

## I. THE FOUR DIMENSIONS OF FOOD SECURITY

Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

- 1996 World Food Summit

From this definition, **four main dimensions of food security** can be identified:

Physical AVAILABILITY of food	Food availability addresses the “supply side” of food security and is determined by the level of food production, stock levels and net trade.
Economic and physical ACCESS to food	An adequate supply of food at the national or international level does not in itself guarantee household level food security. Concerns about insufficient food access have resulted in a greater policy focus on incomes, expenditure, markets and prices in achieving food security objectives.
Food UTILIZATION	Utilization is commonly understood as the way the body makes the most of various nutrients in the food. Sufficient energy and nutrient intake by individuals is the result of good care and feeding practices, food preparation, diversity of the diet and intra-household distribution of food. Combined with good biological utilization of food consumed, this determines the <i>nutritional status</i> of individuals.
STABILITY of the other three dimensions over time	Even if your food intake is adequate today, you are still considered to be food insecure if you have inadequate access to food on a periodic basis, risking a deterioration of your nutritional status. Adverse weather conditions, political instability, or economic factors (unemployment, rising food prices) may have an impact on your food security status.

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

## II. THE DURATION OF FOOD INSECURITY

Food security analysts have defined **two general types of food insecurity**:

	CHRONIC FOOD INSECURITY	TRANSITORY FOOD INSECURITY
<b>is...</b>	long-term or persistent.	short-term and temporary.
<b>occurs when...</b>	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.
<b>results from...</b>	extended periods of poverty, lack of assets and inadequate access to productive or financial resources.	short-term shocks and fluctuations in food availability and food access, including year-to-year variations in domestic food production, food prices and household incomes.
<b>can be overcome with...</b>	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 ( see Box 1).

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



**Box 1. What are Safety Nets?**

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

Options include:

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

**Stamoulis, K. and Zezza, A.** 2003. A Conceptual Framework for National Agricultural, Rural Development, and Food Security Strategies and Policies. ESA Working Paper No. 03-17, November 2003. Agricultural and Development Economics Division, FAO, Rome. [www.fao.org/documents/show\\_cdr.asp?url\\_file=/docrep/007/ae050e/ae050e00.htm](http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/007/ae050e/ae050e00.htm)

**III. THE SEVERITY OF FOOD INSECURITY**

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

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

**Measuring the Severity of Undernourishment**

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

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

**The Integrated Food Security Phase Classification (IPC)**

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

IPC Phase Classification	Indicators
Generally food secure	- Crude Mortality Rate
Chronically food insecure	- Malnutrition prevalence
Acute food and livelihood crisis	- Food Access/ Availability
Humanitarian emergency	- Dietary Diversity
Famine / humanitarian catastrophe	- Water Access/Availability
	- Coping strategies
	- Livelihood Assets

See [www.ipcinfo.org](http://www.ipcinfo.org) for more information

**IV. VULNERABILITY**

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

1. vulnerability to an *outcome*;
2. from a variety of *risk factors*;
3. because of an *inability to manage those risks*.

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

1. Reduce the *degree of exposure* to the hazard;
2. Increase the ability to *cope*.

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

**Box 2. Analyzing the Risk of Becoming Food Insecure**

For example, we may be interested in analyzing the risk of becoming food insecure as a result of a flood.

If a household lives outside a flood plain then the exposure to flooding is low and therefore the risk of a flood causing the household to become food insecure is

low (unless their crops are in the valley!).

However, if they live on the flood plain, but they have the ability to cope with the hazard, for example by being very mobile, and being able to move their animals and/or food crops to safety, then the risk may still be low.

## V. HUNGER, MALNUTRITION AND POVERTY

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

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

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

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

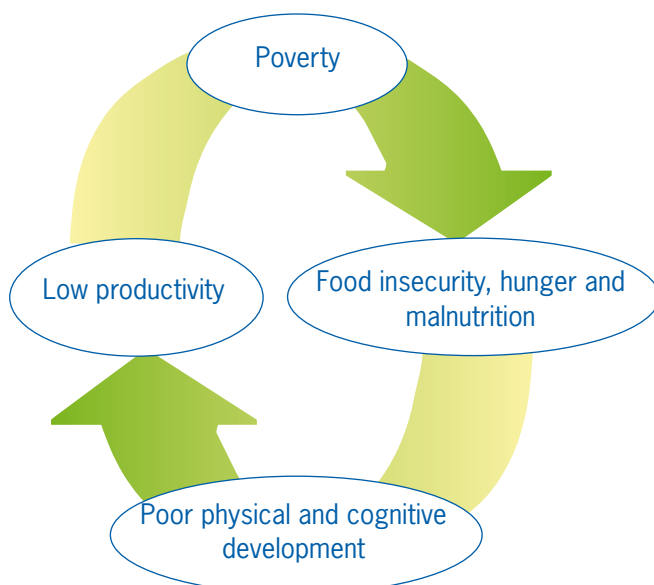
- inadequate care practices for children,
- insufficient health services; and
- an unhealthy environment.

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

A current and widely used definition of poverty is:

*“Poverty encompasses different dimensions of*

Figure 1: Food insecurity, malnutrition and poverty are deeply interrelated phenomena



*deprivation that relate to human capabilities including consumption and food security, health, education, rights, voice, security, dignity and decent work.”*

- Organisation for Economic Co-operation and Development (OECD)

It is argued that a strategy for attacking poverty in conjunction with policies to ensure food security offers the best hope of swiftly reducing mass poverty and hunger. However, recent studies show that economic growth alone will not take care of the problem of food security. What is needed is a combination of:

- income growth; supported by
- direct nutrition interventions; and
- investment in health, water and education.

### FIND OUT MORE:

#### E-learning

These guidelines are taken from the e-learning course “Food Security Concepts and Frameworks” available at: [www.foodsec.org/dl](http://www.foodsec.org/dl)

#### Further Reading

**Devereux, S.** 2006 Distinguishing between chronic and transitory food insecurity in emergency needs assessments. SENAC. WFP. Rome.

**Dilley M. and Boudreau T.E.** Coming to terms with vulnerability: a critique of the food security definition. Food Policy, Volume 26, Number 3, June 2001 , pp. 229-247(19)

**FAO.** 2003. Focus on Food Insecurity and Vulnerability – A review of the UN System Common Country Assessments and World Bank Poverty Reduction Strategy Papers. FIVIMS Secretariat and Wageningen University and Research Centre: [www.fao.org/DOCREP/006/Y5095E/Y5095E00.htm](http://www.fao.org/DOCREP/006/Y5095E/Y5095E00.htm)

**Sen, A.K.** 1981. Poverty and Famines: An Essay on Entitlements and Deprivation. Oxford. Clarendon Press.

**Stamoulis, K. and Zezza, A.** 2003. A Conceptual Framework for National Agricultural, Rural Development, and Food Security Strategies and Policies. ESA Working Paper No. 03-17, November 2003. Agricultural and Development Economics Division, FAO, Rome. [www.fao.org/documents/show\\_cdr.asp?url\\_file=/docrep/007/ae050e/ae050e00.htm](http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/007/ae050e/ae050e00.htm)

**WFP.** 2005. Emergency Food Security Assessment Handbook. [http://www.wfp.org/operations/emergency\\_needs/EFSA\\_section1.pdf](http://www.wfp.org/operations/emergency_needs/EFSA_section1.pdf)

This document is available online at: [www.foodsec.org/docs/concepts\\_guide.pdf](http://www.foodsec.org/docs/concepts_guide.pdf)

For more resources see: <http://www.foodsec.org/pubs.htm>