diseases, latrine usage, weight-for-age, goiter, anemia, night blindness etc are the indicators at different level for this dimensions, which can be assessed by demographic, and health survey, immunization chart etc

Food security was traditionally perceived as consuming sufficient protein and energy (food quantity). The importance of micronutrients for a balanced and nutritious diet (food quality) is now well appreciated. General hygiene and sanitation, water quality, health care practices and food safety and quality are determinants of good food utilization by the body.

Sufficient energy and nutrient intake by individuals is the result of good care and feeding practices, food preparation, and diversity of the diet and intra-household distribution of food. Combined with good biological utilization of food consumed, this determines the nutritional status of individuals. Food security was traditionally perceived as consuming sufficient protein and energy (**food quantity**). The importance of micronutrients for a balanced and nutritious diet (**food quality**) is now well appreciated.

4. STABILITY

The stability dimension addresses the stability of the other three dimensions over time. People cannot be considered food secure until they feel so and they do not feel food secure until there is stability of availability, accessibility, and proper utilization condition. Instability of market price of staple food and inadequate risk bearing capacity of the people in the case of adverse condition (e.g. natural disaster, unexpected weather etc), political instability, and unemployment are the major factors affecting stability of the dimensions of food security. From the above definition of food security, the phrase “**all people, at all times**” is integral to the definition of food security, and is key to achieving national food security objectives.

“All People”

Different people are food secure to varying degrees and will be affected by adverse events differently. We must assess variations in food security status between different groups of people. Most commonly, humanitarian and development agencies differentiate between groups according to their main livelihood (source of food or income), in addition to other factors such as geographical location and wealth.

“All Times “

People's food security situation may change. Adverse weather conditions, political instability, or economic factors may affect your food security status. This recognizes that people's food security situation may change over time. Even if your food intake is adequate today, you are still considered to be food insecure if you have inadequate access to food on a periodic basis, risking a deterioration of your nutritional status. Adverse weather conditions (drought, floods), political instability (social unrest), or economic factors (unemployment, rising food prices) may impact on your food security status.

Therefore, **At all times** refers to the **stability** dimension of food security. It emphasizes the importance of having to reduce the risk of adverse effects on the other three dimensions: food availability, access, or utilization.

Conclusion

The realization of the importance of each dimension has benefited our earlier understanding. For example, while there has been a growing realization of the importance of the food **access** dimension, it has not displaced earlier concerns about adequate food **availability**. Even if people have money, if there is no food available in the market, people are at risk of food insecurity. Similarly, the importance of food **utilization** has further enriched our understanding. Food security is not just about quantity of food consumed, but also about quality, and that your body must be healthy to enable the nutrients to be absorbed. Finally, these three dimensions should be **stable** over time and not be affected negatively by natural, social, economic or political factors. For food security objectives to be realized, all four dimensions must be fulfilled simultaneously.

For example, even if people have money (access), if there is no food available in the market (availability), people are at risk of food insecurity.

Furthermore, food security is also about quality, and that your body must be healthy to enable the nutrients to be absorbed (utilization).

These 3 dimensions should be stable over time and not be affected negatively by natural, social, economic or political factors.

Summary: For Dimensions of Food Security

Physical AVAILABILITY of food	Food availability addresses the “supply side” of food security and is determined by the level of food production, stock levels and net trade.
Economic and physical ACCESS to food	<ul style="list-style-type: none"> • An adequate supply of food at the national or international level does not in itself guarantee household level food security. • Concerns about insufficient food access have resulted in a greater policy focus on incomes, expenditure, markets, and prices in achieving food security objectives.
Food UTILIZATION	<ul style="list-style-type: none"> • Utilization is commonly understood as the way the body makes the most of various nutrients in the food. Sufficient energy and nutrient intake by individuals is the result of good care and feeding practices, food preparation, and diversity of the diet and intra-household distribution of food. • Combined with good biological utilization of food consumed, this determines the nutritional status of individuals.
STABILITY of the other three dimensions over time	<ul style="list-style-type: none"> • Even if your food intake is adequate today, you are still considered to be food insecure if you have inadequate access to food on a periodic basis, risking a deterioration of your nutritional status. • Adverse weather conditions, political instability, or economic factors (unemployment, rising food prices) may have an impact on your food security status.

For food security objectives to be realized, all four dimensions must be fulfilled simultaneously.

2.3. THE DURATION OF FOOD INSECURITY/TYPES OF FOOD INSECURITY

Food security analysts have defined two general types of food insecurity: Inadequate food consumption may vary from a short-term experience to a lifelong condition. Not all households or people suffer inadequate food consumption for the same period. This may vary from a short-term experience to a lifelong condition. Based on these two major types of food insecurity is identified,

A. Chronic Food Insecurity

Chronic food insecurity is taken as long-term or persistent. It occurs when people are unable to meet their minimum food requirements over a sustained period of time. Lack of minimum requirement of food to the people for a sustained period due to extended periods of poverty, lack of assets and inadequate access to productive or financial resources can be called as Chronic Food Insecurity. It is often the result of extended periods of poverty, lack of assets and inadequate access to productive or financial resources.

B. Acute or Transitory Food Insecurity

Transitory food insecurity is short-term and temporary. It refers to a sudden drop in the ability to produce or access enough food to maintain a good nutritional status. Sudden lack of food or reduction

in the ability to produce or access minimum requirement of food due to short-term shocks and fluctuations in food availability and food access, including year-to-year variations in domestic food production, food prices, and household incomes can be defined as Acute or Transitory Food Insecurity. Acute food insecurity is relatively unpredictable and can emerge suddenly. It occurs when there is a cyclical pattern of inadequate availability and access to food. This is associated with seasonal fluctuations in the climate, cropping patterns, work opportunities (labour demand) and/or prevalence of diseases.

For example, food shortages may occur in the pre-harvest period, when on-farm stocks are depleted and other sources of food (e.g. wild foods) are not available.

In rural communities it is common to talk of “hungry periods” and “periods of plenty” related to the agricultural calendar and/or cyclical availability of employment.

The above two types indicate the nature of food insecurity (both **Duration and Severity**). This indicates that there are important differences in how the duration and severity of food insecurity affects people’s lives. Understanding these variations is important since various factors influence the choice of intervention to address food insecurity concerns. A specific vocabulary has been developed to describe the duration of food insecurity and the severity of the level of food insecurity.

Therefore, Understanding the various dimensions of food security is important when establishing priorities in food security policy and programme formulation, making long term investment decisions, and in evaluating response options when responding to food emergencies.

	CHRONIC FOOD INSECURITY	TRANSITORY FOOD INSECURITY
is...	long-term or persistent	Short-term and temporary
Occurs when...	People are unable to meet their minimum food requirements over a sustained period of time	there is a sudden drop in the ability to produce or access enough food to maintain a good nutritional status
Results from...	Extended periods of poverty, lack of assets and inadequate access to productive or financial resources	Short-term shocks and fluctuations in food availability and food access, including year-to-year variations in domestic food production, food prices and household incomes.
Can be overcome with...	Typical long-term development measures also used to address poverty, such as education or access to Productive resources, such as credit. They may also need more direct access to food to enable them to raise their productive capacity.	Transitory food insecurity is relatively unpredictable and can emerge suddenly. This makes planning and programming more difficult and requires different capacities and types of intervention, including early warning capacity and safety net programmers

The concept of *seasonal food security* falls between chronic and transitory food insecurity. It is similar to chronic food insecurity as it is usually predictable and follows a sequence of known events. However, as seasonal food insecurity is of limited duration it can also be seen as recurrent, transitory food insecurity. It occurs when there is a cyclical pattern of inadequate availability and access to food. This is associated with seasonal fluctuations in the climate, cropping patterns, work opportunities (labour demand), and disease.

The Concept of Safety Nets

Measures to enhance direct access to food are more likely to be beneficial if these are embedded in more general social safety net programmes. Safety nets include income transfers for those chronically unable to work—because of age or handicaps—and for those temporarily affected by natural disasters or economic recession

Options include:

- **Targeted direct feeding programmers:** These include school meals; feeding of expectant and nursing mothers as well as children under five through primary health centers, soup kitchens, and special restaurant
- **Food-for-work programmes.** Food-for-work programmes provide support to households while developing useful infrastructure such as small-scale irrigation, rural roads, buildings for rural health centers and schools.
- **Income-transfer programmes.** These can be in cash or in kind, including food stamps, subsidized rations and other targeted measures for poor households.

2.4. THE SEVERITY OF FOOD INSECURITY

When analyzing food insecurity, it is not enough to know the duration of the problem that people are experiencing, but also how intense or severe the impact of the identified problem is on the overall food security and nutrition status. This knowledge will influence the nature, extent, and urgency of the assistance needed by affected population groups.

Different ‘scales’ or ‘phases’ to ‘grade’ or ‘classify’ food security have been developed by food security analysts using different indicators and cut-off points or ‘benchmarks’. Examples include:

Measuring the Severity of Undernourishment

The measure for hunger compiled by FAO, defined as undernourishment, refers to the proportion of the population whose dietary energy consumption is less than a pre-determined threshold. This threshold is country specific and is measured in terms of the number of kilocalories required to conduct sedentary or light activities. The undernourished are also referred to as suffering from food deprivation.

The severity of undernourishment indicates, for the food deprived, the extent to which dietary energy consumption falls below the pre-determined threshold.

The Integrated Food Security Phase Classification (IPC)

The IPC is a classification system for food security crises based on a range of livelihood needs:

IPC Phase Classification	Indicators
Generally food secure	- Crude Mortality Rate - Malnutrition prevalence
Chronically food insecure	

Acute food and livelihood crisis	- Food Access/ Availability
Humanitarian emergency	- Dietary Diversity
Famine / humanitarian catastrophe	- Water Access/Availability - Coping strategies - Livelihood Assets

2.5. VULNERABILITY, HUNGER, MALNUTRITION AND POVERTY

The dynamic nature of food security is implicit when we talk about people who are vulnerable to experiencing food insecurity in the future. Vulnerability is defined in terms of the following three critical dimensions:

- Vulnerability to an outcome;
- From a variety of risk factors;
- Because of an inability to manage those risks

Indeed, a person can be vulnerable to hunger even if he or she is not actually hungry at a given point in time. Vulnerability analysis suggests two main intervention options:

- Reduce the degree of exposure to the hazard;
- Increase the ability to cope.

By accounting for vulnerability, food security policies and programs broaden their efforts from addressing current constraints to food consumption, to include actions that also address future threats to food security.

Moreover, It is important to understand how these three concepts are related to food insecurity.

Hunger is usually understood as an uncomfortable or painful sensation caused by insufficient food energy consumption. Scientifically, hunger is referred to as food deprivation.

Simply put, all hungry people are food insecure, but not all food insecure people are hungry, as there are other causes of food insecurity, including those due to poor intake of micronutrients.

Malnutrition results from deficiencies, excesses, or imbalances in the consumption of macro- and/or micronutrients. Malnutrition may be an outcome of food insecurity, or it may relate to non-food factors, such as:

- Inadequate care practices for children,
- Insufficient health services; and

- An unhealthy environment

While **poverty** is undoubtedly a cause of hunger, lack of adequate and proper nutrition itself is an underlying cause of poverty.

A current and widely used definition of poverty is:

Poverty encompasses different dimensions of deprivation that relate to human capabilities including consumption and food security, health, education, rights, voice, security, dignity and decent work. It is argued that a strategy for attacking poverty in conjunction with policies to ensure food security offers the best hope of swiftly reducing mass poverty and hunger. However, recent studies show that economic growth alone will not take care of the problem of food security. What is needed is a combination of:

- Income growth; supported by
- Direct nutrition interventions; and
- Investment in health, water, and education

2.6. A THEORETICAL FRAMEWORK FOR FAMINE, FOOD SECURITY, AND VULNERABILITY

Famines and food shortages have recurred throughout human history owing to a variety of interrelated causes, including environmental crises and natural disasters, economic, social, and political inequalities, and violent conflict. In the 21st century, however, the percentage of the world's population facing acute and chronic hunger is decreasing on every continent except Africa. Sub-Saharan Africa is the only region of the world in which chronic food insecurity, threats of famine remain endemic for most of the population, and the number of malnourished people is steadily increasing. Improving food security thus remains a central concern for African development and requires concerted effort on the part of African governments and international donors.

Although the imperative is clear to better address Sub-Saharan Africa's ongoing food crises, the international community and regional governments still lack consensus on how to define and respond to famine adequately. Drawing on multidisciplinary approaches, this section of

the chapter reviews dominant theories and conceptual frameworks for the study of vulnerability, food security, and famine especially in Sub-Saharan Africa.

In their discussion of famine in Ethiopia, Webb & von Braun (1994) define famine as “a catastrophic disruption of society as manifested in a cumulative failure of production, distribution and consumption systems”. The principal consequences of famine are a concentrated decline of food consumption resulting in chronic weight losses for individuals and sharp increases in excess mortality, massive social disruption, and long-term resource depletion. Although famine has long been considered a discrete event triggered by external causes and amenable to technical solutions, researchers and scholars have recently challenged this view, arguing that famine must be understood as a long-term socioeconomic process that accelerates destitution of a society’s most vulnerable groups to the point where their livelihood systems become untenable.

The negative effects of famine in Sub-Saharan Africa have been magnified by an upsurge of complex emergencies rooted in structural vulnerabilities that limit equitable access to resources. High death tolls from famines are increasingly correlated with the presence of violent conflicts and the concentration of populations in refugee camps where disease epidemics are a common cause of mortality.

2.6.1. Review of Famine Theories

Theories of famine have shifted from an emphasis on environmental and demographic causes to economic and sociopolitical causes. Early work on famine was heavily influenced by Malthus who proposed that famine followed excessive population growth and served to keep carrying capacity in check by reducing populations to a level consistent with food production. Contrary to Malthus’s predictions, however, famines have not limited population growth to any significant extent over history.

Largely because of Malthus’s influence, “the criterion of famine became a measurable increase in the death rate of an aggregation of individuals, diagnosed

by medical professionals as being due to starvation and causally related to a measurable decrease in the availability of food”.

This emphasis on famine as a “technical malfunction” requiring the intervention of experts (e.g., demographers, medical specialists, and agronomists or economists) has long dominated the field and obscured the social processes underlying food crises. The assumed linkage among famine, starvation, and mass mortality in both popular conceptions and technical definitions stems directly from the debate started by Malthus more than two centuries ago. Yet as more nuanced analyses have recently demonstrated, famine can occur in varying degrees of severity well before critical food shortages become evident. For example, villagers in Sudan distinguish a “famine that kills” from a range of other food crises experienced at the household level that may cause hunger and destitution but not necessarily lead to death.

A. Sen’s Entitlement Approach

The groundbreaking work of Amartya Sen in *Poverty and Famines* (1981) introduced a new paradigm in famine studies by rejecting Malthusian notions of food availability decline (FAD) per head and insisting on the salience of market forces and the role of the state in determining individual entitlement to food. According to Sen, starvation occurs when a person does not have access to enough food, often despite the availability of food for those who can afford it. Famines invariably affect populations in different ways depending on a household’s ability to acquire food during crisis times. For instance, at the height of the 1972–1974 famine in Ethiopia, there was no significant reduction in overall food output, and people succumbed to starvation while food prices remained fairly stable. Similarly, during the Sahel famine of the mid-1970s, a survey by the Food and Agricultural Organization determined that the most affected countries such as Mali, Mauritania, and Niger all produced enough grain even during the worst year (1973) to feed their populations, if the grain had been equally distributed.

In Sen’s (1989, 1999) framework, vulnerability to famine is directly related to a household’s level of entitlements.

He defined entitlements as “a key set of alternative commodity bundles that a person can command in society using the totality of rights and opportunities that he or she faces”. Entitlement relations are based

on four different types of ownership: production, trade, labor, and inheritance or transfer. Through a combination of these means, individuals gain access to food directly or to the ability to acquire (purchase) it indirectly. Market functioning is central to a household's ability to access food, and starvation can occur even when food is readily available at local markets if a household lacks the appropriate entitlements. Famine is thus characterized by a collapse of entitlements for certain segments of society and the failure of the state to protect those entitlements. Sen's theoretical contributions revolutionized famine policy by shifting the debate from issues of availability to emphasizing the ability of individuals to obtain access to and control over food resources.

B. Revising Sen's: Famine as A Politically Driven Process

Although Sen's work remains central in famine research and development studies more generally, several critics have cogently argued that Sen's overemphasis on economic market-based causation neglects the salience of politics, historical processes, and social disruption in creating conditions of vulnerability and famine. In Sen's analysis, market forces replaced previous non-human actors (i.e., supernatural or natural explanations that considered famine an act of God or nature) and defined famine as an economic rather than a natural disaster.

Further shifting the focus of the debate, we should now examine the role of political agency in provoking and sustaining acute and chronic food insecurity, especially among disenfranchised and war-torn populations involved in complex humanitarian emergencies.

In his reassessment of Sen's entitlement theory, deWaal (1990) points out that Sen fails to explain two central phenomena witnessed in famines: (a) Many people choose not to consume food rather than sell their vital assets, and (b) most famine mortality is caused by the outbreak of disease and widespread epidemics rather than simple under nutrition. In deWaal's **integrated model of famine**, a natural disaster or economic crisis precipitates famine, causing a loss of entitlements to staple foods and a threat to long-term socioeconomic stability. In this situation, people resort to a variety of coping strategies for temporary solutions, but the strategies often lead to impoverishment and social disruption. When

copings strategies completely breakdown, social collapse ensues and results in health crises and excess mortality.

Social collapse at this level is usually accompanied by violence, which renders food and medical relief less effective and quickly turns entitlement loss into destitution. In de Waal's view, famine is not limited to the standard notion of mass starvation unto death, but can also be considered "a more virulent form of poverty that leads to death".

C. Incorporating Vulnerability and the Household Livelihood Security Framework

In terms of chronic poverty and vulnerability, Africa remains the world's most disadvantaged continent. While the broad term vulnerability has been often used to mean vulnerability to poverty or risk, it has sometimes been treated as a cause and/or symptom of poverty. Vulnerability frameworks arose from the realization that the underlying vulnerability status of a population is a more important determinant of the extent and duration of a crisis than the discrete environmental hazards that may trigger the crisis. For instance, the relationship between drought and famine is strongest in places where the resource base is poor, poverty is endemic, and public capacity for prevention is weak. Although coordinated, rapid government intervention prevented drought from leading to famine in Zimbabwe, countries such as Sudan and Ethiopia are highly susceptible to drought-induced famine owing to political and economic systems weakened by repeated crises over time.

Although the concept of vulnerability is a powerful one, it must be made useful for policymakers. This idea implies that local variation in vulnerability must be presented to policymakers in a comprehensible and functional manner.

Vulnerability can be analyzed on various levels, including individual, community, regional, and national levels. It can be further separated into external factors that comprise the particular risks and shocks experienced by a population and the internal aspects that relate to a population's increasing inability to cope with those shocks.

During the 1990s, vulnerability analysis became a domain of expertise in its own right with the rise of vulnerability assessment studies and mapping. Vulnerability mapping uses a geographic information systems (GIS) framework for organizing data layers that includes secondary data on water sources, rainfall, and basic physical and social infrastructure. With this basic dataset, the framework uses a community sampling process and a participatory research approach to involve local populations in the actual definition and mapping of their own vulnerability.

The main gap that still needs to be addressed in vulnerability studies includes the multiple scales of analysis that create problems in aggregating data, the absence of objective criteria against which to compare a zero state of no vulnerability, and the complicated nature of dynamic systems that involve different combinations of variables over time and space. Vulnerability mapping tends to be descriptive. It is important to add an analysis of causality within the framework.

A household's capacity to absorb and recover from famines (or other shocks) can be analyzed instructively from a livelihood perspective. Livelihoods are the means by which the household as a unit and its individual members make a living and pursue their goals. They encompass the existing capabilities and assets as well as the sustainability types of socioeconomic activities pursued.

D. The Household Livelihood Security Approach

The Household Livelihood Security (HHLS) framework grew out of a food security perspective but it is based on the observation that food is not the only basic need. Other needs such as political participation, education, shelter, and meeting social obligations are as important as food.

A livelihood "comprises the capabilities, assets (stores, resources, claims, and access) and activities required for a means of living; a livelihood that is sustainable can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation"

Household livelihood security, then, refers to adequate and sustainable access to income

and resources to meet basic needs (including food, potable water, health facilities, educational opportunities, housing, involvement in policymaking, and time for community participation and social integration). Livelihoods include a range of on-farm and off-farm activities that together provide a variety of procurement strategies to make a living. Thus, each household can have several possible sources of entitlement, which constitute its livelihood.

These entitlements are based on the household's endowments and its position in the legal, political, and social fabric of society. The risk of livelihood failure determines the level of vulnerability of a household to income, food, health, and nutritional insecurity.

2.7. The Problem of Food Insecurity in Ethiopia

Food insecurity is divided into categories of the chronic and acute. Chronic food insecurity is commonly perceived because of overwhelming poverty indicated by a lack of assets. Acute food insecurity is viewed as more of a transitory phenomenon related to man-made and unusual shocks, such as drought. While the chronically food insecure population may experience food deficits relative to need in any given year, irrespective of the impact of shocks, the acutely food insecure are assumed to require short-term assistance to help them cope with unusual circumstances that impact temporarily on their livelihoods.

While we may theoretically separate the two categories, there are linkages between the categories of acute and chronic. This is because unpredictable shocks do not suddenly lead to acute food insecurity unless people are already very poor, as is the case of the chronically food insecure. Thus, it tends to be the chronically food insecure who are also represented in the acute category. Perhaps, therefore, it is more correct to speak of predictable and unpredictable needs, rather than to attempt to define the profiles of food insecure households as in reality most of the food insecure featured in the annual disaster appeal are chronically food insecure.

Both chronic and transitory problems of food insecurity are widespread and severe in Ethiopia. A combination of short-term and long-term causal factors can explain the trend towards the increasing food insecure caseload. Long-term factors, such as the interaction between environment, high population growth, diminishing land-holdings, and a lack of on-farm

technological innovation have led to a significant decline in productivity per household. These trends have combined with the repeated effects of drought over the years, to substantially erode the productive assets of communities and households. A loss of community assets (e.g., pasture and forest) has led to increasing environmental degradation and increased the pressure on-farm, leading to declining investment in soil and water conservation practices. More importantly, households are less able to cope with shocks because they cannot accumulate savings (e.g., livestock holdings and food stores) even in good years.

The above causal factors are only true because past policy environment has failed to address these issues and create off-farm income opportunities. This is particularly true of agrarian policies of the 1970s and 1980s, which, when combined with civil conflict led to agricultural stagnation and increasing levels of poverty across the board.

As a consequence, for the last two decades in particular, Ethiopia has become increasingly reliant on food aid to meet national food deficits. In 1984-85, external food aid made up just over 26% of the total food availability in country. Over the last decade, this has declined to an average of 10% of the volume of national cereal production. Food insecurity is one of the defining features of rural poverty, particularly in the moisture deficit north-east highland plateaus and some pastoral areas.

Because of the primary dependence on crop production in Ethiopia, harvest failure leads to household food deficits, which in the absence of off-farm income opportunities, and/or timely food aid assistance, lead to asset depletion and, increasing levels of destitution at the household level. The effect is mirrored at the national level, resulting in overall declining food availability and increased reliance on food aid imports to prevent widespread mortality. Over the last fifteen years, this situation has resulted in Ethiopia importing an average of 700,000 metric tons (MT) of food aid per annum to meet food needs, among others, demonstrating the scale of the problem in Ethiopia.

Indicative of, but not exclusive to food insecurity, is the high level of nutritional deprivation.

While it is important to deepen and refine the general understanding of the nature, magnitude, trends and impact of poverty, and the coping mechanisms used by various groups, addressing the root causes of food insecurity is an immediate requirement.

Key to this is the need to increase agricultural production nationally and to build the resource base of chronic food deficit households, to increase employment and income in both rural and urban areas, and to provide targeted transfers to deficit households.

Chapter Three: Food Security Strategies

3.1. Achieving Food Security in Africa: Challenges and Strategies

Achieving food security in its totality continues to be a challenge not only for the developing nations, but also for the developed world. The difference lies in the magnitude of the problem in terms of its severity and proportion of the population affected. In developed nations, the problem is alleviated by providing targeted food security interventions, including food aid in the form of direct food relief, food stamps, or indirectly through subsidized food production. These efforts have significantly reduced food insecurity in these regions. Similar approaches are employed in developing countries but with less success.

The discrepancy in the results may be due to insufficient resource base, shorter duration of intervention, or different systems most of which are inherently heterogeneous among other factors. Food security; a situation in which 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 healthy life; is affected by a complexity of factors. These include unstable social and political environments that preclude sustainable economic growth, war and civil conflict, macroeconomic imbalances in trade, natural resource constraints, poor human resource base, gender inequality, inadequate education, poor health, natural disasters, such as floods and locust infestation, and the absence of good governance. All these factors contribute to either insufficient national food availability or insufficient access to food by households and individuals.

The root cause of food insecurity in developing countries is the inability of people to gain access to food due to poverty. While the rest of the world has made significant progress towards poverty alleviation, Africa, in particular Sub-Saharan Africa, continues to lag behind.

Projections show that there will be an increase in this tendency unless preventive measures are taken. Many factors have contributed to this tendency including the high prevalence of HIV/AIDS; civil war, strife and poor governance; frequent drought and famine; and agricultural dependency on the climate and environment.

Over seventy percent of the food insecure population in Africa lives in the rural areas. Ironically, smallholder farmers, the producers of over 90 percent of the continent's food supply, make up the majority of this population. The rest of the food insecure population consists of the landless poor in rural areas and the urban poor.

Food security has three aspects; food availability, food access and food adequacy. Food availability has to do with the supply of food. This should be sufficient in quantity and quality and provide variety. Food access addresses the demand for the food. It is influenced by economic factors, physical infrastructure, and consumer preferences. Hence, food availability, though elemental in ensuring food security, does not guarantee it. For households and individuals within them to be food secure, food at their access must be adequate not only in quantity but also in quality. It should ensure an adequate consistent and dependable supply of energy and nutrients through sources that are affordable and socio-culturally acceptable to them at all times. Ultimately, food security should translate to an active healthy life for every individual.

3.2. Challenges to Food Security in Africa

1. An Underdeveloped Agricultural Sector

The major challenge to food security in Africa is its underdeveloped agricultural sector that is characterized by over-reliance on primary agriculture, low fertility soils, minimal use of external farm inputs, environmental degradation, significant food crop loss both pre- and post-harvest, minimal value addition and product differentiation, and inadequate food storage and preservation that result in significant commodity price fluctuation.

2. Barriers to Market Access

Access to markets is the second hurdle that smallholders have to overcome. The problem is many-fold: poor infrastructure and barriers in penetrating the market caused by their limited resource base, lack of information, lack of or inadequate support institutions and poor policies in place among other factors. Poor infrastructure literally limits the markets to which farmers can profitably take their produce by increasing the cost of transportation, and hence acts as a barrier to market penetration.

Other barriers include market standards, limited information, requirements for large initial capital

investments, limited product differentiation, and handicapping policies.

3. Effects of Globalization

Globalization is a concept that allows countries to benefit from capital flows, technology transfer, cheaper imports, and larger export markets in the long term. However, the effect of globalization on any country depends on that country's level of economic development, structures in place during the implementation stage, flexibility of its economy.

Globalization has three dimensions. The first refers to the multiplication and intensification of economic, political, social, and cultural *linkages* among people, organizations, and countries at the world level. The second dimension is the tendency towards the universal application of economic, institutional, legal, political, and cultural practices. This is related to the first dimension in that increased linkages generate a need for common institutions and rules. The third dimension is the emergence of significant spillovers from the behavior of individuals and societies to the rest of the world. Due to the interrelation of the various dimensions, policies made in one country are bound to have effects on another.

With globalization comes liberalization of markets. The food security threat caused by liberalization is due to dumping of heavily subsidized produce in developing countries and premature exposure of upcoming industries to genuine competition from producers in developing and developed countries. In addition, most profits are repatriated by transnational companies reducing the potential for poverty reduction to direct employment alone. In most cases, the pay is low because the national policies do not protect the laborer.

4. Disease and Infection

Disease and infection continue to plague the African continent. Diseases such as malaria, tuberculosis, and HIV/AIDS not only reduce the man-hours available to agriculture and household food acquisition, but also increase the burden of household in acquiring food.

In Sub-Saharan Africa, AIDS is the leading cause of adult mortality and morbidity.

The Food and Agriculture Organization of the United Nations (FAO), estimates that by 2020 the epidemic will claim the lives of 20 percent or more of the population working in agriculture in many Southern African countries. More than two thirds of the total population of the 25 most affected countries resides in rural areas, affecting agricultural production as well as farm and

domestic labour supplies. Lack of resources also makes it more difficult for HIV-affected households to supplement their diet through the purchase of more nutritious and varied foods. The effect of malnutrition on food security is further exacerbated by the fact that individuals affected by disease and infection, have greater nutritional requirements

5. Handicapping policies

Poor policies have greatly affected the food security in Africa. The problem arises when the focus on policies, structures and institutions is put above that of the people themselves. When policies are not inclusive in their design they tend to handicap the exempted lot by providing barriers. One such way in which this may take place is uneven development within countries where certain regions are preferentially developed for political reasons at the expense of others. Policies that promote monopolistic competition for the large-scale industries hurt the cottage and small industry. When we fail to provide safety nets for vulnerable groups, we doom them to destruction.

3.3. Food Security Interventions: Possible Strategies for food Security

How then can Africa achieve food security? The solution lies in increasing food availability, food access and food adequacy for all. Because the food insecurity in Africa is directly correlated with poverty, it is necessary to not only alleviate poverty but also create wealth for the target population. The key lies in mutual honest intention from multi-stakeholders to ensure that all is done with the sole purpose of benefiting them.

The following are some strategies that when implemented together would hold good prospects for substantially alleviating food security in Africa. These are:

1. Nutritional interventions;
2. Facilitating market access;
3. Capacity building;
4. Gender sensitive development;
5. Building on coping strategies; Creating off-farm opportunities; and
6. Good governance

1. Nutritional Interventions

Malnutrition has devastating effects on any population. It increases mortality and morbidity rates, diminishes the cognitive abilities of children and lowers their educational attainment, reduces labour productivity and reduces the quality of life of all affected. In addition to investing in short-term interventions, which are vital, African countries should increase their investment in long-term interventions such as dietary diversification, food sufficiency, and bio fortification.

These have lower maintenance costs, a higher probability of reaching the poor who are vulnerable to food insecurity, and produce sustainable results. Dietary diversification remains the best way to provide nutritious diets to the sustainability of any population. It is possible to obtain the right mix of food to alleviate malnutrition from that which is locally produced. The probability of so doing is increased with an increase in locally produced foods.

Increased production would in part make these foods affordable to the poor and increase their protein, vitamin, and mineral intake. One sure way is to revisit the cultivation of traditional fruits and vegetables that are adapted to prevailing environmental conditions. Once produced, there is need for more stringent post-harvest loss prevention measures.

1. Facilitating Market Access

There is need to remove the barriers to trade. The focus by most African governments has been to open up markets in the hope that their people will benefit. Study shows that the projected gains of world trade liberalization tend to be minimal in Sub-Saharan Africa and that the income gains from trade liberalization will go to countries with a competitive advantage in the markets concerned.

2. Rural Off-farm Opportunities

Rural off-farm opportunities will provide opportunities for both the landless rural poor and the group of non-adopter that fall out of business when the agricultural sector becomes more efficient. In addition, provision of off-farm opportunities will curb rural to urban migration and possibly induce some urban to rural migration. It would reduce the

number of non-motivated farmers who took up farming just because they had no other options, thus paving the way for more efficient farming. Some of the opportunities that African countries can look into include cottage industries that process food crops by value addition and/or enhancing shelf life through preservation techniques; production of small scale processing machinery; provision of credit; contract processing facilities; and market facilitation. Specific activities may include the production of items with enhanced shelf life that would allow for marketing in distant markets. These products may range from dairy products such as butter, cheese, and ghee, to pre-processed and packaged cut vegetables such as carrots and shelled garden peas for the urban population; to dried fruits and vegetables.

More sophisticated, yet relatively technically easy to produce products, such as starch and vegetable oils, may also be produced. For this to be achievable there is need for collaboration amongst the multi-stakeholders.

3. Capacity Building

Africa should focus on education, research, and development, access to capital and infrastructure development. Measures to facilitate free primary education throughout Africa are urgently required. Education not only endows one with the power to read and hence be informed, but it also allows one to communicate. As an intervention to food security, education must go beyond the level of reading and writing to that of transfer of knowledge. To be useful, information transfer should be two-way. The poor have an idea of what would work for them and what they need. Since they are supposed to be the primary beneficiaries of food security related policies, it would be prudent to at least listen to them.

In addition, education will open avenues to off-farm employment, thus acting as a safety net. It is time that Africans played an active role in research and development on matters that affect them. This includes food preservation at the village level, alternative medicine to make health more affordable to its people, creating more efficient agricultural extension, options for improving soil fertility, best approach to manage the different agricultural systems, and marketing strategies that would work best for a given group of farmers. Care should be taken to modify available technology to suit community setting and not the other

way round. For benefits to be realized in all areas, infrastructure development must be high priority.

4. Gender Sensitive Development

There is an intrinsic gender issue where poverty is concerned. One of the ways in which this is manifested is in the shift from woman-lead leadership to man-lead leadership as one moves from subsistence farming to market driven farming. Women are important as food producers, managers of natural resources, income earners and caretakers of household food security. Agricultural productivity has been said to increase by as much as 20 percent when women are given the same inputs as men. The education of women is known to produce powerful effects on nearly every dimension of development, from lowering fertility rates to raising productivity, to improving environmental management. If women are to be fully effective in contributing to food and nutrition security, discrimination against them must be eliminated and the value of their role promoted. However, care should be taken not to aggravate the male gender while we pursue the noble task of empowering women. If we do not have the support in the local communities, public investments in education are less effective. We should, as much as it depends on us, avoid imposing our preferences on society without taking time to understand the existing cultural structure. As and when possible, an inclusive approach where men and women complement each other to achieve set objectives should be used. One way to do this is by having open communication and group meetings.

5. Building on coping strategies

While we all agree that poor societies need help to alleviate food insecurity and poverty, we must give them credit for surviving on meager resources for so long. They must be doing something right. At the very least, communities have an idea as to what strategies and implementation tactics would work, given their socio-cultural framework.

Thus, it is important to learn from them and build on strategies that have worked for them as we intervene to alleviate their food insecurity and poverty. Examples: Communities

might have strong family bonds that allow them to “pool resources”. Everyone in the family participates. Even the elderly chip in by being caretakers of the little ones during working hours. In addition, children also chip into the wellbeing of the family by performing tasks such as house care, fetching water, or selling at the family kiosk. They have strong loyalty to their chiefs and elders, religious leaders, midwives and traditional doctors (*Participatory Rural Appraisal*).

6. Good Governance

While it could be argued that all the above interventions are part of good governance, special emphasis on the need for good governance is prudent. All the above strategies can only work in a peaceful, corruption free environment. Part of good governance is the provision of safety nets to vulnerable groups. It should also provide for the minority and be totally inclusive in its decision-making. There is need to delink political interests from the basic needs of a nation.

More often than not sustainable food security measures are long-term strategies, which need to be protected from volatile political interests of leaders. If this means that departments dealing with such issues need to be stable, then so be it. In addition, it is in everyone's best interest to have only the best handling the issues at hand without political interference from governments and donors alike.

In conclusion, the fact that we are discussing food security in Africa, and that there are many resources available that address the topic, is evidence that multi-stakeholders care about Africa's food security.

Geographic Information Systems and Food Security

Geographic information systems (GIS) are playing an increasingly important role in food security. A GIS stores and links cartographic map features with geographically referenced, spatiotemporal data on socio-economic and other kinds of conditions. GIS methods have been most widely used in the developing world for public health and epidemiology, especially for tracking cases of tuberculosis and malaria, and have become standard tools in humanitarian emergencies. GIS is especially useful as a component of rapid

assessments to identify the magnitude and locations of a crisis and the resources needed for relief operations.

GIS has greatly improved ways of presenting and analyzing epidemiological data and spatiotemporal information that has implications for programmatic planning and logistics, resource allocation, and monitoring and evaluation of humanitarian emergencies. Further integration of GIS methods in prevention and relief efforts will enable improvements in famine early warning systems, assessments, monitoring, and evaluation.

The Role of International Organizations, Government, and Civil Society

Since the mid-1970s with the onset of a world food crisis, the international community has created several structures to monitor, prevent, and respond to global food crises, including the World Food Program (WFP), a branch of the United Nations responsible for obtaining and moving large quantities of food in response to emergencies and expanded agricultural programs in foreign universities funded by USAID and other bilateral aid programs.

Traditionally, famine relief in Africa has taken the form of multilateral food aid brokered by large international organizations such as WFP, national governments, and non-governmental and community based organizations.

Food aid can be essential not only in replacing lost assets but also in lessening the economic threat of famines by helping to preserve existing assets (de Waal 1990). One of the biggest problems associated with food aid has been the inadequacy of African transportation infrastructures for ensuring reliable and equitable food delivery.

An Overview of Food Security Programs and Strategy in Ethiopia

Food Security Program/Interventions in Ethiopia

FSP is a special arrangement, which focuses on addressing vulnerability, which exists in different parts of the country.

Cognizant of the level of vulnerability in the country, the government of Ethiopia, in close collaboration with development partners, has prepared The New Coalition for Food Security in Ethiopia. In this section, will look at current food security interventions made by these actors in response to the situation of food insecurity in the country,

These programs has been under implementation in different chronically food insecure districts in the country

The Core objectives of The Food Security Program include:

- Enabling chronically food insecure people attain food security
- Improve the food security situation of the transitory food insecure people

Component of Ethiopian Food Security Program

1. Resettlement program

The main objective of the resettlement program is to enable chronically food insecure households attain food security through improved access to land.

Program Interventions

- Resettlement is purely on voluntary basis
- Each settler household is guaranteed assistance of packages that includes provision of

fertile farm lands, seed, oxen, hand tools, and food ration for the first eight months

- The settlers are also provided access to essential infrastructures (clean water, health post, feeder roads)

2. Productive Safety Net program(PSNP)

The objective of the PSNP is to provide transfers to the food insecure population in chronically food insecure districts in a way that prevents asset depletion at the household level and creates asset at the community level,

Program Intervention

- PSNP is intended to serve as a dual purpose of helping bridge the income gap of the CFI-HH
- PSNP has two components
 - Labor intensive public works
 - Direct Support

The able-bodied will be engaged in public works for which they are paid a minimum amount while the labor poor are paid same amount free. A key feature of the Safety net program is its household focus. It is linked with the HABP and PSNP beneficiaries are getting priority in getting access to the HABP resources

3. Household Asset Building Program(HABP)

Program Description

The Household Asset Building Program (HABP) is one of the four components of the Food Security Program, and it contributes to achievement of the FSP's expected Outcome of "improved food security status of male and female members of food insecure households living in chronically food insecure woredas.

- The major causes of food insecurity in the country is the depletion of household assets
- Multiple causes can be cited in this regard
- Drought has been the major factor causing loss of crop and livestock
- Repeated food shortages have also forced many HH to sell their assets to address their immediate needs
- Building sustainable household assets is therefore the major solution to the problem of food insecurity

Program Interventions

- Introduction of appropriate technologies which helped improved production and productivity
- Preparation and dissemination of different menu of technological packages through the extension service
 - packages includes :-- provision of improved inputs to increase livestock's and crop production,
 - Moisture conservation and utilization
 - Natural resource development,
 - Trainings
 - Support for additional income generating activities , and
 - Provision of market information

4. Complimentary Community Investment(CCI)

CCI is an intervention, which is designed to create community assets and complement household investment through creating an enabling environment.

In these programs, there are different key interventions designed to attain household food security are :-

- Building the household asset through on-farm activities
- Undertaking a resettlement program
- Implementing a Safety Net Program which
- bridge food gaps while building community
- Introducing non –farm activities

The main objective of the resettlement program is to enable chronically food insecure households attain food security through improved access to land.

The objective of the PSNP is to provide transfers to the food insecure population in chronically food insecure districts in a way that prevents asset depletion at the household level and creates asset at the community level

Ethiopia's Food Security Strategy (FSS), issued in November 1996, highlighted Government plan to address causality and effect of food insecurity in Ethiopia. The regional food security programs and projects were subsequently designed based on that strategy.

In recognition that the pursuit of food security is a long-term and multi-sector challenge, institutional strengthening, and capacity building is included as a central element of the strategy. As in the past, however, the overall objective of the FSS is to ensure food security at the household level, while Agricultural Development Led Industrialization (ADLI) will focus on creating the conditions for national food self-sufficiency.

Agriculture is found to be the starting point for initiating the structural transformation of the economy, as a result, ADLI is pursued as a major policy framework for development since 1991. ADLI forms the basis of the FSS, as it does with the Poverty Reduction Strategy (PRS) process and is viewed as the engine for poverty reduction in Ethiopia.

Given that Ethiopia is a predominantly agrarian society, ADLI focuses on the development of the rural sector. The adoption of ADLI presupposes productivity enhancement of smallholder agriculture and industrialization, based on utilization of domestic raw materials via adopting labor-intensive technology. The strategy also focuses on the development of large-scale private commercial farms. In ADLI, it is generally believed that the development of agriculture helps expand market for domestic manufacture, implying increased incomes of smallholders.

More specifically, the central elements of ADLI are enshrined in the Government's new Rural Development Strategy, completed in January 2002. The essential elements of this can be summarized in terms of the development and optimal use of both labor and land as a primary resource for economic development.

In general Ethiopian Food Security strategy rests on these three basic pillars:

- To increase the availability of food through increased domestic production
- To ensure access to food for food deficit households; and
- To strengthen emergency response capabilities

Given the dominance of rainfed agriculture, domestic production will give priority to increase

production in the areas of dependable rainfall i.e. areas with adequate moisture. The present subsistence farming has to transform into small-scale commercial agriculture. Rural credit, markets, infrastructure and farmers' skill all need to be improved. A more consolidated agricultural extension programme by offering the farmers a choice from a menu of market-oriented packages will be in place.

Ensuring household access to food poses a formidable challenge in view of the fact that chronically food insecure households are predominantly located in drought-prone moisture deficit areas and peripheral pastoral areas. These areas are chronically food insecure in several respects: they do not produce enough food to feed themselves, food production is highly variable, and there are many households with insufficient income to secure enough food through the market.

Accordingly, chronically food insecure areas require a more comprehensive and appropriate package of interventions to cater to their situation. Such a package may include soil and water management, plant nutrient generation and recycling, drought and pest resistant crops, improved post-harvest management. Diversity is key to managing risks and thus a move away from traditional crop mix to specialized oil seeds, fruits and vegetables, and livestock are proposed to generate cash incomes and increase purchasing power in the market. Livestock, water harvesting and management, and agro-forestry would be the central elements of food security activities in moisture deficit and pastoral areas. However, opportunities for increased crop production will also be exploited to the maximum.

Chapter Four: Poverty and Food Insecurity

4.1. Poverty Definitions

Poverty can be defined in a range of different ways: as lack of resources or income available to purchase necessities or to achieve an acceptable standard of living; through actual levels of expenditure; as deprivation indicated by the lack of essentials; as lack of the capability to achieve particular standard of living, whether or not that standard of living is achieved; or as inability to participate in the activities of everyday life. At the same time, sociological attention to inequality has focused on a range of different inequalities: inequality of income; health inequalities; educational inequalities, or inequality of educational opportunity.

According to sociologists and researchers, there are two different approaches to poverty: *absolute poverty* and *relative poverty*. The concept of absolute poverty is grounded in the idea of subsistence, the basic conditions that must be met in order to sustain a physically healthy existence. People who lack these fundamental requirements for human existence such as sufficient food, shelter, and clothing are said to live in poverty. The concept of absolute poverty is seen as universally applicable. It is held that standards for human subsistence are more or less the same for all people of an equivalent age and physique, regardless of where they live. Any individual, anywhere in the world, can be said to live in poverty if he or she falls below this universal standard.

The material conditions of life in the developed countries are very different from those in developing countries. Advocates of the concept of relative poverty hold that poverty is culturally defined and should not be measured according to some universal standard of deprivation. It is wrong to assume that human needs are everywhere identical in fact; they differ both within and across societies. Things that are seen as essential in one society might be regarded as luxuries in another. For example, in most industrialized countries, running water, flush toilets, and the regular consumption of fruit and vegetables are regarded as basic necessities for a healthy life; people who live without them could be said to live in poverty.

Yet in many developing societies, such items are not standard among the bulk of the population and it would not make sense to measure poverty according to their presence or absence. Critics

of the concept of absolute poverty also point out that its definition has changed over time according to the existing knowledge that is available in particular periods. In short, therefore, even the definition of absolute poverty is relative.

The face of poverty is diverse and ever changing, so it is difficult to present a profile of 'the poor'. The people who are disadvantaged or discriminated against in other aspects of life have an increased chance of being poor. The explanations of poverty can be grouped under two main headings: theories that see poor individuals as responsible for their own poverty, and theories that view poverty as produced and reproduced by structural forces in society.

The following section discusses different theories explaining the causes of poverty.

4.2. Theories of Poverty in Contemporary Literature

Recent literature on poverty uniformly acknowledges different theories of poverty, but the literature has classified these theories in multiple ways. Virtually all authors distinguish between theories that root the cause of poverty in individual deficiencies (*conservative*) and theories that lay the cause on broader social phenomena (*liberal or progressive*).

1. Poverty Caused by Individual Deficiencies

This first theory of poverty is a large and multifaceted set of explanations that focus on the individual as responsible for their poverty situation. Typically, politically conservative theoreticians blame individuals in poverty for creating their own problems, and argue that with harder work and better choices the poor could have avoided (and now can remedy) their problems. Other variations of the individual theory of poverty ascribe poverty to lack of genetic qualities such as intelligence that are not so easily reversed. The belief that poverty stems from individual deficiencies is old. Religious doctrine that equated wealth with the favor of God was central to the Protestant reformation (Weber 2001) and blind, crippled, or deformed people were believed to be punished by God for either their or their parents' sins.

In spite of the widespread societal view that individuals are responsible for their own poverty, community developers look to other theories of poverty for more positive approaches.

2. Poverty Caused by Cultural Belief Systems that Support Sub-Cultures of Poverty

The second theory of poverty roots its cause in the “Culture of Poverty”. This theory is sometimes linked with the individual theory of poverty or other theories to be introduced below, but it recently has become so widely discussed that its special features should not be minimized. This theory suggests that poverty is created by the transmission over generations of a set of beliefs, values, and skills that are socially generated but individually held. Individuals are not necessarily to blame because they are victims of their dysfunctional subculture or culture.

Culture is socially generated and perpetuated, reflecting the interaction of individual and community. This makes the “*culture of poverty*” theory different from the “individual” theories that link poverty explicitly to individual abilities and motivation. Technically, the culture of poverty is a subculture of poor people where they develop a shared set of beliefs, values, and norms for behavior that are separate from but embedded in the culture of the main society.

Oscar Lewis was one of the main writers to define the culture of poverty as a set of beliefs and values passed from generation to generation.

Culture is socialized and learned, and one of the tenants of learning theory is that rewards follow to those who learn what is intended. The culture of poverty theory explains how government anti-poverty programs reward people who manipulate the policy and stay on welfare.

3. Poverty Caused by Economic, Political, and Social Distortions or Discrimination

Whereas the first “individualistic” theory of poverty is advocated by conservative thinkers and the second is a culturally liberal approach, the third to which we now turn is a progressive social theory. Theorists in this tradition look not to the individual as a source of poverty, but to the economic, political, and social system, which causes people to have limited opportunities and resources with which to achieve income and well-being.

The 19th century social intellectuals developed a full attack on the individual theory of poverty by exploring how social and economic systems overrode and created individual poverty

situations. For example, Marx showed how the economic system of capitalism created the “reserve army of the unemployed” as a conscientious strategy to keep wages low. Later Durkheim showed that even the most personal of actions (suicide) was in fact mediated by social systems. Discrimination was separated from skill in one after another area, defining opportunity as socially mediated.

Much of the literature on poverty now suggests that the economic system is structured in such a way that poor people fall behind regardless of how competent they may be.

4. Poverty Caused by Geographical Disparities

Rural poverty, urban disinvestment, southern poverty, third-world poverty, and other framings of the problem represent a spatial characterization of poverty that exists separate from other theories. While these geographically based theories of poverty build on the other theories, this theory calls attention to the fact that people, institutions, and cultures in certain *areas lack the objective resources* needed to generate well being and income, and that they lack the power to claim redistribution.

5. Poverty Caused by Cumulative and Cyclical Interdependencies

The previous four theories have demonstrated the complexity of the sources of poverty. The final theory of poverty to be discussed here is by far the most complex and to some degree builds on components of each of the other theories. It looks at the individual and their community as caught in a spiral of opportunity and problems, and that once problems dominate they close other opportunities and create a cumulative set of problems that make any effective response nearly impossible.

The cyclical explanation explicitly looks at individual situations and community resources as mutually dependent, with a faltering economy, for example, creating individuals who lack resources to participate in the economy, which makes economic survival even harder for the community since people pay fewer taxes.

This theory has its origins in economics in the work of *Myrdal* (1957:23) who developed a

theory of “interlocking, circular, interdependence within a process of cumulative causation” that helps explain economic underdevelopment and development. Myrdal notes that personal and community wellbeing are closely linked in a cascade of negative consequences, and that closure of a factory or other crisis can lead to a cascade of personal and community problems including migration of people from a community. Thus, the interdependence of factors creating poverty actually accelerates once a cycle of decline is started.

This cycle also repeats itself at the individual level. The lack of employment leads to lack of consumption and spending due to inadequate incomes, and to inadequate savings, which means that individuals can not invest in training, and individuals also lack the ability to invest in businesses or to start their own businesses, which leads to lack of expansion, erosion of markets, and disinvestment, all of which contribute back to more inadequate community opportunities.

Health problems and the inability to afford preventive medicine, a good diet, and a healthy living environments become reasons the poor fall further behind. The cycle of poverty also means that people who lack ample income fail to invest in their children's education, the children do not learn as well in poor quality schools and they fall further behind when they go to get jobs. They also are vulnerable to illness and poor medical care.

A third level of the cycle of poverty is the perspective that individual lack of jobs and income leads to deteriorating self-confidence, weak motivation, and depression. The psychological problems of individuals are reinforced by association with other individuals, leading to a culture of despair, perhaps a culture of poverty under some circumstances.

This brief description of the cycle of poverty incorporates many of the previous theories. It shows how people become disadvantaged in their social context, which then affects psychological abilities at the individual level.

Five Theories of Poverty: Summary

Theory	What causes Poverty?
1. Individual	Individual laziness, bad choice, incompetence, inherent disabilities
2. Cultural	Subculture adopts values that are non-productive and are contrary to norms of success
3. Political-economic Structure	Systematic barriers prevent poor from access and accomplishment in key social institutions including jobs, education housing, health care, safety, political representation, etc
4. Geographic	Social advantages and disadvantages concentrate in separate areas,
5. Cumulative and cyclical	<p>spiral of poverty, problems for individuals (earnings, housing, health, education, self-confidence) are interdependent and strongly linked to community deficiencies (loss of business and jobs, inadequate schools, inability to provide social services) etc.</p>

