

Food Security and Agricultural Policy

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Food Security and Agricultural Policy

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FOR 2ND YEAR AGRICULTURAL ECONOMICS STUDENTS

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INTRODUCTION

Rationale, Definition and Scope

- Agriculture is the art and science of cultivating crops, raising livestock, provision of raw materials for industries and agricultural products for man's use.
- There are many branches of agriculture which among others include: agricultural economics, crop science, soil science, animal science, fishery, forestry and agricultural engineering.
- Agricultural economics involves the application of economic principles in agriculture.
- Agricultural production of a country is the sum of the contributions of the individual farm units and the development of agriculture means the development of millions of individual farms.

Rationale, Definition and Scope ...

- Hence, welfare of a nation depends upon accomplishments of each farm unit.
- The prosperity of any country depends upon the prosperity of farmers, which in turn depends upon the rational allocation of resources among various uses and adoption of improved technology.
- Human race depends more on farm products for their existence than anything else since food, clothing – the prime necessities are products of farming industry.
- Even for industrial prosperity, farming industry forms the basic infrastructure.
- The relative weight of the agricultural sector in the economy varies from country to country and in general is **between 3 and 40 % of the total value of production, and may count for as much as 70% of total labor.**

Rationale, Definition and Scope...

- Moreover, modern agriculture is usually an important component of the demand for industrial products and for other services.
- Finally, agriculture provides inputs to the food industry.
- When considered in its entirety, the *agribusiness* weighs for more than 30 percent even in highly industrialized economies.

1.2. The Rationale for Agricultural Policy

- When studying agricultural policies, it is very important to understand the **characteristics of the *agricultural system***.
- How production is organized in terms of **number and size of farms, availability of infrastructures, technology level, institutional settings, marketing arrangements, availability of reliable outlets for farm's resources, etc.**
- For example, if there are limited infrastructures for processing and transporting vegetables product, high prices for vegetables may not be sufficient in effectively stimulating vegetable production.

The Rationale for Agricultural Policy...

- Two main aspects are common to many traditional agricultural systems across the World:
 - Family production organization
 - Size of operations
- Family production organization (peasant organization) means that agriculture gives employment opportunities to members of the household, which may or may not have other employment opportunities available to them, and the output of the production process can be self consumed before being destined to the market for sale.

The Rationale for Agricultural Policy...

- What are relevant are the implications that household production can have for policy:
 - When self-consumption is a relevant share of production, output price policies may be less effective in enhancing farmers' income
 - economy wide policies or industrial sector policies aimed at developing other sectors, such as industry or services, may have the indirect effect of releasing labor force from the farm sector and thus increase incomes for those who remain - reaction to price policies may be different by peasants when compared to fully commercial farms .

The Rationale for Agricultural Policy...

- The **second point** is that **traditional agriculture usually operates through small size farms.**
- Dimension of the operation can be measured in several ways: amount of land, value of production or number of labor units employed.
- While the amount of land per farm or the value of total production per farm varies, the number of labor unit employed is quite constant over time and space, i.e., in different regions of the world and in different periods in time.

Concept of policy

What is Policy??

- **Policy** is the course of action chosen by government towards an aspect of the economy, including the goals that the government seeks to achieve, and the choice of methods to pursue those goals (Ellis, 1991).
- **Policy** is typically described as a **principle or rule to guide decisions and achieve rational outcome(s)**.
- Policies are generally adopted by the senior **governance body** where as procedures would be developed and adopted by senior **executive officers**.
- The term may apply to **Government, Private sector Organizations and Groups, and Individuals**.

Concept of policy...

- Policy differs from rules or law.
- While law can compel or prohibit behaviors, policy merely guides actions toward those that are most likely to achieve a desired outcome.
- Policy or policy study may also refer to **the process of making important decisions, including the identification of different alternatives such as programs or spending priorities, and choosing** among them on the basis of the impact they will have.
- Policies have **Political, Management, Financial, and Administrative Mechanisms/tools** arranged to reach explicit goals.

Concept of policy...

- Public policy is an attempt by the government to **address a public issue** in terms of **laws, regulations, decisions, and actions**.
- Public **Policies** are developed by officials within institutions of government to address public **issues through the political process**.
- Public Policy-making is the process by which governments translate **their political vision into programs and actions to deliver 'outcomes' desired change in the real world**.
- Thus policy-making is a **fundamental function of any government**.
- There are three parts to public policy-making: **Problems, Actors, and The Policy**.

Concept of policy...

- The problem is **the issue that needs to be addressed**.
- The actors are the individual or group that is **influential in forming a plan** to address the problem in question.
- Policy is the finalized course of action **decided upon by the government**

Public policy

- The term public policy always refers to **the actions of government and the intentions that determine those actions. Various Authors described it as follow:**
- The outcome of **the struggle in government over who gets what**
- Whatever **governments choose to do or not do.**
- **Political decisions** for implementing programs to achieve societal goals.
- The **sum of government activities, whether acting directly or through agents, as it has an influence on the life of citizens.**
- What the government intends to do.

Public policy ...

Eight Steps of policy Analysis

1. Policy analysis
2. Policy instrument development
3. Consultation
4. Coordination
5. Decision
6. Implementation
7. Evaluation
8. Impact

Public policy ...

Impact:

A) The Intended effects/objectives

- The intended effects of a policy vary widely according to the context in which they are made. Broadly, policies are typically instituted to avoid some negative effect that has been noticed in the, or to seek some positive benefit.

B) The Unintended effects

- Policies frequently have side effects or unintended consequences. Because the environments that policies seek to influence or manipulate are typically complex adaptive systems
- Depending on the size of the tax increase, this may have the overall effect of reducing tax revenue by causing capital flight or by creating a rate so high that citizens are deterred from earning the money that is taxed.

Policy Making Process

Content of Policy and Its Documents

- Policies are typically circulated through official written documents.
- Policy documents often come with the endorsement or signature of the executive powers within an organization to legitimize the policy and demonstrate that it is considered in force.
- Such documents often have standard formats that are particular to the organization issuing the policy.
- While such formats differ in form, policy documents usually contain certain standard components including:

Content of Policy and Its Documents...

1. A **purpose statement**, outlining why the organization is issuing the policy, and what its desired effect or outcome of the policy should be.
2. An **applicability and scope**: who the policy affects and which actions are impacted by the policy. The applicability and scope may expressly exclude **certain people, organizations, or actions from the policy requirements**. Focus the policy on only the desired targets, and avoid unintended consequences where possible.
3. An **effective date**: This indicates when the policy comes into force. Retroactive policies are rare, but can be found.
4. A **responsibilities** section, indicating which parties and organizations are responsible for carrying out individual policy statements. Many policies may **require the establishment of some ongoing function or action**.

Content of Policy and Its Documents...

5. **Policy statements** indicating the specific **regulations, requirements, or modifications to organizational behavior that the policy is creating.**
6. Policy statements are extremely diverse depending on the organization and intent, and may take almost any form. *Some policies may contain additional sections, including:*
 7. **Background**, indicating any reasons, history, and intent that led to the creation of the policy, which may be listed as
 8. **Motivating factors.** This information is often quite valuable when policies must be evaluated or used in ambiguous situations, just as the intent of a law can be useful to a court when deciding a case that involves that law.
 9. **Definitions**, providing clear and unambiguous definitions for terms and concepts found in the policy document.

1.3. Goals of Agricultural Policy

- Historically the objectives of agricultural policies have evolved with society's attitude towards agriculture.
- The objective of **producing adequate amounts of food at reasonable prices to feed the growing urban population.**

Goals of Agricultural Policy...

These include:

Objectives related to farmers

- Achieve an acceptable level of farm income (or income for farm families)
- Reduce income variability (or downward fluctuations of income)
- Improve competitiveness of the agricultural sector

Objectives related to consumers

- Assure provision of safe and high quality food (at fair prices)
- Assure food security
- Contribute to energy security

Goals of Agricultural Policy...

Objectives related to society at large

- Protect the natural environment and biodiversity
- Preserve cultural landscapes
- Contribute to the viability of rural areas
- **In general**, the Goal of the Ethiopia Agriculture policy is to “*contribute to Ethiopia’s achievement of middle income status by 2020*”.
- The Development Objective aims to “*sustainably increase rural incomes and national food security*”.

Goals of Agricultural Policy...

- ❑ This objective embodies the concepts of producing more, selling more, nurturing the environment, eliminating hunger and protecting the vulnerable against shocks; all of which are embodied in various national policy instruments, and are expressed in terms of four main themes, each with its own Strategic Objective:

Thematic Area	Strategic objectives(SOs)
• Productivity and production	• SO1: To achieve a sustainable increase in agricultural productivity and production.
• Rural commercialization	• SO2: To accelerate agricultural commercialization and agro industrial development.
• Natural resource management	• SO3: To reduce degradation and improve productivity of natural resources.
• Disaster Risk Management and Food Security	• SO4: To achieve universal food security and protect vulnerable households from natural disasters.

Summary ...

- The main reasons for government intervention in agricultural sector are :

- 1) *Efficiency increase of agricultural production;*
- 2) *Protection of farmers' income;*
- 3) *National food safety and security and*
- 4) *External effects and public goods in agriculture.*

CHAPTER TWO

ANALYSIS OF FOOD PRODUCTION SYSTEMS

CONTENTS

- Concepts of food production issues
- Characteristics of Agricultural production
- Food production Analysis
- Policy Analysis Matrix(PAM))

2.1. Food Production Issues...

- Identifying the factors that **influence the size and composition of agricultural output** is impossible without an understanding of the decision making environment of the farm household.
- Food must be linked with production, processing, storage, distribution and consumption, and as such can be viewed as a system (combining demand and supply equation), that explicitly links people in the analysis.
- The supply side of household food security includes **their access to productive resources** that ensure production of food crops while
- The demand side of household food security consists of **ability to generate cash income** through sale of labour, livestock, cash crops and others, and food system combines them together.

2.1. Food Production Issues

- Production in agriculture can be defined as **the process of combining resources (labor, fertilizer, mechanical implements....) in the creation of agricultural products.**
- Producing a ton of wheat, for example requires in addition to suitable climatic conditions, some amount of arable land, seed, fertilizer, equipment such as ploughs, and human labor.
- Agriculture is the **basic source of food, and farmers are the basic food producers.**
- Farmers are remarkably diverse people, ranging from near-subsistence peasants to corporate businessmen.

2.1. Food Production Issues...

- There are four principal components of the household food system:
 - ❖ The household itself and its productive resources (using principally its own labour and land),
 - ❖ income earning component,
 - ❖ market exchange component, and
 - ❖ Institutional co-operation to mobilise social network and resources.

COMPONENT 1: Household itself as a producing & consuming unit.

- Land, labour (both for farm production and off-farm income opportunities), household valuables (ownership of livestock that generates cash income as well as providing draught power for crop production), and
- Crop yields and animal products to generate cash income or stored or processed for consumption

2.1. Food Production Issues...

COMPONENT 2: Cash income earning opportunities:

- Off-farm employment , cash-for-work, trading, handicrafts, farm labour, casual work, and other part time employment.
- Farm income
- Transfer income

COMPONENT 3: The exchange through markets

- *Product markets:* sale of livestock and livestock products or sale of crop
- *Factor market:* purchase of input, purchase of capital goods and investment

2.1. Food Production Issues...

COMPONENT 4: Institutions that mediate flows of resources between households.

- Household themselves where decision about resource mobilisation and allocation is made involving a range of actions.
- Other households and community institutions (mobilisation of social network and resources), involving mutual help, resource sharing, food gifts.
- The state providing famine relief, cash-for-work, food imports and buffer stock in strengthening food system.
- The **market** is an institution where traders, consumers and the state take a part and range of exchanges takes place mediated through price.
- The components in the food system are linked by a system of flows of resources, food, cash income and asset position to meet household consumption and other need.

2.1. Food Production Issues...

- The food production issues important to the policy analyst begin with understanding **why agriculture as a sector is so different from other industries and why agriculture itself is so heterogeneous from farm to farm and even from field to field.**
- Five features set apart the agricultural sector from other productive sectors of an economy:
 - *Its large contribution to national income,*
 - *The large number of participants,*
 - *The peculiarities(a unique trait) of the agricultural production function,*
 - *The role of the agricultural sector as a resource reservoir, and*
 - *The importance of home consumption of output.*

2.2. Characteristics of Agricultural Production

- Several other features contribute to the uniqueness of agricultural production functions. The most important are:-
 - 1. Dependence of seasonal and weather condition:** agricultural production is heavily dependent on weather condition, especially in developing countries like Ethiopia.
- It heavily depends on seasons because most of the **crop production system is rain fed agriculture.**
- The quality of agricultural product is subject to many conditioning factors as the agro-ecological zones of the regional states is one of the cases, e.g. weather condition.

2.2. Characteristics of Agricultural Production...

2. **Time lag of agricultural products:** there is a long difference in time of commencement and getting the produce.
 - For annual crops it may take 60days, 90days, 120days, and 150days and may be more and for perennial crops like coffee, fruit, cotton it takes more time.
 - Because of this time difference, there may be a change in the demand for the commodity and this makes marketing difficult.
3. **Nature of perishability and bulkiness:** the bulkiness character can affect marketing in such a way that it needs huge storage facility, transport facility, which in turn increases the marketing margin.
 - Perishable farm products are sensitive to price fluctuation which an implication that it demands effective and efficient storage and distribution systems.

2.2. Characteristics of Agricultural Production...

4. **Control over the conditions of production:** Agriculturalists have little control of production processes and thus it is difficult to plan accurately.
- Farming business return compared to industry: Farming business is slow and of low return over time when compared to industrial products and this can be ascertained by analyzing payback period.
5. **The law of diminishing returns:** This begins to operate at earlier stage which means the marginal productivity of the same quality of labor is more in industrial sector than in agricultural sector.

2.3. Food Production Analysis

- As agriculture is a unique sector, analysts are ready to address the basic production decisions farmers must make to function effectively year in and year out: **what crops to produce, what combination of inputs to use to produce them, and what total output to produce.**
- The decisions individually and then combines all three to relate output decisions to changes in output (or input) prices in order to construct a supply curve.
- The supply curve is a very convenient conceptual and empirical tool which summarizes a great deal of complicated producer decision making in a simple two-dimensional diagram.
- In combination with the consumer demand curve for the same commodity, the supply curve is an essential tool in economists' understanding of price

2.4. THE POLICY ANALYSIS MATRIX (PAM)

- The study of agricultural policy spans three levels- *microeconomic behavior of producers, marketing and trade*, and *macroeconomic linkages*.
- The PAM approach is a system of double-entry bookkeeping.
- Analysts using PAM have to provide complete and consistent coverage to all policy influences on *returns and costs* of agricultural production.
- With this method, applied economists need to be equally capable of analyzing, for example, fertilizer response functions, quantitative restrictions on trade, and real effective exchange rates.
- The main empirical task is to construct accounting matrices of revenues, costs, and profits.

2.4 :The policy analysis matrix...

- A PAM is constructed for the study of each selected agricultural system-using data on farming, farm-to-processor marketing, processing, and processor to-wholesaler marketing.
- The impact of commodity and macroeconomic policies can then be gauged by comparison with the absence of policy.
- The results can be used to identify what kinds of farmers-categorized by the commodities they grow, the technologies they use, and the agro climatic zones in which their farms are located are competitive under current policies affecting crop and input prices and how their profits change as the policies are altered.

2.4 : The policy analysis matrix...

- The PAM is a product of two accounting identities, **one defining profitability as the difference between revenues and costs** and the other **measuring the effects of divergences** (distorting policies and market failures) as the difference between observed parameters and parameters that would exist if the divergences were removed.
- Profits are defined as the difference between total (or per unit) sales revenues and costs of production.
- This definition generates the first identity of the accounting matrix.
- In the PAM, profitability is measured horizontally, across the columns of the matrix, as demonstrated in Table 1 Profits, shown in the right-hand column, are found by the subtraction of costs, given in the two middle columns, from revenues, indicated in the left-hand column

2.4 : The policy analysis matrix...

- Each of the column entries is thus a component of the profits identity-revenues less costs equals profits.
- Each PAM contains two cost columns, **one for tradable inputs** and **the other for domestic factors**.
- Intermediate inputs-including fertilizer, pesticides, purchased seeds, compound feeds, electricity, transportation, and fuel-are divided into their tradable-input and domestic factor components.
- This process of disaggregation of intermediate goods or services separates intermediate costs into four categories-
 - **Tradable inputs, domestic factors, transfers** (taxes or subsidies that are set aside in social evaluations), and **non tradable inputs** (which themselves have to be further disaggregated so that ultimately all component costs are classified as tradable inputs, domestic factors, or transfers).

2.4 : The policy analysis matrix...

Table.1: Policy Analysis Matrix

	Revenues	Costs		Profit
		Tradable Inputs	Domestic Factors	
Private Prices	A	B	C	D
Social Prices	E	F	G	H
Divergences	I	J	K	L

- **Private profits**, D, equal A minus B minus C. **Social profits**, H, equal E minus F minus G. **Output transfers**, I, equal A minus E.
- **Input transfers**, J, equal B minus F. **Factor transfers**, K, equal C minus G. **Net transfers**, L, equal D minus H; they also equal I minus J minus K.
- Ratio Indicators for Comparison of Unlike Outputs:
- Private cost ratio (PCR): $C/(A - B)$.
- Domestic resource cost ratio (DRC): $G/(E - F)$ Nominal protection coefficient (NPC) on tradable outputs (NPCO): A/E on tradable inputs (NPCI): B/F Effective protection coefficient (EPC): $(A - B)/(E - F)$ Profitability coefficient (PC): $(A - B - C)/(E - F - G)$ or D/H Subsidy ratio to producers (SRP): L/E or $(D - H)/E$

2.4 : The policy analysis matrix...

- The central purpose of PAM analysis is *to measure the impact of government policy on the private profitability of agricultural systems and on the efficiency of resource use.*
- Private profitability and competitiveness are likely to be uppermost in the minds of those concerned specifically with agricultural incomes.
- Social profitability and efficiency are often emphasized by economic planners whose concern is the allocation of resources among sectors and the growth of aggregate income in the economy.
- Both sets of issues ultimately focus on the incentive effects of policy-part of the difference between private and social profitability-and on how policy incentives might be altered.

2.4 : The policy analysis matrix...

- Through evaluation of private and social revenues and costs, the PAM method is designed to illuminate these related issues of agricultural policy analysis.
- The approach is particularly well suited to empirical analysis of agricultural price policy and farm incomes, public investment policy and efficiency, and agricultural research policy and technological change.
- The PAM approach to policy evaluation advocates a disaggregated view of efficiency effects (as measured by social profitability) and of non efficiency effects.

2.4 : The policy analysis matrix...

- The analyst can do much in describing the contributions of a particular system to non efficiency objectives and in quantifying implications for efficiency (aggregate income gains or losses).
- But it is left to the discretion of each policy-maker to determine whether tradeoffs between efficiency and non efficiency objectives merit changes in policy or maintenance of incentives to particular systems.

CHAPTER THREE

FOOD SECURITY AND NUTRITION

3.1. Concept of Poverty and Hunger

3.1.1. Meaning of poverty

- Poverty can be understood in many senses, which includes:-
 - Description of **material needs(a minimum standard of life)** including necessities of daily living foods, shelter, clothing, health etc.
 - Description of **social relationships and needs including social exclusion, dependency, problem to participate in society, information and education exclusion.**
 - **The conditions of poverty are linked with a question of resource scarcity, distribution, and power.**
 - It always means **a reduced (or complete lack of) access to material, economic, social, political or cultural resources needed to satisfy basic needs.**

3.1. Concept of Poverty and Hunger...

- Described as a persistent lack of income and wealth.
- World Bank indicator for poverty is 1 or to 2 dollar daily income indicates poverty.
- Extreme poverty is living with less than dollar and moderate poverty is living with less than 2 dollar per day, according to World Bank definition.

3.1.1. Types of poverty

- As poverty is a multidimensional phenomenon, it's defined and measured in multitude of ways.
- The UN, perhaps the most prominent international institution dealing with hunger and poverty, **divides poverty into two general classifications: income poverty and human poverty** (UNDP, 2000).

a. Income Poverty

- Income poverty is an understanding of poverty **that is solely based on levels of monetary income.**
- It is used by both WB and UN that people living on less than US\$1 per day are living in extreme poverty, and people who earn less than US\$2 a day are in moderate poverty (WB, 2008).

3.1.2.Types of poverty...

- Worldwide, approximately 1 billion people live on less than US\$1 a day (UNDP, 2007.) and about 2.6 billion live on less than US\$2 a day.
- **Income poverty is also used to determine a poverty threshold or poverty line.**
- This is the boundary between poverty and non-poverty as determined by governments.
- It is based on the cost of subsistence needs in a given country so, while US\$1 a day is the international poverty line, for countries where the cost of living is higher, the poverty line is higher.
- In the United States, for example, the poverty line is at about US\$28 a day (UN, 2008).

3.1.2.Types of poverty...

b. Human Poverty

- Whereas income poverty is based on only one indicator, **human poverty encompasses the multiplicity of dimensions associated with poverty.**
- **It includes deprivation on a material level, e.g. lack of proper diet, clothing, shelter, and work.**
- **It also includes social deprivation, such as denial of employment, participation in social institutions, and education.**

3.1.2.Types of poverty...

- The UN utilizes the human poverty framework as well as income poverty.

The UN's Economic and Social Council has described human poverty as:

“... a denial of choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic to go to, not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living on marginal or fragile environments, without access to clean water or sanitation”
(ECOSOC, 2008).

3.1.2.Types of poverty...

Other classification

- **Two types of poverty** are identified:- namely relative poverty and absolute poverty.
- 1. **Absolute poverty** refers to **absolute deprivation of certain basic necessities of life, the most obvious being food, in order to maintain a minimum level of living.**
- Absolute poverty refers to **subsistence below minimum, socially acceptable living conditions, usually established based on nutritional requirements and other essential goods.**
- e.g. per capital income under a certain arbitrarily fixed poverty line in USD per unit of time, a daily intake of less than 2150 calories/person/day, or HDI.

3.1.2.Types of poverty...

2. **Relative poverty** compares the lowest segments of a population with upper segments, usually measured in income.

- key indicators such as the share, in national wealth or income, possessed by 20% of the poorest inhabitants of a country.
- When people unable to do the normal customized experiences they are in state of relative deprivation /poverty.
- e.g. unable to celebrate Easter, Edialfetir, charismas or if for example in America having a car is a normal custom/experience but if an individual does not have a car, he/she is found to be in relative poverty (poverty in relation with the other).

3.1.3. The relationship between hunger and poverty

- Even major international organizations mandated to alleviate hunger and poverty use a variety of interpretations.
- From the most comprehensive perspective, **hunger describes the feeling of discomfort that is the body's signal that it is in need of more food.**
- All people experience this feeling at times but, for most people, particularly in the developed world, this phenomenon is a fleeting event that is alleviated once the next meal is taken, causing no deep or permanent damage.
- Poverty causes hunger. Resignation causes hunger. Gender discrimination causes hunger.

3.1.3. The relationship between hunger and poverty...

- Not every poor person is hungry, but almost all hungry people are poor.
- Millions live with hunger and malnourishment because they simply cannot afford to buy enough food, cannot afford nutritious foods, or cannot afford the farming supplies they need to grow enough good food of their own.
- Hunger can be viewed as a **dimension of extreme poverty**.
- It is often called the most severe and critical manifestation of poverty.

3.1.4. Dimensions of poverty

- **Socio cultural dimensions:-** It can be expressed in terms of **lack of self – confidence, having low self –esteem, dependence proneness and alienate** (isolate/separate from) of people from mainstream of social development and the like.
- **Intellectual dimension of poverty:** - can be **explained by when people perceive a sense of worthlessness and believe that they know nothing.**
- When the majority is dominated by elites and upper class people.
- **Institutional dimensions:-** **Unorganized or no solidarity among people for their betterment and well-being**
- **Economic deprivations:-** Economic limitations to satisfy the needs and wants of the household

3.1.4. Dimensions of poverty...

- **Ecological dimensions:-**According to ecologists the cause for poverty are population growth and population pressure on natural resources.
- The ecologists for this type of problem proposed solutions are controlling population growth and wise utilization of resources.
- **Political economics of poverty:** - According to political economists the cause for poverty is unequal resources, wealth and power distribution or unfair/injustice resource, wealth, prestige, privilege concentration. i.e. resources used to satisfy few minorities but disregard majorities.
- Solutions proposed by political economists are redistribution of wealth and power justice resource and power distribution.

3.1.5. Causes of rural poverty

- ❑ They are many causes of poverty and Some of them can be explained as:
- *natural and environmental factors*- access to fertile land, irrigation, the climate determine the type of crop, livestock to be produced;
- *inadequate nutrition* in child hood in poor nations lead to mental and physical stunt/limit; diseases that affect poor nations and the poor people in these countries give a chance to continue poverty consistently;
- *unemployment, under employment*, poor infrastructure; lack of education, lack of democracy, lack of well-paying jobs , lack of free trade etc;
- unplanned population growth, lack of freedom , lack of social integration; and the impact of colonization , monarchy/domination of socialism and communism-

3.1.7. The Vicious Circle of Poverty

- ❑ Poverty may have enormous effect such as increase vulnerability; hunger and starvation; increase different violence (social, political, war, etc); lack of different opportunities and increase discrimination and the like.
- ❑ In the model "The vicious circle of poverty" the link between **lack of capital and underdevelopment is emphasized.**

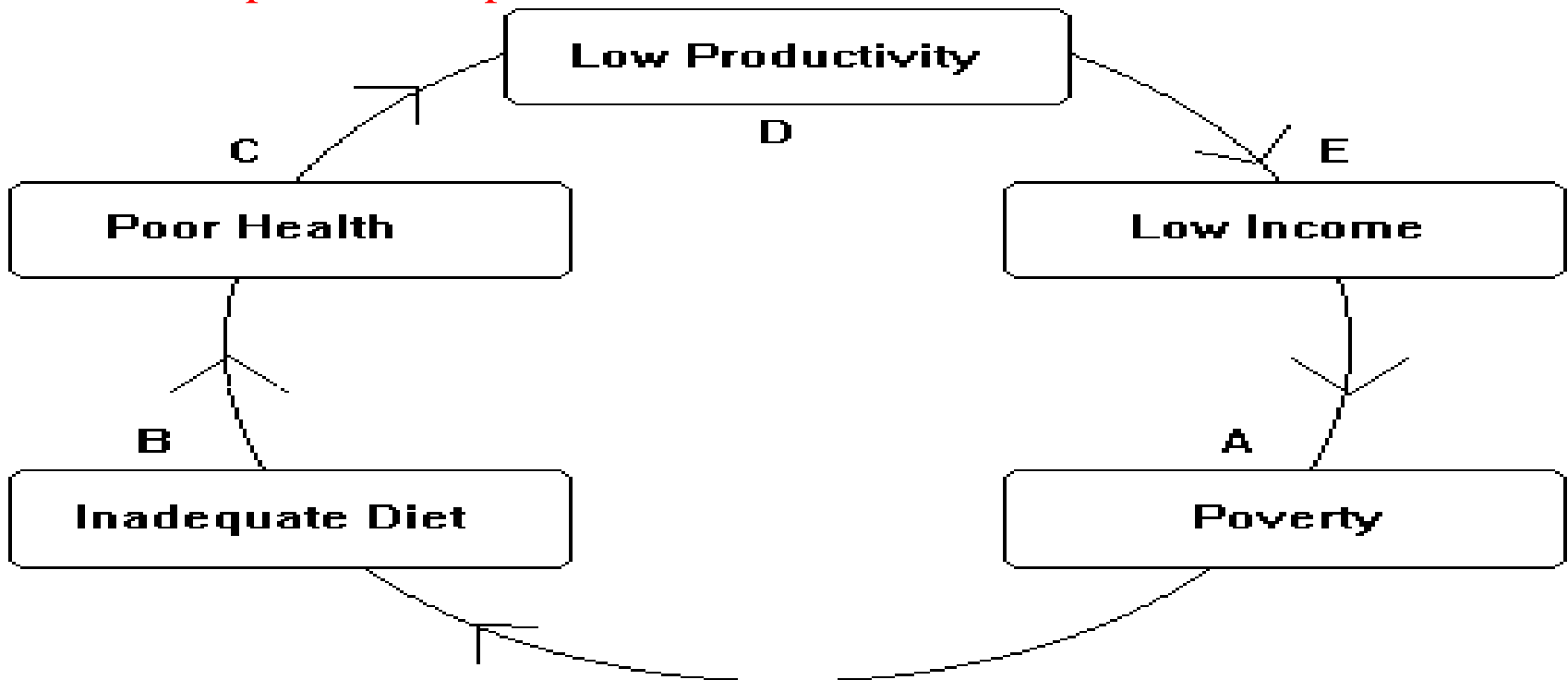


Figure 3.1: *The vicious circle of poverty - Individual level.*

3.1.8. Poverty Reduction

- The anti-poverty strategy depends heavily on reducing poverty through the:-
- **Promotion of economic growth:-** overview of many studies show that:
 - Growth is fundamental for poverty reduction, and in principle growth as such does not affect inequality.
 - Growth accompanied by progressive **distributional change** is better than growth alone.
 - **High initial income inequality is a slow down** on poverty reduction.
 - Poverty itself is also likely to be a **barrier for poverty reduction**; and **wealth inequality seems to predict lower future growth rates.**

Poverty Reduction...

- **Reduction of barriers to the creation of new businesses**, or reducing barriers for existing business, as having the effect of bringing more people into the formal economy.
- **Improving the social environment and abilities of the poor**
 - Subsidized education.
 - Subsidized health care.
 - Assistance in finding employment.
 - Subsidized employment
- Encouragement of political participation

3.2. Basic Concepts of Food Security

- 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.*

3.2. Basic Concepts of Food Security...

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

3.2. Basic Concepts of Food Security...

- *1974, World Food Summit was focus on the volume and stability of food supplies.*
- *“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: “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: define as “Access of all people at all times to enough food for an active, healthy life”.*

3.2. Basic Concepts of Food Security...

- *Exercise what is common and what is the difference between the two recent concepts*
- 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”.

Definitions of Food Security...

- Over time a large number of different definitions have been proposed there are approximately 200 definitions and 450 indicators of food security.
- In general at least four similar definitions of food security have been used by international Organizations:

Definitions of Food Security...

- *"Access by all people at all times to enough food for an active, healthy life." (World Bank)*
- *"All people at all times have both physical and economic access to the basic food they need." (FAO Committee on World Food Security)*
- *"Access by all people at all times to sufficient food and nutrition for a healthy and productive life." (The Agricultural Trade Development and Assistance Act of 1990)*
- *"When all people at all times have access to sufficient food to meet their dietary needs for a productive and healthy life." (USAID, 1986)*

3.3. Pillars of food security

- The WHO states that there are **three pillars** that determine food security: food availability, food access, and food use.
- The FAO adds a fourth pillar: the stability of the first three dimensions of food security over time.
- In 2009, the World Summit on Food Security stated that the “four pillars of food security are **availability, access, utilization, and stability**”.

3.3. Pillars of food security...

1. Availability

- Food availability relates to the food supplied through *production, distribution, and exchange*.
- Food production is determined by a variety of factors including land ownership and use; soil management; crop selection, breeding and management; livestock breeding and management; and harvesting.
- Crop production can be impacted by changes in rainfall and temperatures.
- ***Food Availability: Sufficient quantities of appropriate, necessary types of food from domestic production, commercial imports or donors are consistently available to the individuals or are within reasonable proximity to them or are within their reach.***

3.3. Pillars of food security...

Constraints to food availability include:

- inappropriate agricultural knowledge, technologies, and practices;
- Inappropriate economic policies, including pricing, marketing, tax and tariff policies; lack of foreign exchange; inadequate agricultural inputs; non-existent or ineffective private sector; population growth rates that offset increased production or imports; marketing and transportation systems which inhibit the cost-effective movement of food from source to need;
- Inability to predict, assess and cope with emergency situations which interrupt food supplies; natural resource, climatic, and disease constraints;
- Donor disinterest or fatigue; and political choice on the part of the government at any level.

3.3. Pillars of food security...

2. Access

- Food access refers to the affordability and allocation of food, as well as the preferences of individuals and households.
- The UN Committee on Economic, Social, and Cultural Rights noted that the causes of hunger and malnutrition are often not a scarcity of food but an inability to access available food, usually due to poverty.
- Poverty can limit access to food, and can also increase how vulnerable an individual or household is to food price spikes.
- Access depends on whether the household has enough income to purchase food at prevailing prices or has sufficient land and other resources to grow its own food.

3.3. Pillars of food security...

- **Food Access:** Individuals have adequate incomes or other resources to purchase or trade to obtain appropriate foods needed to maintain consumption of an adequate diet/nutrition level.
- Food security can be attained only when physical and economic access to food is secured.
- While physical accessibility to food will be affected by unforeseen events such as wars, export embargoes/restrictions,
- Economic accessibility will be hindered by factors such as lack of purchasing power -- poverty.
- While the factors that determine the **physical accessibility to food** are common to both developed and developing countries, the factors hampering economic access are especially serious in developing countries.

3.3. Pillars of food security...

Constraints to individual food access include:

- inadequate economic growth that in general, leading to a lack of job opportunities or lack of incentives to become a productive participant in the economy;
- inadequate training and/or job skills; lack of credit or other means to exchange assets and
- Food losses associated with ineffective and inefficient harvesting, storage, processing and handling; political decisions favoring one group over another.

3.3. Pillars of food security....

3. Utilization

- Food utilization refers to the **metabolism of food by individuals.**
- Once food is obtained by a household, a variety of factors impact the quantity and quality of food that reaches members of the household.
- In order to achieve food security, the food ingested must be safe and must be enough to meet the physiological requirements of each individual.
- Food safety impacts food utilization, and can be impacted by the preparation, processing, and cooking of food in the community and household.

3.3. Pillars of food security....

Food Utilization/Consumption:-

- It is when Food is properly used; proper food processing and storage techniques are employed; adequate knowledge of nutrition and child care techniques exists and is applied; and adequate health and sanitation services exist.
- Constraints to food utilization include: **nutrient losses associated with food preparation; inadequate knowledge and practice of health techniques, including those related to nutrition, child care, and sanitation; and cultural practices that limit consumption of a nutritionally adequate diet by certain groups or family members.**

3.3. Pillars of food security...

4. Stability

- Food stability refers to the ability to obtain food over time.
- Food insecurity can be transitory, seasonal, or chronic.
- In transitory food insecurity, food may be unavailable during certain periods of time.
- At the food production level, natural disasters and drought result in crop failure and decreased food availability.
- Civil conflicts can also decrease access to food.
- Instability in markets resulting in food-price spikes can cause transitory food insecurity.
- Other factors that can temporarily cause food insecurity are loss of employment or productivity, which can be caused by illness.

3.3. Pillars of food security...

- Seasonal food insecurity can result from the regular pattern of growing seasons in food production.
- **Stability of Food Supply:** Food should be supplied at reasonable prices in a stable manner. Food price tends to be unstable by nature due to the price inelasticity of supply and demand for major agricultural commodities.

3.3. Pillars of food security

Availability

- Domestic production
- Import capacity
- Food stocks
- Food aid

Access

- Income, purchasing power, own production
- Transport and market infrastructure
- Food distribution

Utilization

- Food safety and quality
- Clean water
- Health and sanitation
- Care, feeding and health-seeking practices

Stability

- Weather variability, seasonality
- Price fluctuations
- Political factors
- Economic factors

3.4. Food security at different levels of analysis

National Level

- Food security at the national level is perhaps best described as a **satisfactory balance between food demand and food supply at reasonable prices.**
- This may intended to indicate **a situation where there have been no major disorders in food markets,** where adequate food is available and where most of the population have access to that food.
- Changes in food security can be identified over time by rising prices.
- These will affect the poorest first, as they spend a higher proportion of their income on food.
- There are countries where the overall supply of food is clearly inadequate to meet its citizens' needs,

3.4. Food security at different levels of analysis

The household level of food security

- The household level of food security is probably the most important for the analyst, insofar as the household is the basic economic unit which determines the level of consumption by the individual.
- At this level, households are identified as **food secure if their entitlement for food is greater than their needs, defined as the aggregation of individual requirements**

3.4. Food security at different levels of analysis..

The individual level of food security

- At the individual level, the definition of food security is much more straightforward.
- An individual is food secure if his or her food consumption is always greater than need, as defined by physiological requirement.
- This may be affected by individual earnings and assets, or by the individual's position in the household.

3.4. Food security at different levels of analysis..

The relationship between the levels of food security

- It is clear that food security at one level does not imply food security at a lower level of aggregation. How???

3.4. Food security at different levels of analysis..

The relationship between the levels of food security

- It is clear that food security at one level does not imply food security at a lower level of aggregation.
- A country which is food insecure will almost certainly contain groups of the population which are food secure, and many countries which are food secure at a national level will contain groups of the population who suffer from severe food insecurity.
- Food security at the household level does not imply that all members of the household are food secure.
- A food insecure household may equally contain food secure members.

3.5. Types of food insecurity

1. Chronic food insecurity

- When individuals or groups of people suffer from food insecurity *at all of the time*, then they can be said to suffer from **chronic food insecurity**

2. Transitory food insecurity

- When households face a *temporary decline* in access to food, it is called as **transitory food insecurity**.
- Transitory food insecurity may lead to chronic food insecurity, depending on its frequent occurrences.
- For example, a two years drought may force the households to sell their assets to survive. Then, this leads to chronic food insecurity from transitory food insecurity.

3.5. Types of food insecurity...

- Transitory food insecurity can be further divided into temporary food insecurity and cyclical or seasonal food insecurity.
- Temporary food insecurity occurs when sudden and unpredictable shocks, such as drought or pest attack, affect a household's entitlements.
- For urban households, sudden unemployment may also be a cause of transitory food insecurity.
- Seasonal food insecurity occurs when there is a regular pattern of inadequate access to food.
- This is often linked to agricultural seasons, particularly when it is difficult for households to borrow foods
- Generally, Food security analysts have defined **two general types of food insecurity**:

3.5. Types of food insecurity...

	Chronic food insecurity	Transitory food insecurity
<i>is...</i>	Long-term or persistent.	Short-term and temporary.
<i>Occurs when...</i>	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.
<i>Results from...</i>	Extended periods of poverty, lack of assets and inadequate access to productive or financial resources.	Short-term shocks and fluctuations in food availability and access, including year-to-year variations in domestic food production, food prices and household incomes.
<i>can be overcome with...</i>	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 programmes

Model to analyze the structure of aggregate food deficits

- Analyzing the overall food situation of a country enable to determine the priority areas of policy interventions to improve food security and help answer questions such as:-
 - *should food security policies focus on improving access??*
 - *or on increasing availability??*
 - *or on both sides of the food equation simultaneously???*
- The overall structural food deficit of a country, defined as **short-fall of domestic food production below aggregate national requirements**, is often composed of two different types of sub-deficits with clearly distinct features, Namely: **a supply deficit and a demand deficit.**

Typical food deficit scenarios and its implication for Food Security policy

Scenario 1: Supply problems arising from structural production problems .

- *A structural food deficit, defined as permanent short-fall of domestic food production below aggregate food requirements does not mean food insecurity if a country has the capacity to fill the gap through food imports. However, food insecurity in terms of in-sufficient availability occurs if, due to foreign exchange constraints, a country lacks the capacity to finance the food import requirements.*
- In such situations, strategic approaches to mitigate food insecurity have to **put emphasis on increasing food availability.**
- Depending on the conditions, this can either be achieved by promoting domestic food production, or by measures to increase foreign exchange earnings.
- As a transitory measure, external assistance in terms of food aid deliveries or balance of payments support can help to overcome availability constraints.

Typical food deficit scenarios and its implication for Food Security policy...

Scenario 2: Access problems and demand deficits as a result of mass poverty

- *This scenario refers to countries where, due to wide-spread poverty and/or large income differentials, access to food is the major problem for a significant proportion of the population. Food supplies from domestic food production may, in such cases, cover or even exceed the existing market demand for food.*
- Policy Measures to improve Food Security in this case, have to **emphasize employment and income generation** and targeted assistance to the vulnerable and food insecure population groups.
- The appropriate type of assistance targeting (e.g. transfers in cash or in kind of food, food relief assistance, food subsidies, food-for-work, temporary or safety-net approaches, etc.) depends on the specific local situation, the groups to be assisted, and the availability of resources.

Typical food deficit scenarios and its implication for Food Security policy...

Scenario 3: Instability of food production and / or demand

- *Food insecurity in terms of instability, caused by sudden or repeated short-falls of supply or demand, can arise from factors affecting either food production (e.g. droughts, floods, other natural disasters) or income and demand (e.g. income losses due to depressed world market prices for major export commodities, or due to war and displacement). Either production or demand short-falls would lead to a shift of the production.*
- Major policy approaches to prevent or mitigate the adverse effects of production and supply instabilities on food security, particularly in areas prone to natural disasters, comprise Early Warning Systems, Food Security Reserves, Buffer Stocks, and Emergency Food Aid.

Typical food deficit scenarios and its implication for Food Security policy...

- **Scenario 4:** Availability and Access problems as a result of conflict / crisis situation
- Most of the armed conflicts take place in regions heavily dependent upon agriculture. Due to civil war and displacements, fields can no longer be cultivated and whole regions lie fallow. Armed conflicts destroy crops, cattle herds and land; they ruin a country's infrastructure and markets. Even worse, they destroy the ecological and social resources needed for food production. These attacks on food systems are common instruments of war.
- Even after conflicts are settled, certain areas cannot be accessed due to land mines and other 'dormant weapons', and it takes much time and many resources (which often farmers do not have) to re-establish the production.

Typical food deficit scenarios and its implication for Food Security policy...

- In case of open armed conflicts, populations often leave the region and settle within a short time at a different place – often in a different country due to security reasons.
- A sudden shortfall of demand due to displacement or a sudden demand at the new location overextends the local market.
- Food aid – sometimes over long periods – helps to mitigate this acute food insecurity situation.
- The longer such a situation lasts, the more difficult it will be to re-establish the production system back home.
- Interventions in such acute crisis situations therefore are crucial.

Typical food deficit scenarios and its implication for Food Security policy...

Scenario 5: Combination of different scenarios

- *Very often, the situation in countries with Food Security problems is characterized by a combination of the different types of food deficits. The case of a combined demand and market supply/ import deficit. The implications for Food Security are particularly severe if a country with structural production and/or demand deficits is hit by an acute food crises resulting from natural or man-made disasters.*
- On the other hand, there are also cases where a demand deficit, caused by mass poverty, goes hand in hand with domestic "surplus" food production.
- Such surpluses may be exported or stockpiled while, at the same time, the poor have no access to such "surpluses" for want of purchasing power.

Current analyses, concepts and policies regarding food security

A case of Malawi

- *One country that has grown increasingly vulnerable to food insecurity in recent years is Malawi. A recent assessment concluded that there has been “a gradual but steady deterioration of agricultural productivity per capita while eroding livelihoods. With the majority of the population depending on subsistence agriculture as their primary food source, much of the population is vulnerable to acute food insecurity from economic, climatic or other shocks”. A key assumption of a recent investigation into food security is that a large proportion of individuals and households there have less food security and more limited coping strategies now than they did in 1990. (Incidentally, a second assumption highlighted the fact that this situation stems more from policy choices made between 1980 and 2000 than from exogenous factors such as drought).*

3.6. Food Consumption Patterns

- Food consumption surveys, also known as food intake surveys or dietary surveys are used to estimate food consumption patterns at the national, regional, household and individual level.
- The *Food Consumption Score* (FCS) combines the elements of ‘quantity’ and ‘quality’ of food.
- It measures food diversity (the types of food consumed), food frequency (the number of days each food group is consumed) and the relative nutritional importance of different food groups.
- The FCS uses standardized and calibrated thresholds that divide households into three groups: poor food consumption, borderline food consumption and acceptable food consumption.

3.6. Food Consumption Patterns...

- Individual food consumption patterns are affected by a **number of cultural, geographical and socio-economic factors and can be used to quantify consumption patterns** from the household level to the national level.
- In Ethiopia, the capacity for dietary diversification efforts to improve the nutritional status of the population is limited in the short term due to issues related to availability, access and behaviours.
- The burden of under nutrition is very high in both peri-urban and rural areas.
- Nationally, more than one in four households (26%) consume less than acceptable diets: 10% of households have poor food consumption and 17% borderline.

3.6. Food Consumption Patterns...

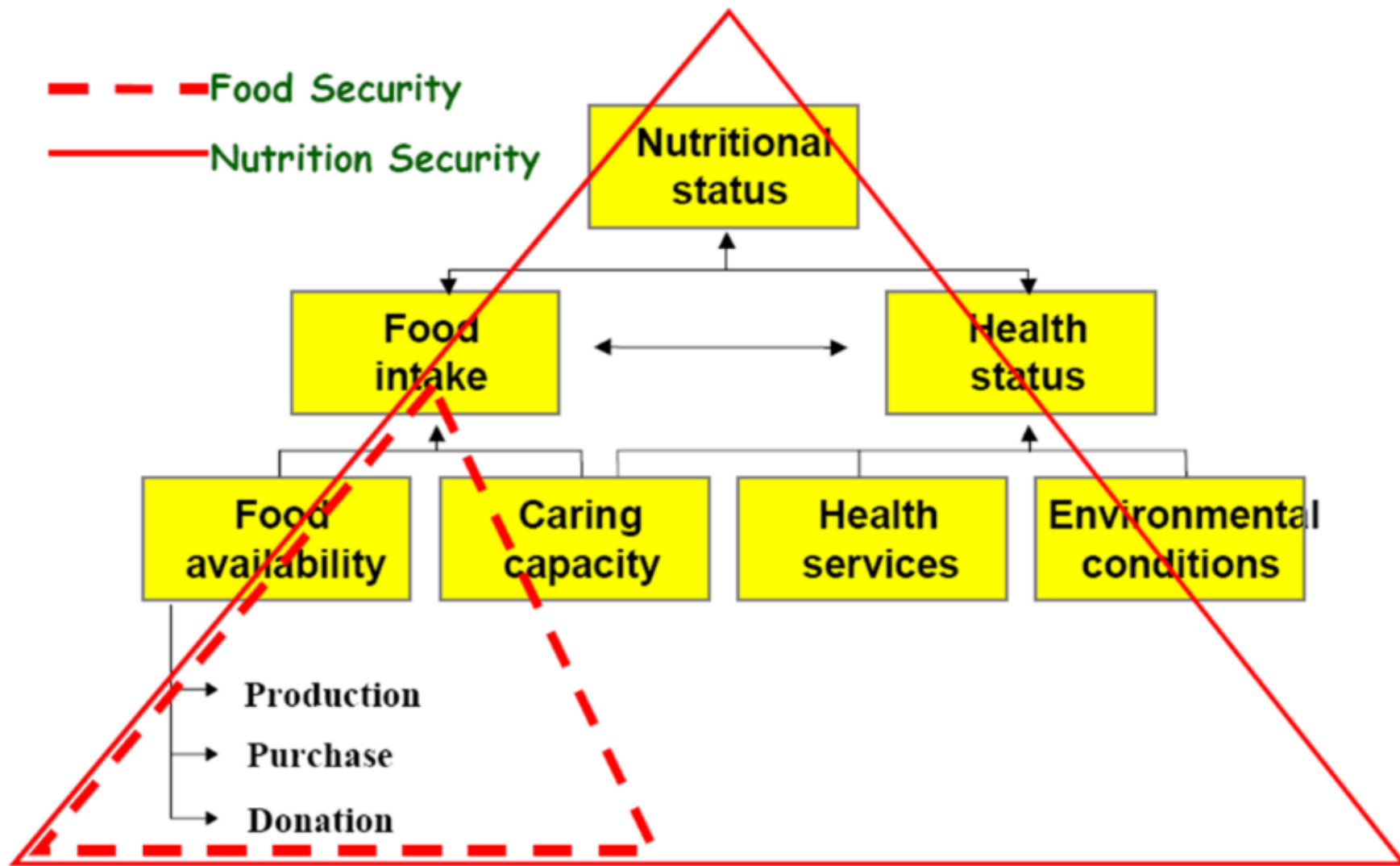
- The Ethiopian diet chiefly consists of **cereals** (maize, sorghum, teff), **tubers and root crops, pulses and oil seeds.**
- The national staple ‘injera’ is typically made from teff, which is grown in the highlands, or sometimes from millet or sorghum.
- Despite a large livestock population, dairy and meat supply is limited, with consumption of these products especially low in rural areas, except **in nomadic pastoralist districts** (Somali and Afar) where milk is a major component of the diet, consumed 4-5 days a week compared with 1.5 days on average nationally.
- Staples are usually accompanied by vegetables (5 days a week) except in Addis Ababa, Gambela, Somali and Afar where they are consumed far less frequently. Fruit consumption is low across all districts.

3.7. Food and Nutrition Security

- **Food security:** the condition when all people, at all times, have physical and economic access to sufficient, safe and nutritional food to meet their dietary needs and food preferences for an active and healthy life.
- **Nutrition Security:** The condition when all people have ongoing access to the basic elements of good nutrition, i.e., a balanced diet, safe environment, clean water, and adequate health care (preventive and curative), and the knowledge needed to care for and ensure a healthy and active life for all household members.
- **Food** is here defined as any substance that people eat and drink to maintain life and growth.

3.7. Food and Nutrition Security...

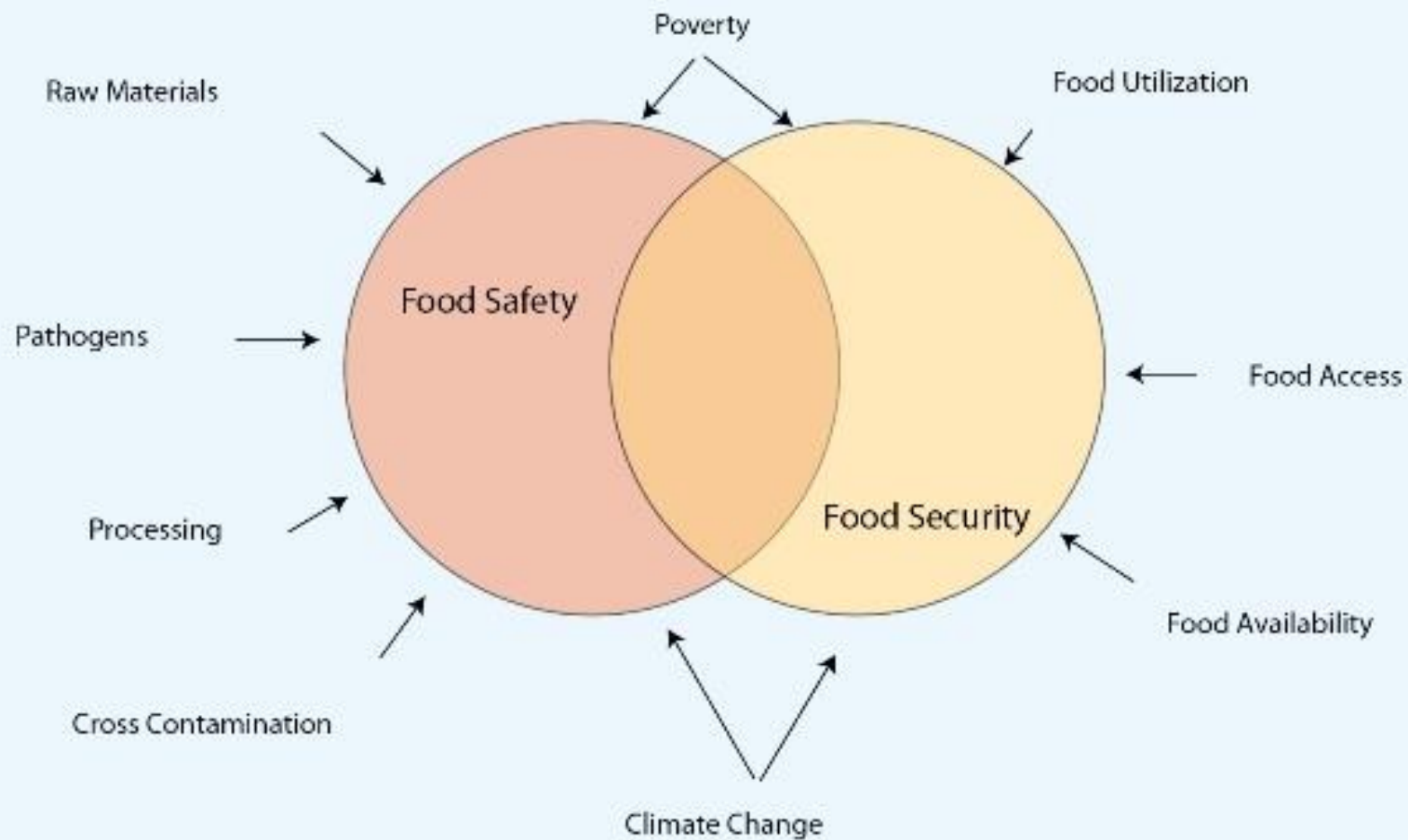
- The overlap between food and nutrition security is shown in this figure.



3.7. Food and Nutrition Security...

- This aims at what is more precisely called ‘**Nutrition Security**’, which can be defined **as adequate nutritional status in terms of protein, energy, vitamins, and minerals for all household members at all times.**
- *“Food and nutrition security is achieved, if adequate food (quantity, quality, safety, socio-cultural acceptability) is available and accessible for and satisfactorily used and utilized by all individuals at all times to live a healthy and active life.”*
- Food safety is an umbrella term **that encompasses many facets of handling, preparation and storage of food to prevent illness and injury.**
- Food security is affected by climate change, dependence on fossil fuels, and the loss of biodiversity and use of food crops for biofuels, among many other factors

3.7. Food and Nutrition Security...



3.8. The Food Balance Sheet

- A food balance sheet presents a comprehensive picture of the pattern of a country's food supply during a specified reference period.
- The food balance sheet shows for each food item i.e. each primary commodity availability for human consumption which corresponds to the sources of supply and its utilization.
- The total quantity of foodstuffs produced in a country added to the total quantity imported and adjusted to any change in stocks that may have occurred since the beginning of the reference period gives the supply available during that period.
- On the utilization side a distinction is made between the quantities exported, fed to livestock used for seed, losses during storage and transportation, and food supplies available for human consumption.

3.8. The Food Balance Sheet...

- The per capita supply of each such food item available for human consumption is then obtained by dividing the respective quantity by the related data on the population actually partaking in it.
- Data on per capita food supplies are expressed in terms of quantity and by applying appropriate food composition factors for all primary and processed products also in terms of dietary energy value, protein and fat content.

A case of western Africa

- *There is no doubt that poverty and hunger have always existed, both in Africa and elsewhere. However, while ancient Europe was certainly no stranger to food shortages, the current food crises in Africa are linked to global issues of great magnitude. They are no longer uniquely local problems, but have become the most urgent and intractable issue facing those concerned with development in the 21st Century. According to the findings of a study published in 2005, 11 food insecurity in West Africa is not only due to social and economic policy dimensions, but also to other factors such as the chronic vulnerability of households in northern parts of Sahelian countries, the combined impacts of desert locusts and insufficient rainfall in 2004, and market tensions and the difficulties these create for vulnerable groups trying to gain access to food.*

CHAPTER FOUR

MARKETING FUNCTIONS, MARKETS AND FOOD PRICE FORMATION

4.1. Marketing Issues

- Marketing is a total system of business activities designed to plan, price, promote and distribute want-satisfying products to target markets and to achieve organizational objectives.
- Market refers to a collection of buyers and sellers who transact over a particular product or product class as a housing market, stock market, financial market, etc.
- The food marketing sector transforms the raw agricultural commodities produced by farmers into the foods purchased and eaten by consumers.
- *The costs of storage, transportation, and processing-the marketing transformations are an integral component of food price formation.*
- The term "marketing functions" is used to refer specifically to the commodity transformations in time, space, and form that are associated with storage, transportation, and processing.

4.1. Marketing Issues ...

- Marketing encompasses so many activities that are at the core of all food systems, understanding the full range of marketing issues is a central task for food policy analysis.

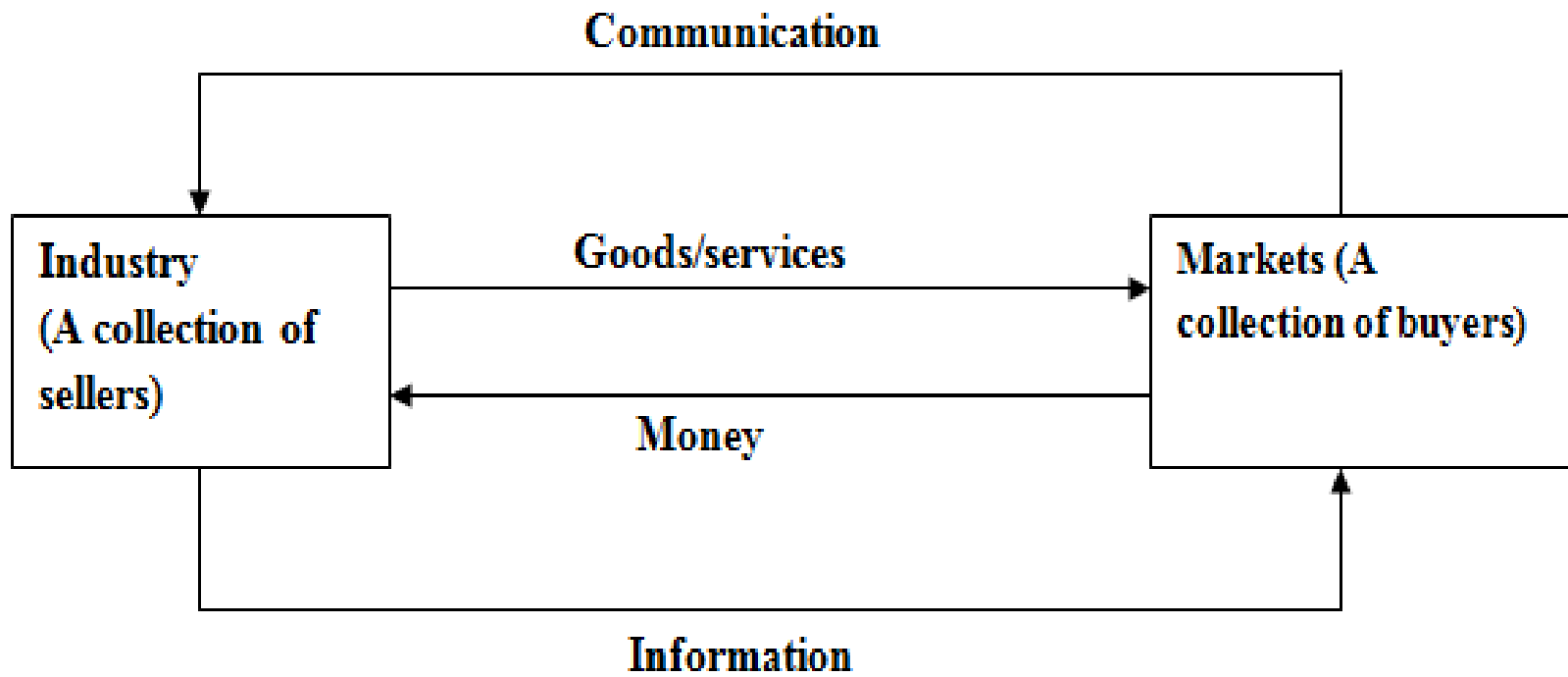


Figure 4.1 A simple marketing system

4.1. Marketing Issues ...

□ The objectives a society can reasonably hold for its marketing sector are analogous to the four basic objectives for the food system as a whole:

- ✓ *efficient economic growth,*
- ✓ *a more equal distribution of incomes,*
- ✓ *nutritional well-being, and*
- ✓ *food security.*

4.2. Price and Income policy

- Price analysis is an **indirect approach** for determining market **efficiency**.
- Efficient marketing systems are characterized by a **high degree of price integration** closely correlated movements of connected series of price over space, form, and time.
- If competitive conditions prevail and enough merchants respond in this way, the **abnormal price difference disappears because supplies in the low-price market decline, placing upward pressure on prices, and supplies in the high-price market increase, causing prices to fall**.
- However, expectations about future price levels are an important ingredient in price formation.

4.3. Domestic Markets and Price Policy

- "Food prices are too high." "Crop prices are too low." Both complaints are heard in virtually all countries.
- All consumers would like food prices to be lower, to take a smaller portion of their family budgets.
- All farmers would like their crop prices to be higher, to provide them greater return for their effort and investment.
- The tension between the two, the food price dilemma, inevitably focuses the attention of consumers, producers, and policymakers alike on the margin between farm prices and consumer prices.

4.4. Trade Restrictions

- A trade restriction can be applied to either the price or the quantity of the commodity to reduce the amount traded internationally and to drive a wedge/block between the world price and the domestic price.
- For imports, the trade policy imposes either a per unit tariff (import tax) or a quantitative restriction (import quota) to limit the quantity imported and raise the domestic price above the world price.
- Likewise, trade policy for exports limits the quantity exported through imposition of either a per unit export tax or an export quota, and the result is to cause the domestic price to be lower than the world price.
- If, for example, a trade policy restricts imports of textiles through imposition of a tariff, producers of textiles gain because the domestic price rises above the world price.

4.4. Trade Restrictions...

- In response to higher local textile prices, production expands, consumption declines, and the quantity of imports is reduced. Since the domestic price is raised, consumers transfer income to producers and to the government budget because of the duties paid on imports.
- To increase both the production and consumption of food would require maintaining a dual price policy involving subsidies to both producers and consumers.

Table 4.1: Price Policies

	Policies benefiting producers	Policies benefiting consumers
Subsidy policies	Producer subsidies on importable	Consumer subsidies on <u>importables</u>
	Producer subsidies on exportable	Consumer subsidies on exportable
Trade policies	Restrictions on imports	Restrictions on exports

4.5 Food Stamps and Rationing

- Food stamps have been widely used in the United States as the main government program for **reducing hunger among poor people**.
- Nearly 20 million people received a net value of over \$6,000 million in food stamps in 1981.
- Despite the theoretical efficiency of food stamps in providing food subsidies targeted precisely to those most in need, the actual implementation record so far is quite mixed.
- Where serious attempts are made to limit food stamps to the most impoverished/poor households, all the problems of implementing an honest and efficient means test arise.

4.5 Food Stamps and Rationing...

- Many relatively well-off households slip into the system, many of the most destitute fall outside, and the bureaucratic costs become very large.
- Food stamp programs as an efficient targeting mechanism for food subsidies can probably be used effectively only in middle-income countries with a skilled civil service and accurate statistical records on at least the urban population.
- For poorer countries and in the rural areas of even the middle-income countries food stamps are not likely to be effective.

4.6. Poor people's Foods

- The poor in most societies eat different foods from those consumed by middle- and upper-income groups.
- Poor people's foods tend to be **root crops** (cassava, sweet potatoes, and Irish potatoes) or **coarse grains** (corn, sorghum, millet, and others).
- The preferred staple in most societies is either rice or wheat although corn is preferred in some African and Latin American countries.
- In rice cultures wheat is sometimes regarded as an inferior good.
- Such sharp contrasts in food consumption patterns by income class within a country are not caused by differences in taste but by economic necessity.
- If only the poor choose to eat the subsidized inferior staples, only the poor capture the subsidy.

4.6. Poor people's Foods...

- At the same time, many of the inferior foods are produced by very poor farmers on marginal lands at considerable distance from major urban centers.
- Marketing subsidies that raise the returns to these farmers while lowering the costs to the consumers may work simultaneously on both dimensions of poverty.
- Simply forcing down prices, however, would have a devastating impact on the incomes and welfare of some of the poorest of the rural poor.
- The implementation of food subsidies for poor consumers through the regular channels of the marketing system is the most efficient way to protect food intake of the poor when price incentives to farmers are improved.

Chapter Five

POLICY ANALYSIS OF THE PRODUCT MARKETS

5.1. Improving the Marketing System

- ✓ Markets are economic institutions that permit trade.
- ✓ At the beginning of the economic development of a country, government action may be needed to favor the *emergence* of markets that do not exist.
- ✓ The presence of *transaction costs*, in fact, may prevent some of the potential beneficial trades from taking place.
- ✓ The *transaction costs* is used to define a very broad set of phenomena, including asymmetric information, strategic behavior, geographical distances and lack of infrastructure.

Improving the Marketing System cont'd

- ✓ **Transaction costs** are *all costs that must be paid when operating a transaction.*
- ✓ It include transportation, administrative costs, information gathering, etc.
- ✓ **Institutions** are *sets of rules and agreements that regulate economic activity.*
- ✓ Agricultural policies too may have distributional effects.
- ✓ Low food prices, for example, have a larger beneficial impact on poor consumers than on rich consumers.

5.2. Price ceiling and Floor

Price Ceilings

- ✓ One interference with the market process is called a price ceiling.
- ✓ *A price ceiling occurs when the price is artificially held below the equilibrium price and is not allowed to rise.*
- ✓ Most price ceilings involve the government example, in many cities, there are **rent controls**.
- ✓ This means that the maximum rent that can be charged is set by a governmental agency.
- ✓ This rent is usually allowed to rise a certain percent each year to keep up with inflation.
- ✓ However, the rent is below the equilibrium rent.

Price Ceilings cont'd

- ✓ *Price ceilings lead to shortages.*
- ✓ *Shortages create a rationing problem*

Ways to resolve the shortage problem:

- ✓ The most common way is *first-come, first-served*.
- ✓ Another common way to resolve the problem of shortages is for the sellers to choose which buyers they will sell to.
- ✓ The lottery systems such that who pick the right numbers are allowed to buy.
- ✓ The government make **the choice** of buyer.
- ✓ Ex. In 1979, the California government decided that those with license plates that ended in an odd number could buy gasoline only on odd days of the month.

Price Ceilings cont'd

- ✓ **Price ceilings provide a gain for buyers and a loss for sellers.**
- ✓ Sellers would like to avoid the loss if they can.
- ✓ One way to do so is called a *black market*.
- ✓ In this case, the sellers illegally raise the price and hope to get away with it.
- ✓ Black markets are not smart; is not smart because of the existence of gray markets.
- ✓ A *gray market* is a way of getting around the price ceiling without actually doing anything illegal.

✓

Price Ceilings cont'd

There are two forms of gray market.

- *One form of gray market involves charging for goods or services that were formerly provided free.*

Example:

- ✓ If the rent cannot be raised on the apartment, there is nothing preventing the landlord from charging for use of the elevator, charging for to pay for electricity and water, and so forth.
- *The second form of gray market is to provide less service for the same price.*

Example:

- ✓ The apartment owner would not repair, clean, paint, nor otherwise maintain the apartment building.

Price Floors

- ✓ *A price floor exists when the price is artificially held above the equilibrium price and is not allowed to fall.*
- ✓ private businesses or the government maintains the price floor.
- ✓ One price floor that was maintained by the private businesses used to be called “**fair trade**”.
- ✓ In fair trade markets price floors always generate surpluses.
- **The problem is: "what to do with the surpluses"?**
- ✓ There were many ways to solve the problem of surpluses.
 1. Occasionally, a store simply broke the manufacturer's policy.

Price Floors

- The store lowered the price to get rid of the surplus.
- A second solution was to simply **absorb the surplus**.
- ✓ Your textbook producers would have a surplus of textbooks.
- A third solution was to **change the name of the product** in order to reduce the price.
- ✓ Surplus gasoline was sold to independent dealers who would sell it as Thrifty, 7-11, or Discount Gas at a lower price.
- *The main point here is that, even if someone interferes with the market process, there are powerful forces to return to equilibrium.*

5.3. Agricultural Risks and Crop Insurance

- Alternative policy implications of risk-aversion must be set.
- Depending on level of hazard categorize the design to overcome the problems:

1) *Natural hazards*

- ✓ *Irrigation*: is not only just for risk avoidance strategy; it also has a major impact on output
- *Crop insurance*:- Establishing insurance scheme to save the times of disaster Growing crops like sweet potato
- *Resistant Varieties*:- Plant breeding or selection designed for resistant to pests, diseases, and drought and for stability of yields.

5.3. Agricultural Risks and Crop Insurance cont'd

2. *Market risks*

- ***Price stabilization:*** - State intervention ranging in setting minimum floor prices for key strategic staples to fixed producer prices across a wide range of crops.
- ***Marketing information:***- Where risk-aversion is attributed to inadequate information [about prices, about new seeds, etc]
- ***Diffusion of information*** to peasants can take many forms through extension work, training and visit programs, radio, leaflets, and farmer education in schools
- ***Provision of credit*** for consumption is a means of reducing risk-aversion in farm households subject to wide seasonal variations in income.
- ***Credit*** has also been considered relevant on the production side, for overcoming resistance to the adoption of new technologies.

5.3. Agricultural Risks and Crop Insurance cont'd

• However, various drought risk management strategies exist, those includes;

- ✓ **Household strategies (Micro-level)** Households which specialize in farming are more vulnerable to the effects of weather variability compared to those which diversify.
- ✓ **Community-based arrangements (Meso-level)** Sharecropping is a traditional risk sharing arrangement in developing agrarian economies.
- ✓ **External assistance (Macro-level);**-Low income countries may sometimes require external assistance to manage large scale disaster risks.

CHAPTER SIX

MACRO FOOD POLICY

6.1. Food aid

- Food aid is providing food and related assistance to tackle hunger, either in emergency situations, or to help with deeper, longer term hunger alleviation and achieve food security.
- Food Assistance Programs (also food-related transfers): any intervention to address hunger and under nutrition (e.g., food stamps, food subsidies, food price stabilization, etc.).
- Food Aid International concessional flows in the form of food or of cash to purchase food in support of food assistance programs.
- The key distinction they make is: *international sourcing* of concessional resources *tied to the provision of food*, whether by a donor or to a recipient.

6.1. Food aid...

- World Food Programme (WFP) is currently the largest humanitarian organization in the world.
- It handles 99% of multilateral food aid, generally in partnership with NGOs and government institutions, which are in charge of food distributions in recipient countries.
- In 2004, WFP food aid reached 89 million people worldwide.
- In-kind food aid from the US is the WFP's main resource.
- A relatively small number of relief NGOs specialize in food-related emergency relief and are predominantly US-based, such as **World Vision**, **CARE**(Cooperative for Assistance and Relief Everywhere), and **Catholic Relief Service (CRS)**.
- These three account for about 80% of the gross revenues of the top 8 such relief agencies.

6.1. Food aid...

Types of food aid

- Mousseau's summarizes 3 types of food aid:

1. Program Food Aid:- Is a form of in-kind aid whereby food is grown in the donor country for distribution or sale abroad.

- This is typically a government to government transfer.

- Rather than being free food as such, recipient countries typically purchase the food with money borrowed at lower than market interest rates.

2. Relief or Emergency Food Aid:- This is typically for emergency situations, such in cases of war, natural disasters, etc, where food is distributed for free.

6.1. Food aid...

3. Project Food Aid:- This is food aid delivered as part of a specific project related to promoting agricultural or economic development, nutrition and food security, such as food for work and school feeding programs.

- Relief aid used to be a minor form of aid until the 1990s when it shifted to being the dominant factor, signifying both the increase in emergencies, and the end of the Cold War where food aid as a political tool (to aid the donor) seemed to be less important.
- As with relief aid, project food aid is typically distributed by the **World Food Programme (WFP)**, **Non-governmental organizations (NGOs)**, and **occasionally by government institutions.**

6.1. Food aid...

Problems with food aid

- ❖ Some core problems with international food aid are ;
 - It is a donor-driven system
 - It promotes domestic interests of donor countries
 - It is a foreign policy tool
 - International institutions are driven by exporters
 - Development is not necessarily the objective

6.1. Food aid...

Benefits of Relief Aid

- They are better at responding to emergency situations quickly and manage to reach and save countless lives.
- Relief aid results in more aid going directly to the relief organizations, rather than via governments who could divert its use.
- This direct delivery can help with rapid responses.

6.1. Food aid...

Problems with Relief Aid

- **Inefficiencies in execution**
- While relief aid goals seem worthy and have certainly saved many lives, Some delivery of emergency food aid **can be too late**
- Some deliveries **require a mobilization of effort and media attention before anything happens**
- Often **aid does not cover the need**
- Food is not always needed; sometimes cash may be better
- Mousseau details some examples in Niger, Ethiopia and Malawi where such delays have caused more deaths or greatly increased the cost of providing the aid.
- The shorter time frame in which the aid is needed also means that many responses often go unfulfilled.

6.2. Stabilizing Agricultural Markets

Buffer Stocks

- The prices of agricultural products such as wheat, cotton, cocoa, tea and coffee tend to **fluctuate** more than prices of manufactured products and services.
- This is largely due to the **volatility in the market supply** of agricultural products coupled with the fact that demand and supply are **price inelastic**.
- One way to smooth out the fluctuations in prices is to operate price support schemes through the use of **buffer stocks**.
- Buffer stock schemes seek to **stabilize the market price of agricultural products by buying up supplies of the product when harvests are plentiful and selling stocks of the product onto the market when supplies are low.**

6.2. Stabilizing Agricultural Markets...

Advantages of a successful buffer-stock scheme:

1. Stable prices help maintain farmers' incomes and improve the incentive to grow legal crops
2. Stability enables capital investment in agriculture needed to lift agricultural productivity
3. Farming has positive externalities it helps to sustain rural communities
4. Stable prices prevent excess prices for consumers – helping consumer welfare

6.2. Stabilizing Agricultural Markets...

Problems with buffer stock schemes

- In theory buffer stock schemes **should be profit making**, since they buy up stocks of the product when the price is low and sell them onto the market when the price is high.
- However, they do not often work well in practice.
- Clearly, **perishable items cannot be stored for long periods of time and can therefore be immediately ruled out of buffer stock schemes.**

6.2. Stabilizing Agricultural Markets...

- The success of a buffer stock scheme however ultimately depends on the ability of those managing a scheme to correctly estimate the average price of the product over a period of time.
- This estimate is the scheme's target price and obviously determines the maximum and minimum price boundaries.

6.3. Increasing Domestic Flexibility

- Amartya Sen's findings indicate that endemic hunger is not a problem of supply but of distribution, and which can be solved by an *entitlement approach* (Sen, 2009).
- Entitlement defined as “the set of alternative commodity bundles that a person can command in a society using the totality of rights and opportunities that he or she faces”
- Just by considering the many policy tools which directly or indirectly impact on food security, one is reminded of the complexity of the challenge facing especially a poor net food-importing country like Ethiopia.
- So, the following instruments can both increase and decrease national food security, depending on the way they are handled, financed, and harmonized:

6.3. Increasing Domestic Flexibility...

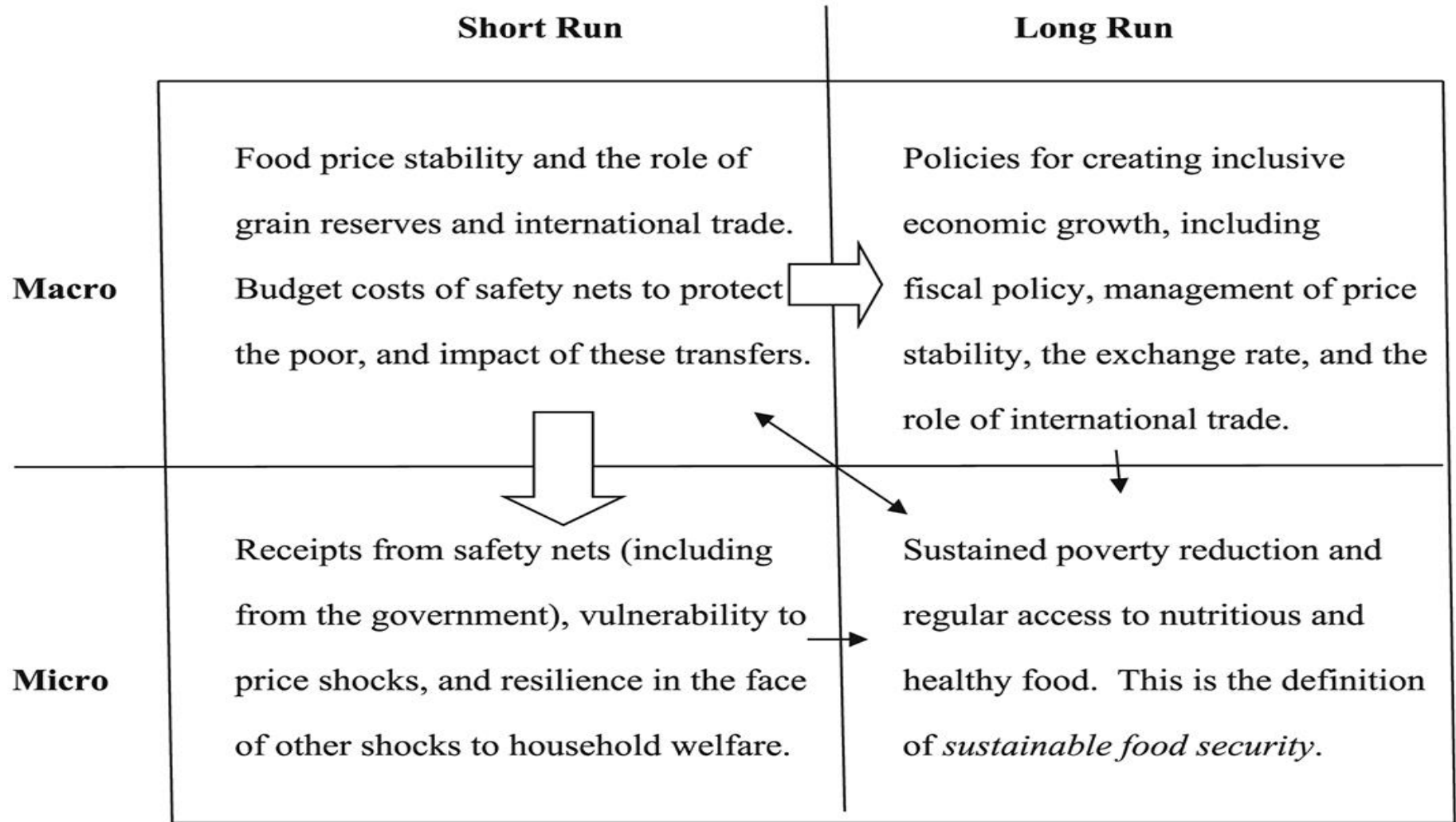
- *Agricultural and food production*: R & D/extension, vocational and management training, investment and production finance/credits, insurance schemes for production, commercial and investment risks, input subsidies, (small) farmer support, land use legislation and administrative practice, and infrastructure support.
- *Social policies* like (staple) food price guarantees and food aid in various forms.
- *Trade instruments* such as tariffs, safeguards, quotas, market interventions, price risk insurance, commodity exchanges, futures and other hedge instruments, export restrictions, various forms of food reserves, and trade and export promotion.

6.3. Increasing Domestic Flexibility...

- *Investment policies* e.g. multilateral trade and bilateral investment agreements, foreign investment legislation and agreements including fiscal incentives, concessional finance, investor protection and *stabilization clauses* (“regulatory chill”), with biofuels and biotech technologies demanding special regulatory attention.

6.3. Increasing Domestic Flexibility...

Food Security, Structural Transformation, Markets and Government Policy



Source: Timmer 2014

CHAPTER SEVEN

TYPES OF AGRICULTURAL POLICIES

7.1. Price policy

- Economic activities are guided by **prices**.
- Price policy is designed to influence the **level and stability of the price received by farmers and paid by consumers for farm outputs.**

Objectives of output price policy;

- Primary objectives of the policy include:
 - ✓ To influence agriculture output
 - ✓ To achieve desired changes in income distribution
 - ✓ To influence the role and contribution of the agriculture sector to the overall process of economic development

7.2. Input policy

- Input policy concerns the ways government tries to influence the quantities and combinations of purchased variable inputs used by small farmers in developing countries.
- Purchased variable inputs include chemical fertilizers, pesticides, high yielding seed varieties, fuel, animal feeds, water, etc

Variable input policies have three dimensions:

- I. Price level of variable inputs, concerns state actions to **influence the prices paid by farmers for inputs**
- II. Delivery system for variable input, concerns state actions to **improve the physical flow of inputs to farmers**
- III. Information provision to farmers concerning **the type, quantity and combination of inputs**

7.3. Agricultural and rural credit policies

- It concerns with the provision of credit to farm families in developing countries; and credit provision has been one of the most popular type of state intervention in the agricultural sector;
- Credit may be informal, or formal, private or state in origin.;
 - ❑ *Informal credit channels refer to the financial services provided by money lenders (as an example the rich farmers, traders and others);*
 - ❑ *formal credit channels are those bound by the legal regulations of a country, and they include private banks, state banks, registered cooperatives, and a host of others.*
- The entire system of institutions and the way they work is called rural financial system

7.3. Agricultural and rural credit policies...

- Farmers need funds for three major reasons:
 1. **Working capital.** In most of agricultural that the production is obtained only by the end of season, while costs are sustained throughout all of the season, farmers need to anticipate money.
 2. **Consumption smoothing.** Agricultural production is highly variable from year to year, whereas consumption needs to be kept constant. Farmers may need to borrow money during bad years and save money during good years.
 3. **Investments.** When an investment is realized, its cost is paid at the beginning, while the benefits are only obtained later on during many years.
- **New objectives and instruments of credit policy;-**
 - The first objective should be that of *local saving mobilization*.
 - The second objective should be that of **reducing the margin of the financial intermediary, especially by reducing transaction costs.**

7.4. Mechanization policy

- **Agricultural Mechanization** embraces the use of tools, implements and machines for agricultural land development, crop production, harvesting, and preparation for storage, storage, and on-farm processing.
 - It includes three main power sources: human, animal, and mechanical.
1. **Hand tool technology** is the simplest and most basic level of agricultural mechanization: the use of tools and simple implements using human muscle as the main power source.
 2. **Draught animal technology** refers to implements and machines utilizing animal muscle as the main power source.
 3. **Mechanical power technology** is the highest technology level in agricultural mechanization. It embraces all agricultural machinery which obtains its main power from other sources other than muscular power.

7.4. Mechanization policy...

- They three principal purposes of mechanization may be summarized as follows:
 - 1. Increase in labor productivity.** The introduction of machinery to substitute for labor (“laborsaving”) is a common phenomenon associated with the release of labor for employment in other sectors of the economy or to facilitate cultivation of a larger area with the same labor force.
 - 2. Increase in land productivity.** The purpose of mechanization is here to produce more from the existing land.
 - 3. Decrease in cost of production.** Introduction of a machine may lower production costs or offset increased costs of draft animals or labor.
 - Additional benefits to the user may be associated with a reduction in the drudgery of farm work, greater leisure, or reduction of risk.

7.5. Land reform policy

The importance of land tenure

- Without clearly defined rights of access to land, or land tenure, production is more difficult to carry out and incentives are weakened for long-term investments in land to raise its productivity.
- Land tenure also is one of the organizing pillars of rural economies and societies that helps define economic and contractual relationships, forms of cooperation, and social relationships.
- Land reform policy which covers a wide range of social changes involving the access of people to land and the size structure of land holdings, and legal or contractual forms of land tenure.

7.5. Land reform policy...

- Article 40.3 of the Ethiopian Constitution decreed the following in relation to land tenure:
- *"The right to ownership of rural and urban land, as well as of all natural resources, is exclusively vested in the state and in the peoples of Ethiopia. Land is a common property of the Nations, Nationalities and Peoples of Ethiopia and shall not be subject to sale or to other means of exchange."*
- Article 40.4 of the Constitution puts the right to use land as follows:
"Ethiopian peasants have [the] right to obtain land without payment and the protection against eviction from their possession."

7.5. Land reform policy...

- However, in addition to the right to use, government policy allows for: renting of land; transferring the right to use land to legal heirs; and compensation for land improvements in case of expropriation by government or other bodies.
- Therefore, while in terms of ownership, land remains under government ownership.
- However, there are substantial changes in the exercise of the right to use land, as shown above, and in promoting security of tenure.

7.6. Agricultural Research policy

- During the 1950's and 60's national and international concerns over food shortages, particularly in Asia, led to large investments in public agricultural research organizations.
- The unambiguous agenda was to raise agricultural productivity as a means of increasing the aggregate food supply as a way of reducing hunger and the poverty associated with it.
- With this agenda in mind, centralized public sector scientific research institutes were created to solve the generic problem of increasing the biological potential of important food crops.
- The institutional set up contained international agricultural research centers and, at the national level, sets of commodity and or disciplinary based research institutes.

7.6. Agricultural Research policy

- The task of transferring technology packages to farmers was given to the institutionally separate extension system.
- This approach resulted in the development and spread of input responsive, high yielding cereal varieties and the consequent "green revolution" phenomenon.

The new agendas:

- **Poverty:** The green revolution, despite its success in increasing food production, demonstrated the difficulty of using advances in agricultural productivity to address complex social phenomena such as poverty.
- It brought to attention the fact that the poor did not always have the resources to benefit directly from new productivity enhancing technology.

7.6. Agricultural Research policy

- Moreover when the poor had land-based resources, research often had difficulty responding to their specific technological needs, usually in the less favorable production environments.
- For the landless and urban poor the need for better entitlements to food (through employment for example) restrained the benefits that would have otherwise arisen through cheaper and more abundant food.
- **Environment:** Concerns were also emerging as to the environmental consequences of an intensive agricultural development strategy reliant on chemical inputs and heavy consumption of water.
- As a consequence the environment is now a mainstream agenda for agriculture and development policy generally.

7.6. Agricultural Research policy

- **Stakeholder participation:** There was also a growing realization that the hierarchical institutional arrangements typical of most centralized, public agricultural research organizations make it difficult to achieve a client focus in research.
- Farmer participatory research arose as a way of addressing this issue.
- Sustained advocacy during the 1990's placed the participatory "paradigm" in the mainstream.
- However the institutional context of many public research organizations has restricted the development of truly participatory and client focused working practices.

7.6. Agricultural Research policy

- **Public vs. Private:** In the last decade economic liberalization along with shifts in globally held perceptions concerning the role of the State in society have emerged as a major new policy agenda.
- This has made institutional concerns of fundamental importance, focusing attention on the efficiency and proper role of the public sector in areas such as agricultural research.
- Private sector agricultural research has also grown as a result of the opportunities that economic and trade liberalization are now presenting for private investments in agro-industries such as seed production, horticultural exports and so forth.
- Private research has also been encouraged by improved intellectual property protection regimes and technical advances associated with biotechnology.

Principles of Agricultural Policy

- There are five basic principles for making an agricultural strategy sustainable over the long run, as follows:
- ***Economic sustainability.*** The strategy must find ways to deliver real economic benefits to the rural sector.
- ***Social sustainability.*** The strategy also must improve the economic well-being of lower income groups and other disadvantaged groups, including women. Otherwise, it loses social viability
- ***Fiscal sustainability.*** Policies, programs and projects whose complete sources of financing are not identified should not be undertaken.
- In an era of increasing budgetary stringency in all governments, application of this principle encourages a search for new sources of fiscal revenue and ways in which beneficiaries of the policies, programs and projects can contribute to their financing, i.e. ways to foster cost recovery.

Principles of Agricultural Policy..

- ***Institutional sustainability.*** Institutions created or supported by policy should be robust and capable of eventually standing on their own.
- For example, financial institutions which are just credit channels to farmers and ranchers, and which do not have deposit-raising capabilities of their own, are not likely to survive over the longer term. Equally, research and extension services that are supported mainly by international loans and grants are not sustainable in the long run.
- ***Environmental sustainability. Policies should be*** developed to bring about sustainable management of forests and fisheries stocks and reduce to manageable levels agricultural pollution of water sources and degradation of soils. A major challenge for agricultural policy in some countries is to slow or stop the expansion of the ‘agricultural frontier’, the zone in which cultivation is possible only by felling trees.



CHAPTER EIGHT

AGRICULTURAL DEVELOPMENT POLICY IN ETHIOPIA

8.1. Overview of the Rural development and Agricultural Policy

- Ethiopia has a consistent set of policies and strategies for agriculture and RD that reflect the importance of the sector in the nation's dev't aspirations.
- The policy framework is based on the concept of ADLI, which has been the central pillar of Ethiopia's development vision since the 1990s.
- ADLI is an economy and society wide strategy in which agriculture has a central role.

8.1.1. The Rural Development Policy and Strategies (RDPS , 2003)

- Key elements of the RDPS include:

Rural and agricultural centered development as a means of:-

- Ensuring rapid economic growth;
 - Enhancing benefits to the people;
 - Eliminating food aid dependency; and
 - Promoting the development of a market-oriented economy.
- ❖ It also sets out five basic directions for agricultural development:

1. *The labor intensive strategy*, which sees the mobilization of underutilized and unproductive rural labor as a key driver of growth, rather than capital-intensive approaches.

1. The Rural Development Policy and Strategies (RDPS , 2003)...

2. *Proper utilization of agricultural land*, by guaranteeing the availability of land to people who seek to make a living out of land, and assisting them to utilize **it productively on a sustainable basis through irrigation, multi-cropping and diversified production;**

3. A “*foot on the ground*”, which envisages moving ahead in a stepwise manner building on experiences and **indigenous knowledge** at the same time as exploring opportunities for deploying new technologies in conjunction with human resource development

1. The Rural Development Policy and Strategies (RDPS , 2003)...

4. *Differentiation according to agro-ecological zones*, which recognizes that

Ethiopia's enormous agro-ecological diversity calls for different approaches to agricultural development in different parts of the country.

- This also provides the opportunity for risk management through diversification.

5. *An integrated development path* among various activities and products in agriculture, as well as linking these to education, health and infrastructure development

2. Plan for Accelerated and Sustained Development to End Poverty/ PASDEP (2005/06 to 2009/10);

- PASDEP also **give high priority to agriculture and RD.**
- PASDEP included six fundamental agricultural development strategies:
 1. Adequately **strengthened human resources capacity and their effective utilization;**
 2. Ensuring prudent allocation and use of land;
 3. Adaptation of development compatible with different agro-ecological zones;
 4. Specialization, diversification and commercialization of agricultural production;
 5. Integrating development activities with other sectors; and
 6. Establishment of effective agricultural marketing systems

3. The New GTP

- A number of the PASDEP principles have been rolled forward into the new FYGTP, which will correspond with the first five years of the Policy Implementation Framework.
- Smallholder agriculture, however, is expected to remain the principal source of agricultural growth.
- Increasing male and female smallholder productivity and production is the main thrust of the plan and will be achieved in three major ways.
 - **First**, *by scaling up best practices* used by leading farmers whose productivity is 2-3 times higher than the average.



3. The New GTP...

- **Second**, *by improving the management of natural resources* with a focus on improving water utilization and the expansion of irrigation.
- **Third**, *by encouraging farmers to change from low value to high value products* in order to increase their cash incomes, with complementary investments in market and infrastructure development.
- These initiatives will be supported by **farmer training and measures to improve access to agricultural inputs and product markets using cooperatives as the delivery mechanism.**

3. The New GTP...

- The FYGTP envisages differentiation among the three main agro-ecological zones.
- ❑ In the adequate moisture areas the focus will be on *scaling up best production and marketing practices* to increase productivity by supplying agricultural inputs and providing training to development agents (DAs) and farmers.
- Particular attention will be given to *soil fertility management using organic and inorganic fertilizers; improved rain fed agronomic methods; irrigation and improved water use efficiency; production and distribution of seed; natural resource conservation; livestock and forage development; capacity building, and strengthening research-extension-farmer linkages.*

3. The New GTP...

- ❑ In the *moisture deficit areas the focus will be on soil and water conservation, and watershed management using labor-based methods.*
- Particular attention will be given to: *underground and surface water utilization; development of small ruminants, poultry and apiculture; and productive safety net initiatives to underpin food security for vulnerable households.*
- ❑ In the *pastoral areas the FYGTP will focus on livestock development; water for people and livestock; forage development; irrigation; improving the livestock marketing system; and strengthening implementation capacity*

4. Comprehensive Africa Agriculture Development Program (CAADP)

- CAADP is a framework which African Governments agreed on and created to accelerate growth and eliminate poverty and hunger on the continent.
- Ethiopia is in the process of institutionalizing the CAADP as its agriculture sector policy, strategy and program formulating framework, of which this PIF (Public Investment Fund) forms a part.
- CAADP embraces the principle of agriculture-led growth as a main strategy to achieve MDG1 of halving poverty and hunger by 2015.

4. Comprehensive Africa Agriculture Development Program (CAADP)...

- On this basis it sets principles and targets to guide national sector strategies in:
 - i. Pursuit of a 6 % average annual growth rate for the agricultural sector;
 - ii. Allocation of at least 10 % of the national budget to the agricultural sector;
 - iii. Exploitation of regional complementarities and cooperation to boost growth;
 - iv. The principles of policy efficiency, dialogue, review, and accountability;
 - v. The principles of partnerships and alliances to include farmers, agribusiness, and civil society communities; and
 - vi. Assigning responsibility for program implementation to individual countries; that of coordination to designated Regional Economic Communities; and that of facilitation to the NPCA Secretariat.

4. Comprehensive Africa Agriculture Development Program (CAADP)...

- The Ethiopia CAADP Study, and the CAADP Compact signed by Government and the key development partners, describes a strategy, consistent with the RDPS and PASDEP, which inform future planning frameworks including the FYGTP.
- The four pillars of the Ethiopia CAADP strategy which are embodied in the CAADP Compact are:

Pillar I: Improve natural resources management and utilization;

- Heavy population pressure and inappropriate agricultural techniques combine to threaten the sustainability of the agro-ecosystem and its capacity to support food production, rural commercialization and poverty reduction.
- The Ethiopian government is already addressing the issue through the Sustainable Land Management Project (SLMP).
- It has requested donor support for a major land administration and land use planning initiative (ELALUDEP).
- Under the SLMP only 55 watersheds out of the 177 that have been prioritized in food secure areas are financed and there are many more watersheds in food insecure areas also in urgent need of attention.
- Additional watershed rehabilitation works in ongoing through the PSNP in food insecure *woredas*.

Pillar II: Improve rural infrastructure, market access and trade capacities;

- Improved infrastructure and market access are important elements of such an enabling environment, but rural commercial development also requires access to financial services, development of commercial supply chains for agricultural inputs, market information services, telecommunications, product standards and quality assurance systems, post harvest storage and transport facilities, etc.

Pillar III: Enhance food security and improve disaster risk management;

- Ethiopian rural households are highly vulnerable to shocks which can quickly reverse years of progress in building household assets.
- In particular, exposure to climatic risks is high in light of the low capacity to store water and irrigate, and the low level of household savings, which are principally in the form of livestock that often have to be sold and depressed prices during times of hardship.
- Improving the capacity to manage risk is critical in overcoming poverty and food insecurity.
- During the last three years (2007-08 to 2009-10) **about 66 per cent of the total budget of MoARD** goes to DRMFS and continued high levels of expenditure are committed over the next four years under funding from the PSNP.

Pillar IV: Improve the agricultural research and extension system.

- Agricultural research and extension institutions are critical in the implementation of agricultural policies and strategies at both federal and regional levels.
- Ethiopia has invested heavily in development of the National Agricultural Research System (NARS), including the Ethiopian Institute for Agricultural Research (EIAR), Regional Agricultural Research Institutes (RARIs) and affiliates of the CGIAR.
- New research centers have been established for previously uncovered agro-ecologies, particularly in lowland, pastoral and agro-pastoral areas.
- Core institutions are the Agricultural Technical and Vocational Education and Training (ATVET) centers and the Farmer Training Centers (FTCs).
- **These institutions are currently functioning to produce, as well as use, the human capital that is embodied in Development Agents (DAs).**

Pillar IV: Improve the agricultural research and extension system...

- ATVETs train DAs and the DAs in turn use FTCs to train farmers.
- At present the extension system deploys four DAs at each *kebele*: with responsibility for *crop production*, *livestock production*, *natural resource management*, and *home economics*.
- In addition, there is *one animal health assistant* per three *kebeles*, and *one cooperative expert* serving five *kebeles*.
- Furthermore, as part of the system, *Research-Extension-Farmer Linkage Councils* have been established to oversee technology generation, packaging and dissemination.
- These Councils are structured from *woreda* up to the federal level.

Pillar IV: Improve the agricultural research and extension system...

- **Seed multiplication and the distribution of improved genetics is a critical element of the drive for improved productivity.**
- In the public sector the major institutions are the Ethiopian Seed Enterprise (ESE), and the recently established Regional Seed Enterprises (RSEs).
- On the livestock side there is the National Artificial Insemination Centre, which is currently operating through four regional sub-branches.
- In the private sector there are Pioneer Hybrid and other small seed enterprises.

8.2. Food Security policy of Ethiopia

- Food and nutrition policy goals include *security of food supply, safe and good quality food* and *adequate and healthy diets for everyone*.
- To a large degree, these goals are consistent with the broader objectives for SARD(sustainable Agriculture and Rural Development).
- Measures to improve the quality and safety of food have direct beneficial effects on health and nutritional status.
- Widespread nutrition and diet education, delivered through formal schooling and the mass media, can promote good eating habits and healthy lifestyles, so reducing the incidence of nutrition-related diseases.
- Especially important for SARD are improvements in child nutrition to make sure that children grow up able to fulfill useful roles in the society of the future

8.2. Food Security policy program of Ethiopia...

- Food Security Program (FSP) is a special arrangement, which focuses on addressing vulnerability, which exists in different parts of the country.
- Since 2003, the program has been under implementation in 319 chronically food insecure woredas /districts from 8 region, with chronically food insecure households - > 6.88 million beneficiaries
- Targeting is the process by which chronically food insecure households are selected to participate in public works or receive direct support.
- A combination of administrative and community targeting systems will be applied in the selection of eligible participants

8.2. Food Security policy of Ethiopia...

Criteria for selection of beneficiaries:-

- HH that have faced continuous food shortage (3 month of food gap or more)
- HH that have suddenly become more vulnerable as a result of a severe loss of assets and are unable to support themselves

Core objectives of the Food Security Programme

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

8.2. Food Security policy of Ethiopia...

Key interventions

- The 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

Component of the FSP

- 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.
 - **Intervention for the resettlement program:** 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).

Component of the FSP

2. Productive Safety Net program (PSNP): PSNP is intended to serve as a dual purpose of helping bridge the income gap of the CFI(Complimentary Community Investment)-HH.

- **Interventions for PSNP:-** PSNP has two components

a. Labor intensive public works

- 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.

Component of the FSP...

b. Direct Support

- **Non Agricultural Income interventions:-** As the food insecure households are resource poor, living in drought – prone and degraded areas, **focusing on crop and livestock production alone may not entirely solve the problem of food insecurity.**
- For these areas income diversification through non –agricultural activities is important.
- To this effect, the food security program concedes complementary income sources in non – farm activities

Component of the FSP...

3. HABP (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 are the depletion of household assets.
- ❑ Multiple causes can be sited 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

Component of the FSP...

- Building sustainable household assets is therefore the major solution to the problem of food insecurity

Interventions for HABP

- 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 IGAs, and Provision of market information.

4. CCI (Complimentary Community Investment):- CCI is an intervention which is designed to create community assets and complement household investment through creating an enabling environment.

Monitoring & Evaluation system of Ethiopia food security policy

The M&E system includes: -

- regular monitoring reports prepared at woreda level, consolidated at Regional and then sent to Federal levels;
- real-time data collected by the Regional and Federal Information Centers
- Bi –Annual government-donor Joint Review and Implementation Supervision mission
- Joint Strategic Oversight committee meeting
- Rapid Response Mechanism
- Agreed studies and assessments, including bi-annual impact surveys

Monitoring & Evaluation system of Ethiopia food security policy...

- **Graduation**

- Graduation is a key goal of the Food Security Programme to which the Productive Safety Net Programme (PSNP) contributes.
- The term ‘graduation’ describes the movement of a HH From food insecurity to the level of food security.
- There are two levels of graduation. Graduation from PSNP and graduation from FSP.
- Every year an assessment is done to check whether the HH is reached to the level graduation or not.