Deutsche Gesellschaft für
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Internationale Weiterbildung und Entwicklung gGmbH

International Training Course

Food and Nutrition Security

Assessment Instruments and Intervention Strategies

BACKGROUND PAPER No. I

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The Concept of Food and Nutrition Security[1]

[1] This paper is a revision and update using elements of the following papers: Gross, R. et al. (2000): The four dimensions of food and nutrition security: definitions and concepts. April 2000, Hahn, H. (2000): Conceptual Framework of Food and Nutrition Security. April 2000 and Rötten, U. (2000): Food and Nutrition Security: Problems and Perspectives. April 2000

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Abbreviations

ARI	Acute respiratory diseases
BP	Background paper
BMI	Body mass index
DAC	Development Assistance Committee of the Organization for Economic Cooperation and Development (OECD)
DD	Diarrheal diseases
DHS	Demographic and Health Survey
DWHH	Deutsche Welthungerhilfe (German Agro Action)
FAO	Food and Agriculture Organization of the United Nations
FNS	Food and nutrition security
GIEWS	Global Information Early Warning System
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Cooperation)
ICN	International Conference on Nutrition
IFPRI	International Food Policy Research Institute
IUGR	Intrauterine growth retardation
LBW	Low birth weight
MDG	Millennium Development Goals
MI	Micronutrient Initiative
PCM	Project Cycle Management
UN ACC/SCN	United Nations Administrative Committee on Coordination Sub-Committee on Nutrition
UNICEF	United Nations Children's Fund
UN SCN	United Nations Standing Committee on Nutrition (former UN ACC/SCN)
USAID	United States Agency of International Development
VAM	Vulnerability Analysis and Mapping
WFP	World Food Program
WFS	World Food Summit
WHO	World Health Organization
ZOPP	Ziel-Orientierte Projekt Planung (Objective-oriented project planning)

1. Background

Food security, an important element of poverty reduction, is a one of the priority foci of German development cooperation with partner countries in Africa, Asia and Latin America / Caribbean.

Food and Nutrition Security (FNS) has evolved significantly during the last decades in theory and practice. This overview provides some basic information about the current understanding on FNS. It serves as a reference point for exchanging experiences among all stakeholders involved in programs and projects, which foster policy and strategy development. It introduces the concepts of FNS and briefly illustrates operational instruments and processes.

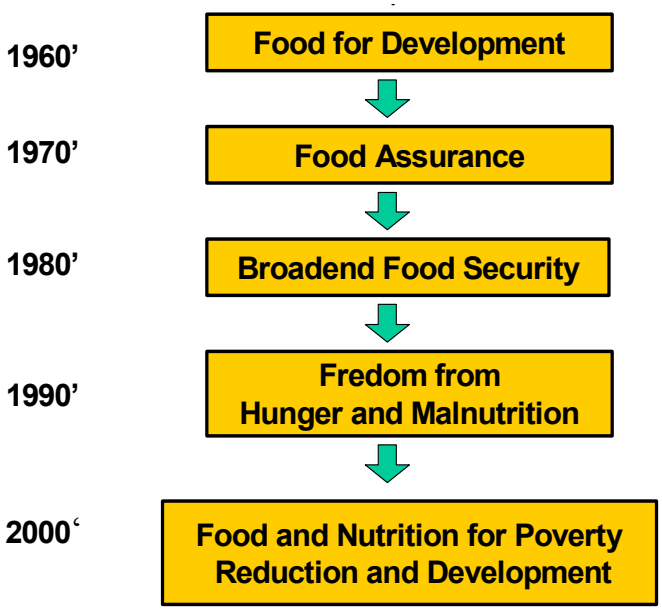
This overview is not a discussion of conceptual approaches, but a tool to bridge theory and practice and to stimulate discussions and innovations. It summarizes the holistic understanding of FNS. Many of the aspects and issues presented in this overview paper are elaborated in more detail in the background papers II through VIII.

2. The evolution of Food and Nutrition Security concerns

Global FNS has a history of more than 50 year, and has evolved through a sequence of definitions and paradigms (Figure 1). After the historic Hot Spring Conference of Food and Agriculture in 1943, in which the concept of a "secure, adequate and suitable supply of food for everyone" was accepted internationally, bilateral agencies from donor countries such as the USA or Canada were created in the 1950s and started to dispose of their agricultural surplus commodities overseas.

In the 1960s, when it was acknowledged that food aid may hinder for developing self-sufficiency, the concept of food for development was introduced and institutionalized. The creation of the World Food Program (WFP) in 1963 is one prominent example.

Figure 1: The evolution of Food and Nutrition Security concerns



The food crisis of 1972/74 marked a dramatic turning point from the past era of food abundance of donor countries to highly unstable food supplies and prices on the world market. As a result, food security insurance schemes, which assured international access to physical food supplies, were developed in the 1970s.

Improved food security assurance was to be achieved through better coordination among donor organizations and agencies and food availability surveillance in recipient countries.

In the 1980s, following the success of the green revolution which helped to increase food production (food availability), it was recognized that food emergencies and even famines were not caused as much by catastrophic shortfalls in food

production as by sharp declines in the purchasing power of specific social groups. Therefore, food security was broadened to include both physical and economic access to food supply. In this decade, poverty alleviation and the role of women in development was promoted.

In the 1990s, concrete plans were defined to eradicate or at least reduce hunger and malnutrition drastically. In addition, the human right to adequate food and nutrition was internationally reaffirmed and committed national governments to a more proactive role. Finally, reduced international public support of donor agencies reduced food aid to crisis management and prevention.

In the 2000s, decreasing hunger and malnutrition has increasingly come to be seen in the context of overall development, poverty reduction and the achievement of the Millennium Development Goals (SCN 2004). These internationally accepted development targets can only be achieved, if adequate food and nutrition are ensured for all members of a society (see also chapter 6.2).

3. A holistic understanding of Food and Nutrition Security

Food security historically referred to the overall regional, national, or even global food supply and shortfalls in supply compared to requirements. But, with increased observation of insufficient food intake by certain groups (despite overall adequacy of food supply), the term has more recently been applied mostly at a community, local, household or individual level (Foster 1992). Further, the term has been broadened beyond notions of food supply to include elements of access (determined by food entitlements, Sen 1981), vulnerability (Watts and Bohle 1993), and sustainability (Chambers 1989) (see also Maxwell 1995).

However, food security is a concept that has evolved over time. The most common definitions vary around that proposed by the World Bank (1986) and were summed up by Maxwell and Frankenberger as "secure access at all times to sufficient food for a healthy life" (1992, p.8). In their exhaustive review of the literature on household food security, they list 194 different studies on the concept and definition of food security and 172 studies on indicators (Maxwell 1995). A review that updates this literature (Clay 1997) provides an additional 72 references[2]. IFPRI (1999) listed approximately 200 definitions and 450 indicators of food security. An article by Gross et al. (1998) provides a synthesis of different concepts and the models of nutrition and FNS.

According to a currently accepted definition (FAO 2000), **'Food Security'** is achieved when it is ensured that “all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life”. Food is here defined as any substance that people eat and drink to maintain life and growth. As a result, safe and clean water is an essential part of food commodities.

The **nutrition** focus adds the aspects of caring practices and health services & healthy environments to this definition and concept. 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 (Quisumbing 1995 p. 12).

[2] Both publications are recommended to development practitioners who are interested in understanding the development of the concept of food security. Other recommended reviews of this literature are Riely et al. (1995), Chung et al. (1997), and Christiaensen and Tollens (1995).

Figure 2: Definition of Food and Nutrition Security

"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."

This definition combines food and nutrition security and emphasizes several aspects, i.e., ***'Availability'***, ***'Accessibility'***, and ***'Use and Utilization'*** of food. The inclusion of the use and utilization aspect underscores the fact that ***'Nutrition Security'*** is more than ***'Food Security.'***

A holistic understanding of FNS stresses the various dimensions of the concept:

1. **categorical aspects**,

2. **socio-organizational aspects**, and

3. **managerial aspects**.

Each is discussed below.

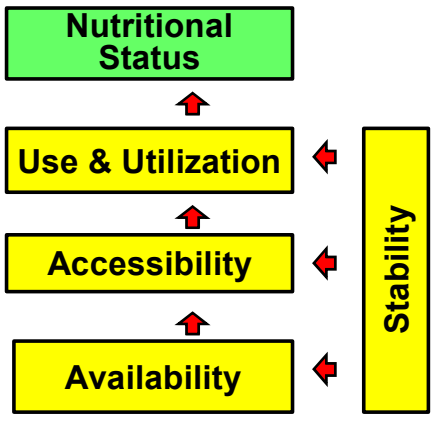
4. Aspects of Food and Nutrition Security

4.1 The categorical aspects

4.1.1 The conceptual framework of food security

Figure 3 illustrates the relationship among the categorical elements within the conceptual framework of **food security**.

Figure 3: Food security and nutrition



Two factors influence the framework: a physical and a temporal factor. The physical determinant is the food flow: Availability → Accessibility → Use and Utilization.

The **temporal determinant** of FNS refers to stability, which affects all three physical elements.

In this context **availability** refers to the physical existence of food, be it from own production or on the markets. On national level food availability is a combination of domestic food production, commercial food imports, food aid, and domestic food stocks, as well as the underlying determinants of each of these factors. Use of the term availability is often confusing, since it can refer to food supplies available at both the household level and at a more aggregate (regional or national) level. However, the term is applied most commonly in reference to food supplies at the regional or national level (Riely et al 1995, p 21).

Access is ensured when all households and all individuals within those households have sufficient resources to obtain appropriate foods for a nutritious diet (Riely et al. 1995). It is dependent on the level of household resources – capital, labor, and knowledge – and on prices. Note that adequate access can be achieved without households being self-sufficient in food production. More important is the ability of households to generate sufficient income which, together with own production, can be used to meet food needs.

Food access also is a function of the physical environment, social environment and policy environment which determine how effectively households are able to utilize their resources to meet their food security objectives. Drastic changes in these conditions, such as during periods of drought or social conflict, may seriously disrupt production strategies and threaten the food access of affected households. To the extent that these shocks often lead to the loss of productive assets such as livestock, they also have severe implications for the future productive potential of households and, therefore, their long-term food security (Riely et al. 1999, p 22).

Use of food refers to the socio-economic aspect of household food security. If sufficient and nutritious food is both available and accessible the household has to make decisions concerning what food is to be purchased, prepared and consumed (demanded) and how the food is allocated within the household. In households where distribution is unequal, even if the measured aggregate access is sufficient, some individuals may suffer from food deficiency. The same is true if the composition of the consumed food is unbalanced. Another aspect is the social function that food can have in terms of community cohesion through offerings, ritual meals etc. especially in food deficit times. All these socio-economic aspects are determined by knowledge and habits. This is especially critical for feeding infants (breast feeding, weaning foods etc.).

Focusing on the individual level food security also requires taking the biological **utilization** of food into consideration. This refers to the ability of the human body to take food and convert it into either energy which is either used to undertake daily activities or is stored. Utilization requires not only an adequate diet, but also a healthy physical environment, including safe drinking water and adequate sanitary facilities (so as to avoid disease) and an understanding of proper health care, food preparation, and storage processes.

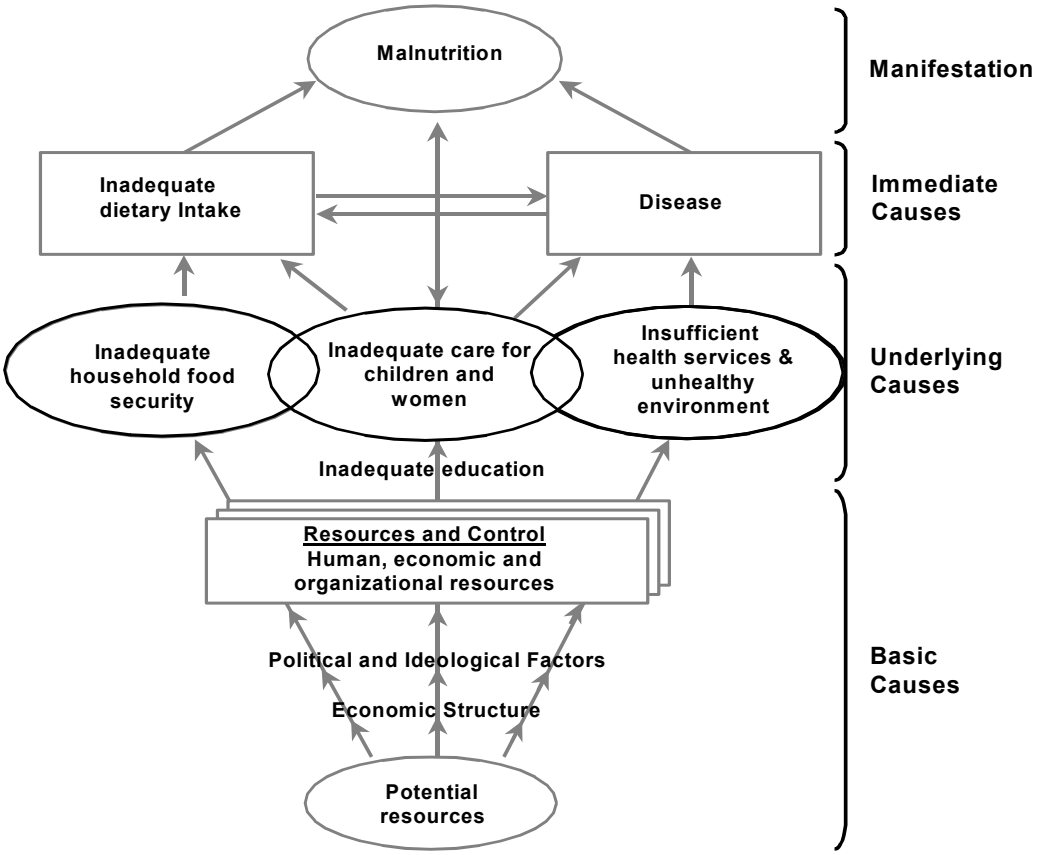
Stability or sustainability refers to the temporal dimension of nutrition security i.e. the time frame over which food security is being considered. In much of the food security literature, a distinction is made between *chronic food insecurity*—the inability to meet food needs on an ongoing basis – and *transitory food insecurity* when the inability to meet food needs is of a temporary nature (Maxwell and Frankenberger 1992). Transitory food insecurity is sometimes divided into two subcategories:

- cyclical, where there is a regular pattern to food insecurity, e.g., the ‘lean season’ or ‘hungry season’ that occurs in the period just before harvest, and
- temporary, which is the result of a short-term, exogenous shock such as droughts or floods. Also civil conflict belongs to the temporary category, although their negative impact on food security often continues over long periods of time.

4.1.2 The conceptual framework of malnutrition

Figure 4 shows the conceptual framework of malnutrition, developed by UNICEF and widely accepted at the international level. Although mainly used in the context of under-nutrition in rural areas of developing countries, it is also applicable to overnutrition in an urban context. According to this framework, malnutrition occurs as a result of a number of factors which directly and indirectly cause malnutrition.

Figure 4: Conceptual framework of malnutrition (UNICEF 1991)



The **immediate causes** of the nutritional status manifest themselves at the level of the individual human being. These are dietary intake and health status. These factors themselves are interdependent. **Dietary intake** must be adequate in quantity and in quality, and nutrients must be consumed in appropriate combinations for the human body to be able to absorb them (energy, protein, fat, and micronutrients). On household level the decision what food is being put on the table (demand) and who is to eat it (intra-household distribution) determines the composition of the meals for the individual. Habits (e.g. food taboos) and knowledge (e.g. preparation, processing, child feeding practices) influence the composition but also the biological utilization of the food. There are strong synergistic relationships between the **health status** and the nutritional status. A sick person is likely to lose his/her appetite, thus eating a poor diet, digest his/her food poorly and must use some of his nutrients to fight infection. A poorly nourished person has a weakened immune system and is more prone to infections. Infections increase the potential for and severity of malnutrition. In developing countries, infectious diseases, such as diarrheal diseases (DD), and acute respiratory infections (ARI), are the most important nutrition-related health problems.

The immediate causes of the nutritional status are, in turn, influenced by four **underlying causes** manifesting themselves at the household level. These are adequate household food security (availability and access), adequate care for mothers and children (specifically relevant in the case of child nutritional status), a proper health environment as well as access to health services. Associated with each is a set of **basic causes** for achieving them which are briefly outlined below (Smith and Haddad 1999, p 12).

The resources necessary for gaining **access to food** are food production, income for food purchases, or in-kind transfers of food (whether from other private citizens, national or for-

eign governments or international institutions). Whether or not enough food is available (**food availability**) is determined, aside from own household production, by the market supply which originates from the combination of domestic food stocks, commercial food imports, food aid and domestic food production.

Caring capacity, the second underlying determinant, is the provision in households and communities "of time, attention, and support to meet the physical, mental, and social needs of the growing child and other household members" (ICN 1992). Examples of caring practices are child feeding, health seeking behaviours, support and cognitive stimulation for children, and care and support for mothers during pregnancy and lactation. The adequacy of such care is determined by the caregiver's control of economic resources, autonomy in decision making, and physical and mental status. Decisive to execute control is the caretaker's status relative to other household members. A final resource for care is the caretaker's knowledge and beliefs. (for an in depth study see Smith and Haddad 1999).

The third underlying cause of the nutritional status is the availability of a functioning **health service.** They have a direct impact on morbidity and mortality and in consequence on the nutrition status. A further key issue which plays a role is the caretaker's knowledge about health and nutrition related topics (specifically child feeding practices and hygiene).

The last cause refers to the environmental conditions. They play a crucial role in influencing the nutritional status via the health situation and mainly include the availability of safe water, sanitation, and environmental safety, and shelter. Water and sanitation improvements, in association with changes in hygiene behaviour, can have significant effects on a population and its health by reducing a variety of conditions for diseases such as diarrhea, intestinal helminthes, guinea worm, and skin diseases. These improvements in health can, in turn, lead to reduced morbidity and mortality and improved nutritional status. (see Billig et al. 1999).

Finally, the general socio-economic and political conditions of a country influence the causes of nutrition (and poverty). These include the potential resources available within the natural environment of a country or community, access to technology, and the quality of human resources. Political, economic, cultural, and social factors affect how these potential resources and used for food security, care and health services and a safe environmental (see Smith and Haddad 1999). These factors are considered basic causes that contribute to malnutrition.

This model relates the causal factors for malnutrition with different social-organizational levels. The immediate causes affect individuals, the underlying causes relate to families or households and communities, and the basic causes are related to the sub-national, the national and the regional level (see chapter 4.2.1).

4.1.3 The conceptual framework of the nutritional status at household level

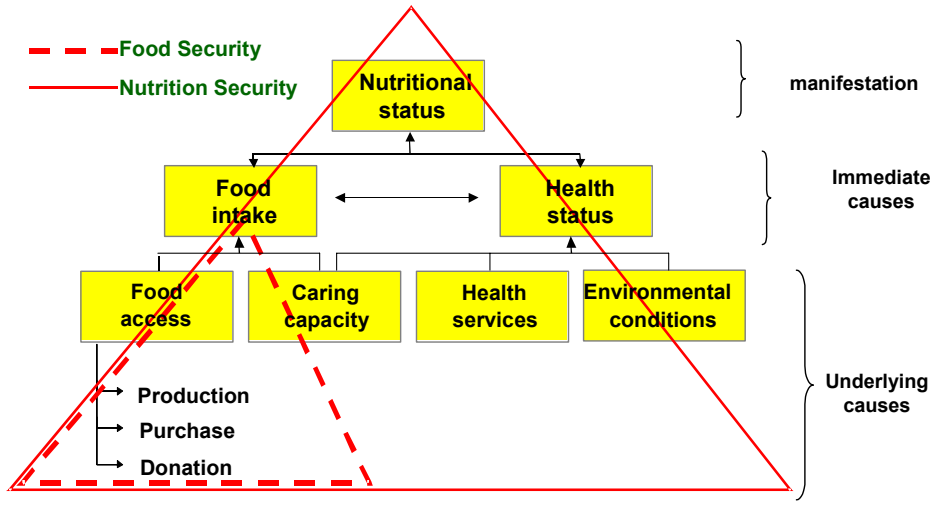
Figure 5 depicts a simplified **causal model of linking nutritional status with causal factors at household level**. In this conceptual framework, the **nutritional status** is an outcome of **food intake** and **health status**. However, the underlying causes of health – **environmental causes** and **health services** – have been depicted in different boxes due to their different natures. A reduced state of health may be due in part to tenuous access to health care, poor housing and environmental conditions, and is possibly worsened by malnutrition, which predispose individuals to diseases. The distinction between health services and environment is necessary to select appropriate intervention strategies.

The four underlying causes of food intake and health status are influenced by several determinants. In addition, each determinant has several contributing factors. For example, as shown in Figure 5, **access to food** is affected by food production, food purchase and/or food donation. This conceptual framework emphasizes the difference between **'*Food Security*'** and **'*Nutrition Security*'**. The first refers to the area of causes and effects of *food availability*

at household level (= access to food), here illustrated as the small, dotted triangle. The latter refers to the entire relationships, depict in the larger lined triangle.

Figure 5 suggests another important fact that should be taken into consideration when designing programs, i.e., the less direct the relationship between a causal factor of malnutrition and the nutritional status, the more time is required to improve the situation.

Figure 5: Conceptual framework of the nutritional status at household level



Source: Gross et al. (2000)

4.1.4 Food, health and nutrition

The two most commonly used conceptual frameworks show significant differences: (1) The food security framework emphasizes an economic approach in which food as a commodity is a central focus. (2) The nutrition security or malnutrition framework adopts a biological approach in which centres on the nutritional status of the human being.

However, common to both frameworks is the promotion of an interdisciplinary approach to ensure FNS. Both acknowledge that food alone is not sufficient to secure a sustainable satisfactory nutritional status and, therefore, aspects of health must be considered. As a result, nutrition is the function of food intake and health status (illustrated in Figure 6).

Figure 6: Food, health and nutrition

The conceptual framework of FNS (Figure 5) integrates the food security and the malnutrition framework. Although each starts from a different conceptual perspective, both arrive at similar program design by using common instruments and processes.

4.2 The socio-organizational aspects

4.2.1 Levels of social and administrative organization

The categorical elements of FNS, i.e., availability, access, use & utilization and stability, are relevant to all levels of social and administrative organizations (Table 1), from the individual and the household (**micro level**), to the community (sub-district, district and province) or **meso level**, and the nation and the global level (**macro level**). However, the relative importance of each determinant of malnutrition (as presented in Figure 4) changes with the level of social organization. At higher levels of social organization the overall political, economic and ecological conditions become more important. Given the diverse nature of the determinant factors of human nutritional status, and the different levels of society in which they interact, FNS will necessarily have to involve aspects from both the natural sciences and the social sciences. As a result, the relevance of FNS at all socio-organizational levels and the interaction between these levels stresses the importance of an interdisciplinary approach of FNS.

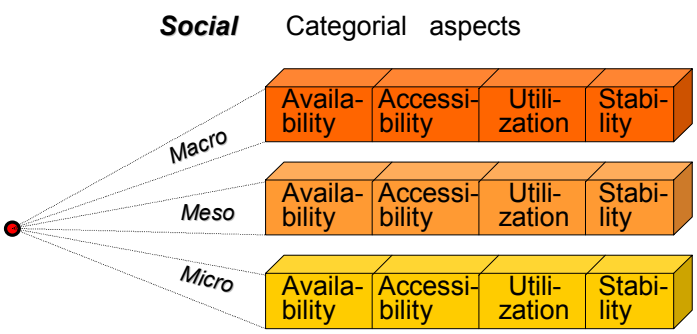
Table 1: Levels of social and administrative organization

Macro	**World**	
	Region	
	Nation	
Meso	**Community**	**Province / City**
		District / Town
		Village
Micro	**Household / Family**	
	Individual	

4.2.2 Food and Nutrition Security at the different social/administrative levels

Figure 7 illustrates a merging of the categorical and the socio-organizational dimensions. *Availability, Accessibility, Use & Utilization* of food and the *Stability* of these three elements differ in their nature, causes and effects at the *Macro*, *Meso* and *Micro* level respectively. For example, food may be available in a country but not in certain disadvantaged districts or among discriminated population groups. The seasonality of food availability and utilization, for example, due to cyclic appearance of diseases, may be a rural but not an urban phenomenon.

Figure 7: Food and Nutrition Security at different levels



The same merger could also apply to the malnutrition framework with its categories: *Food*, *Care*, *Health* and *Environment*. However, these four categories affect, and are affected differently at each of the specific socio-organizational level.

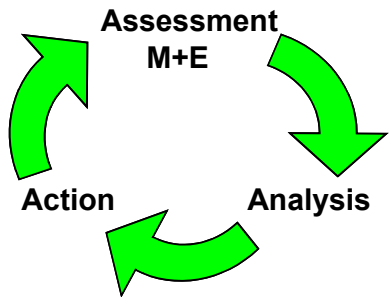
4.3 The managerial aspect

4.3.1 The project cycle management

The third dimension is the **managerial aspect** of FNS projects and programs. As shown in Figure 8, management follows the classical project cycle, which may have different names in different organizations (UNICEF: Triple A (Assessment - Analysis – Action), GTZ/DWHH: Project Cycle Management (PCM)). However, all development agencies agree that program implementation follows a cyclic learning process consisting of the following steps:

Assessment ⇨ Analysis ⇨ Action/Intervention ⇨ Monitoring & Evaluation (or Re-assessment)

Figure 8: Concept of Triple A or Project Cycle Management (PCM)

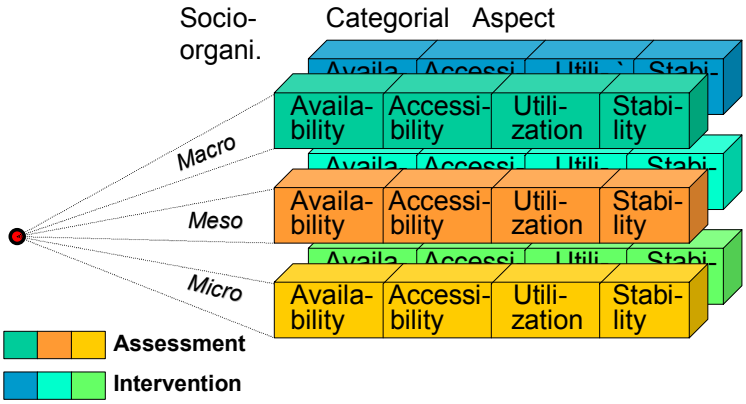


The current situation and problems are identified through assessment. Feasible solutions or actions can then be elaborated based on a comprehensive analysis of causes of problems and their causal relationship. This process is essential to implement the efficient, sustainable, and acceptable actions required to improve the FNS situation of the targeted risk groups. More details are presented in BP VIII.

4.3.2 Assessment and intervention in Food and Nutrition Security at different social and administrative levels

Figure 9 illustrates FNS in three dimensions (categorical, socio-organizational, and managerial). It should be noted that the instruments and processes selected for assessment are specific, but also interlinked. Measures to assess the availability of food at the **macro** level are different from those used at the **meso** or **micro** levels. The same observation applies for instruments and processes selected for program implementation with respect to food availability at the three levels. Despite these differences, **all elements are interrelated vertically and horizontally by nature, cause and effect**. For example, inappropriate assessment of food availability may lead to the formulation of ineffective interventions that actually reduce access and utilization.

Figure 9: Assessment and intervention in Food and Nutrition Security at different social and administrative level



As indicated throughout, FNS is a complex system. Food and nutrition insecurity at different socio-organizational levels are caused by different factors and requires specific solutions. Consequently, an effective **FNS program needs a holistic program approach.**

4.3.3 Examples of instruments to assess Food and Nutrition Security at different social and administrative levels

During all stages of the PCM there is a need for the continuous collection of information to define targets, to select appropriate interventions, and to monitor and evaluate program progress, process and impact. Table 2 provides selected examples of assessment instruments related to the different categories of FNS at macro, meso, and micro level.

Table 2: Examples of instruments to assess Food and Nutrition Security Situation at different social levels

Social Level	Availability	Accessibility	Use & Utilization	Stability
Macro	Precipitation Record Food Balance Sheet	Vulnerability Analysis and Mapping (VAM)	Demographic and Health Surveys (DHS)	Global Information and Early Warning System (GIEWS) Health Surveillance System (WHO)
Meso	Food Market Survey	Food Focus Group Discussion	District Health Survey	Anthropometric Survey of Children
Micro	Agricultural Production Plan	Intra-household Food Frequency Questionnaire	Immunization Chart	Weighing Chart of Pregnant Women

At the **macro** level, precipitation records can predict future food production. Food balance sheets provide information on food availability at national level. The World Food Programme (WFP) developed the Vulnerability Analysis and Mapping (VAM) project to analyze the vulnerability to food insecurity of target populations. A prominent part of VAM is related to access to food. The Demographic and Health Survey (DHS), funded by USAID, provides health data for many countries to help them design their national policy. FAO has developed the Global Information Early Warning System (GIEWS) which collects data related to temporary food insecurity. Under the leadership of WHO, several health surveillance systems have been developed and implemented to monitor the epidemiology of various forms of malnutrition and of selected diseases.

At the **meso** or sub-national level, food market surveys provide data on the availability of food. Qualitative surveys, such as food focus group discussions, provide information on accessibility to food for those in greatest need. District health surveys describe health conditions that may reflect food utilization problems. For quantitative situation analysis, food and nutrition security programs assisted by GTZ use the standardized BASELINE survey method.

Finally, agricultural production surveys, intra-household food frequency interviews, immunization surveys and anthropometric surveys of children under five can be used to assess the availability, accessibility, and use & utilization of food and its stability at **micro** level.

4.3.4 Most common Food and Nutrition Security indicators at different social and administrative levels

Table 3 shows examples of the most commonly used FNS indicators at different social levels according to the matrix found in Table 1. National food availability depends on supply and demand. Therefore, data on the production of different food commodities, fertility rate and the trends in internal population should be reviewed to determine the national situation of food availability. Food prices and per capita food consumption are indicators for national food ac-

cessibility. The rates of stunting, wasting and underweight in children, low Body Mass Index (BMI) in adults, and low birth weight (see BP II and IV) are FNS impact indicators that designate the extent to which food is adequately being used and utilized and converted into a satisfactory national nutrition situation. Fluctuations in food prices and regional shortages of food availability or accessibility are sensitive indicators for national food and nutrition instability.

Table 3: Examples of most common FNS indicators at different social and administrative levels

Social Level	Availability	Accessibility	Use & Utilization	Stability
Macro	Food production fertility rate population flows	Food price wages per capita food consumption	Stunting rate wasting rate LBW rate	Food price fluctuation regional gaps
Meso	Harvesting time staple food production	Market and retail food prices	Latrine coverage DD rate	Pre-/post harvest food women's BMI
Micro	Food storage consumption of wild foods	Meal frequency food frequency employment	Weight-for-age goiter anemia	Pre-harvest food practices migration

At the meso level delayed harvest time and reduced staple food production are indications of reduced food availability. Food prices are sensitive indicators for accessibility. Types of sewage disposal and diarrheal diseases (DD) rates provide information on the effectiveness of food utilization. The comparison between pre and post harvest food availability and accessibility as well as chronic energy deficiency of women (low BMI) indicate temporal food and nutrition insecurity.

The lack of stored food and the consumption of wild foods are indicators for reduced food availability at household level. A reduced number of meals per day and increased rate of under or unemployment may indicate low food accessibility. Appearance of wasting, goiter or anemia among household members are outcome indicators of reduced food utilization at micro level. Finally, changes in pre-harvest food consumption practices and migration may be sensitive indicators for temporal food insecurity.

4.3.5 Examples of intervention instruments of Food and Nutrition Security at different social and administrative levels

Using the systematic approach outlined above, Table 4 shows some examples of interventions in the four categories of FNS at different socio-organizational levels.

Table 4: Examples of implementation tools in Food and Nutrition Security programs at different social levels

Social Level	Availability	Accessibility	Utilization	Stability
Macro	Agriculture and trade policies Family Planning Program	Price policy Food Stamps Program	Safe Motherhood Program	Saving and Loan Policy
Meso	Small-scale Irrigation Project	School-feeding Program	Measles Immunization Campaign	Community Planning Committees
Micro	Use of fertilizer	Breast-feeding Coaching	Latrine Construction Growth chart	Food storage

For example, in addition to a sound agricultural policy that boosts agricultural production, family planning programs may be important to insure long term food availability. Food stamp programs can increase food accessibility for the most vulnerable groups. National safe motherhood programs can reduce fetal malnutrition and thus increase the utilization of food by small children. The formulation of a saving and loan policy, within the national banking system, can assist small enterprises and help to reduce seasonal food insecurity (**macro** level). Small-scale irrigation projects, school feeding programs, measles immunization campaigns, or the creation of community planning organizations are instruments to achieve food security at the **meso** level. Finally, some examples of FNS interventions at the micro level are increasing the area of agricultural production through the use of fertilizer, breast-feeding counseling for young mothers, and the construction of latrines and food stores.

The systematic approach shown in the tables above uses the same instruments and processes for assessment and intervention if the four categorical elements of the Malnutrition Framework (*Food*, *Care*, *Health*, *Environment*) were inserted in the table above. Therefore, it makes little difference which framework – Malnutrition or Food and Nutrition Security – is used for the program design of FNS projects and programs.

BP III – VIII present instruments for assessment, analysis and action in FSN in detail.

5. Rational for investing in Food and Nutrition Security

There are a number of good reasons why it is imperative, profitable and worthwhile investing in food and nutrition security – now!

Basic need, humanitarian task and ethical obligation

Adequate nutrition is a basic human need. Only if people can satisfy their nutritional requirements on a regular basis, and use and utilize adequate and safe food with the respective energy, protein, vitamin and mineral content, is one of the most important precondition for an active, healthy and decent life fulfilled.

Box 1: Ensuring food and nutrition security is fulfilling basic needs and ethical obligations

„Hunger is one of the worst violations of human dignity. In a world of plenty, ending hunger is within our grasp. Failure to reach this goal should fill every one of us with shame. The time for making promises is over. It is time to act. It is time to do what we have long promised to do – eliminate hunger from the face of earth."

Source: Kofi Anan, Secretary General of the United Nations, at the World Food Summit: five years later in June 2002 in Rome

Prolonged lack of food and nutrients leads to various physical and mental impairments of human beings. It prevents children from growing into productive members of the society and be adults who are fully able to participate in the economic and social development of their countries. In extreme cases, it leads to premature death which could be prevented with relatively simple and inexpensive measures. Sustainable food and nutrition security is life saving for people today and beneficial for future generations. Hunger is a human catastrophe and unacceptable (Box 1) in a world which produces enough food for all (see BP II) and which knows enough about appropriate solutions to the problem (see BP VI-VIII).

Human rights

Food insecurity and malnutrition are viewed as a lack of human rights. The International Covenant on Economic, Social and Cultural Rights adopted by the United Nations General Assembly in 1966 defined and formalized the right to food as a basic human right, which had

already been mentioned in the Universal Declaration of Human Rights of the United Nations in 1948.

Box 2: The right to food

"Every man, woman and child has the inalienable right to be free from hunger and malnutrition in order to develop fully and maintain their physical and mental faculties."

Source: United Nations 1974

However, "today, 800 million men, women and children are denied the most basic human right of all: the right to food."

Source: Kofi Annan, Secretary General of the United Nations

Considering food and nutrition security to be a basic human right of every individual means that no compromise is acceptable concerning the right to food (WFS 1996a). The right to food imposes obligations on states to respect, protect and fulfill food and nutrition security (Robinson 1999). And apart from the obligations of national and local governments, others also have duties: communities, families, parents, as well as the international community (SCN 2004, p. 27).

Commitment 7 of the World Food Summit Plan of Action (1996) requests the UN High Commissioner for Human Rights (WFS 1996b) "… to clarify the content of the right to adequate food and the fundamental right of everyone to be free from hunger, as stated in the International Covenant on Economic, Social and Cultural Rights and other relevant international and regional instruments, and to give particular attention to implementation and full and progressive realization of this right as a means of achieving food security for all".

This clarification has been achieved the adoption of the Resolution on the Right to Food by UNHCR and the adoption of the General Comment 12 on the Right to Food by the international community (Haddad 1999). For the first time, this comment provides a comprehensive and authoritative interpretation of the human right to adequate food.

In addition, the international community is currently working on the elaboration of a "Code of Conduct" for the implementation of the right to food, which will provide important guidelines for future activities in the field of food and nutrition security.

Economic considerations

Malnutrition among adults and children has serious consequences. These are low birth weight of babies and a perpetuation of malnutrition over generations, decreased physical and mental abilities with lower capacities for learning and working, specific and partly irreversible physical impairments, increased susceptibility to infections and increased mortality. The World Health Organization (WHO) estimates that more than half of the annual 11 million child deaths can be attributed directly or indirectly to malnutrition.

Malnutrition is one of the most important causes of underdevelopment and poverty (see chapter 6.2). Investments in nutrition are investments in human capital. These investments support men, women, boys and girls who can only then use their growth and development potential for the development of their families and societies once such investments in nutrition have been made.

The World Bank (World Bank, McGuire 1996, Phillips and Sanghvi 1996) assumes that investments in nutritional programs are efficient investments. Cost-benefit analyses show that – depending on the program approach – 0.9 to 84 US$ per 1 US$ invested are gained through increased remuneration and decreased incapacity to work. This is achieved through

the impact on adult labor force participation and productivity, on improved health and school performance and ultimately on economic growth investments in nutrition (FAO 2001b).

The gains from reduction of malnutrition are substantial. In Pakistan, school enrolment rates increased substantially (2 percent for boys and 10 percent for girls) when nutrition improved – measured through increased height-for-age. Nutrition education, vitamin A supplementation and breast feeding promotion are among the most cost-effective public health interventions in terms of disability adjusted life years (DALYs)[3] gained (World Bank 2001).

Box 3: Investing in food and nutrition security pays

„We do not have the excuse that we cannot grow enough or that we do not know enough about how to eliminate hunger. The cost of inaction is prohibitive. The cost of progress is both calculable and affordable."

Source: FAO (2002), p. 4

According to a FAO proposal for an Anti-Hunger-Programme, public investment of US$ 24 billion a year would be enough to jump-start an accelerated campaign against hunger that could reach the target of halving hunger and malnutrition by the year 2015. These costs are very low compared to the more than US$ 300 billion that the OECD nations transferred in 2001 to support their own agriculture. The payoff of investing in food and nutrition security would be impressively high. FAO has estimated that freeing several hundred million people from hunger – as formulated in the above mentioned target – would yield at least US$ 120 billion per year in benefits as a result of longer, healthier and more productive lives (FAO 2002, p.4).

6. Cross cutting issues in Food and Nutrition Security

Food and Nutrition Security is linked to a number of cross cutting issues in development of individuals and societies. These include gender, poverty and poverty reduction, HIV/Aids as well as conflicts, crises and natural disasters.

6.1 FNS and gender

Women are the key to food and nutrition security (Quisumbing 1995). They play an important role as producers of food, as managers of natural resources, in income generation and as providers of care for their families. Yet, women often continue to have limited access to land (see Box 4), education, credit, information, technology and decision making bodies.

Women are thus impaired in fulfilling their potential socio-economic roles in food and nutrition security and in ensuring care, health and hygiene for themselves and their families. This is aggravated by the fact that women themselves are often more vulnerable or more affected by hunger and malnutrition than men, especially by iron deficiency and undernourishment during pregnancy and lactation.

[3] This is a commonly used indicator for assessing health interventions.

Box 4: Women's rights

In many developing countries, women produce most of the food consumed by their families and communities. Yet women rarely have secure tenure to the land they work. In Nepal, India and Thailand, for example, less than 10 percent of women farmers own land.

Although traditional land tenure systems rarely granted women outright ownership of land, they frequently protected their rights to work and manage enough land to provide for their families' needs. In many cases, those rights are now being eroded by changing socio-economic conditions, land shortages and tilting programs that fail to recognize the value either of customary tenure practices or of women's contributions to agriculture.

Improving access to land for women is essential to increase both food security and sustainable production. Only through such measures can it be ensured that women possess collateral and the security to invest in land and technology.

Source: FAO (2002), p. 27

A number of constraints limit women's ability to improve their own and their children's nutritional status. These include, e.g., fewer employment opportunities of poor women compared to men, significantly lower wages, less access to resources and information, less involvement in decision making, lower enrollment at school and earlier drop outs. In some countries, socio-cultural norms dictate that girls marry early in adolescence and have their first child soon thereafter. In conditions of gender inequality, women and girls are more poorly nourished throughout the life cycle, show higher rates of mortality, have less access to health care, and are subject to greater household food insecurity (UN SCN 2004, p. 15).

Researcher (IFPRI) found that

- Agricultural productivity increases dramatically when women get the same amount of inputs men get.
- Gender differences in property rights hinder natural resource management (see Box 4).
- Increasing women's human capital is one of the most effective ways to reduce poverty.
- Increasing women's assets raises investments in education and girls' health.
- Women's education and status within the household contribute more than 50 percent to the reduction of child malnutrition.
- Females in South Asia consistently fare worse than males on a number of health fronts, while girls in Sub-Saharan Africa do better than boys. The difference is linked to the relative value placed on boys and girls in these two regions.
- Good care practices can mitigate the effects both of poverty and low maternal schooling on children's nutrition.
- Women are at a disadvantage when food and nutrients are distributed within a household.

A number of studies have shown that improvements in household welfare depend not only on the level of household income, but also on who earns that income. Women, relative to men, tend to spend their income over-proportionately on food for their families. Women's incomes are more strongly associated with improvements in the health and nutritional status of their children than men's incomes (Quisumbing et al. 1995).

Empirical results leave no doubt that a higher status of women has a significant, positive effect on children's nutritional status in South Asia, Sub-Saharan Africa, and Latin America and the Caribbean. They further confirm that women's status impacts child nutrition because women with higher status have better nutritional status themselves, are better cared for, and provide higher quality care to their children. Raising women's status today is a powerful force

for improving the health, longevity, mental and physical capacity, and productivity of the next generation of young adults (Smith et al. 2003).

Measures to improve food and nutrition security have to take into consideration the gender specific differences, roles, tasks and interests of men, women, girls and boys in the food and nutrition system. They also have to explicitly address women and girls on order to close existing gender gaps and thus allow women to fulfill their potential in generating food and nutrition security.

6.2 FNS and poverty

Food and nutrition insecurity and poverty are closely interlinked in a vicious cycle. Hunger perpetrates poverty, since it prevents people from realizing their potential and making contributions to the progress of their societies. Hunger makes people more vulnerable to diseases. It leaves them weak and lethargic, reducing their ability to work and provide for their dependents. The same devastating cycle is repeated form generation to generation and this will continue to be so until we take effective action to break it. Reducing malnutrition is a cornerstone in reducing poverty.

Food insecurity and malnutrition – an outcome of poverty

A further key factor in FNS affecting all underlying causes is **poverty**. A person is considered to live in (absolute) poverty when he/she is unable to satisfy his or her basic needs – for example, food, health, water, shelter, primary education and community participation – adequately (Frankenberger 1996). The effects of poverty on child malnutrition are pervasive. Poor households and individuals are unable to achieve food security, have inadequate resources for care and are not able to utilize (or contribute to the creation of) resources for health on a sustainable basis.

Considering food insecurity and malnutrition to be a symptom or outcome of poverty and underdevelopment suggests that the availability of and access to food interact with the health and sanitation environment, and human behaviour and knowledge in giving rise to inadequate nutritional outcomes.

Food insecurity and malnutrition – a cause of poverty

Taking the view that nutritional well-being is a pre-condition for development one can argue that lack of productivity is partly a result of malnutrition. The nutritional well-being of the poor is thus not merely an outcome of development, but a pre-condition for it. The linkages between the two are both of a direct, short term nature, and of an indirect, long term one, whereby the latter also closely relates to population growth (von Braun 1999, Leisinger 1999).

Improved adult nutrition leads to higher physical productivity and higher national economic growth rates (WFS 1996a; von Braun et al 1998). Undernutrition has severe consequences in the economic and social development of people and countries. It is calculated that at least 50% of diseases are caused by malnutrition and more than one percent of the economic growth of the world economy is reduced due to malnutrition. Vice versa, undernutrition results in substantial productivity losses through, e.g., reduced physical and mental capacity, and high morbidity. Malnutrition also has effects on future generations. Undernourished pregnant women are at high risk of giving birth to children with low birth weight (Kracht and Schulz 1999; Martorell and Scrimshaw 1995; Pollitt 1995; ICN 1992).

The efforts of food-insecure households to acquire food may also have important implications for the environment and the use of natural resources. Malnourished people often live in ecologically vulnerable areas, and tend to use land-exploiting agricultural practices in their need

for higher food production. This in turn undermines their livelihoods and those of future generations (WFS 1996a).

Nutrition and population growth stand in a complex, long-term relationship. Improved nutrition leads among other factors to economic development. And there is a strong relationship between economic development and the demographic transition from a high birth rate and low life expectancy to longer life expectancy and later lower birth rates (WFS 1996a).

It is increasingly being recognized that food security and nutrition are foundations for development. Nutritional status of children is used as one of the key indicators for poverty reduction in the framework of the Millennium Development Goals (MDGs). This reflects the insight that policies, programs and processes to improve nutrition outcomes have a role to play in poverty reduction and global development. Food security and nutrition contribute to the attainment of more the one MDGs (see box). A food security and nutrition perspective can strengthen key development mechanisms such as poverty reduction strategies, health sector reform, improved governance, human rights and trade liberalization (SCN 2004, p. iii).

Box 5: Food and nutrition insecurity endanger the attainment of the MDGs

Goal 1: Eradicate extreme poverty and hunger
Food insecurity and malnutrition erode human capital, reduce resilience to shocks and reduce productivity (impaired physical and mental capacity).

Goal 2: Achieve universal primary education
Malnutrition reduces mental capacity. Malnourished children are less likely to enroll in school, ore are more likely to enroll later. Hunger and malnutrition reduces school performance.

Goal 3: Promote gender equality and empower women
Food secure and better nourished girls are more likely to stay in school and, subsequently, have more control over future choices.

Goal 4: Reduce child mortality
Malnutrition is directly or indirectly associated with more than 50% of child mortality. Malnutrition is the main contributor to the burden of disease in the developing world.

Goal 5: Improve maternal health
Maternal health is compromised by an anti-female bias in allocations of food, health and care. Food insecurity and malnutrition are associated with most major risk factors for maternal mortality.

Goal 6: Combat HIV/AIDS, malaria, and other diseases
Food insecurity spurs coping mechanisms, such as migratory labor and/or prostitution which increases the spread of HIV/Aids. Malnutrition hastens the onset of Aids among HIV-positive. Malnutrition weakens resistance to infections and reduces chances of survival for those who have malaria.

Goal 7: Ensure environmental sustainability
Food insecurity leads to unsustainable use of forest lands and resources.

Source: UN SCN (2004), p. iii and FAO (2002), p. 11

6.3 FNS and HIV/Aids

According to recent estimates (UNAIDS 2003), about 40 million men, women, boys and girls live with HIV/Aids. 25 million people have died of the disease since the HIV/Aids epidemic began. Every year about 5 million people are newly infected. 95 percent of the 12,000 people, who are newly infected every day, live in low and middle income countries, almost 2000 are children under the age of 15 years.

The disease is primarily infecting the most productive part of the population, i.e., people aged 15 to 49 years. About 50 percent of them are women and 50 percent are between 15 and 24 of age. Trend analysis shows that the largest number of affected people lives in Africa, which also shows the highest prevalence rates (up to almost 40% in Botswana and Swaziland). However, the prevalence (percentage of infected people) is steady. The highest incidence

(number of new cases in a year) of HIV/Aids is observed in countries of Eastern Europe and Central Asia as well as in China. The epidemic is growing in these regions.

The links between FNS and HIV/Aids work in two directions. On one hand, the HIV/Aids epidemic has massive impact on food insecurity and malnutrition of the infected people and their affected families and communities. The destructive power of HIV/Aids on food security and malnutrition is well known. On the other hand, food insecurity and malnutrition affect the outset and impact of HIV/Aids.

Food insecurity and HIV/Aids

As a lethal diseases HIV/Aids is different from most other food security shocks which are of limited duration and magnitude. Individuals and households suffer the permanent loss of productive labour. Food reserves are depleted, income and savings are diverted and assets depleted to meet food, health care and funeral costs. Agricultural workers, key decision makers and highly skilled professionals are lost. An increasing number of households are forced to seek support from the broader community whose coping mechanisms and self-help capacities are in danger of being overstretched. A downward spiral in the welfare of households and communities starts as soon as the first adult falls sick.

UNAIDS estimates that 42 million children will be orphans in Sub-Saharan Africa in 2010. This group is particularly vulnerable to food insecurity and malnutrition.

Box 6: HIV/Aids orphans

"Orphaning is a series of events, with the death of the parent the culminating one. We are ending up with millions of children who are unloved, unsocialized, and uneducated."

Alan Whiteside, University of Natal, South Africa

Existing social capital and long-standing social institutions are threatened. Governments that traditionally spend little of their public resources on health, education, safety nets and other social services are challenged to meet the demand for appropriate sustainable response to the epidemic. In addition, those professionals who are supposed to provide such services are dying prematurely and their competencies cannot be replaced quickly.

Conversely, food insecurity can also increase the risk of HIV/Aids at individual and household level, if, e.g., fatal coping strategies – such as prostitution and migration – seem to be the only way out of food insecurity for the hungry people.

Malnutrition and HIV/Aids

Individual nutritional status may influence a person's risk of infection. The already existing vicious cycle between malnutrition and infectious diseases, which affects many people in developing countries, is intensified through HIV. In addition, adequate nutrition is important because it may retard the progression from HIV to Aids-related diseases.

HIV also increases the body's nutritional needs. The risk of malnutrition increases significantly during the course of the infection. Recent WHO recommendations (WHO 2003) suggest that an adult's energy requirements increase by 10-30 percent, and a child experiencing weight loss needs 100 percent more energy. Data are insufficient to support an increase in protein requirements due to HIV/Aids. Similar findings are relevant for micronutrient requirements. Some micronutrient supplements may even produce adverse outcomes in HIV-infected populations. However, it is imperative to ensure intake of protein, vitamins and minerals at recommended levels (FAO/WHO 2002).

Antiretroviral drugs used for the treatment of HIV/Aids can interact with food and nutrients. They often have to be taken with food to mitigate side effects. Side effects, such as nausea,

vomiting, diarrhea and loss of appetite impact on the use and utilization of food and the adherence to drug regimes.

The mother-to-child transmission of HIV/Aids through breastfeeding, which is estimated to be 10-20 percent, is of special concern. Avoidance of breastfeeding is only recommended if replacement feeding is acceptable, feasible, affordable, sustainable and safe – conditions which often are not met in resource poor settings in developing countries. If one or more of these conditions cannot be fulfilled, exclusive breastfeeding is recommended for the first months of life (SCN 2004, p. 22).

Urgent action needed

HIV/Aids represents an enormous humanitarian and development challenge. However, experience in several countries, e.g., Uganda and Thailand, shows that this challenge can be met and that the epidemic can be stemmed. High levels of political commitment and effective strategies of prevention, care, treatment and mitigation are needed. Important elements are strong advocacy, dynamic leadership and political commitment at all levels, participatory programs that simultaneously address the food, health and care issues associated with HIV/Aids as well as mainstreaming of HIV/Aids considerations in agricultural and development policies and programs (FAO 2001a).

6.4 FNS in the context of conflicts, crises and natural disasters

Hunger and conflict often occur together. Conflict is one of the most common causes of acute food insecurity. More than half of the countries where undernourishment is most prevalent experience conflict. Conversely, food insecurity may lead to or exacerbate conflict, particularly when compounded by other shocks and stresses. The interface between food insecurity and conflict has critical implications for food security and conflict prevention programs alike (FAO 2002, p. 22). Conflict resolution and peacekeeping activities must be seen as vital tools in fighting hunger (FAO 2000, p. iv).

Natural disasters, mainly drought, but also floods, are the main cause of food emergencies. Many of the affected countries have been plagued by severe food shortages over several years, a decade or longer. E.g., drought has contributed to several famines in Africa with millions of people affected over the past 30 years (FAO 2003, pp. 12).

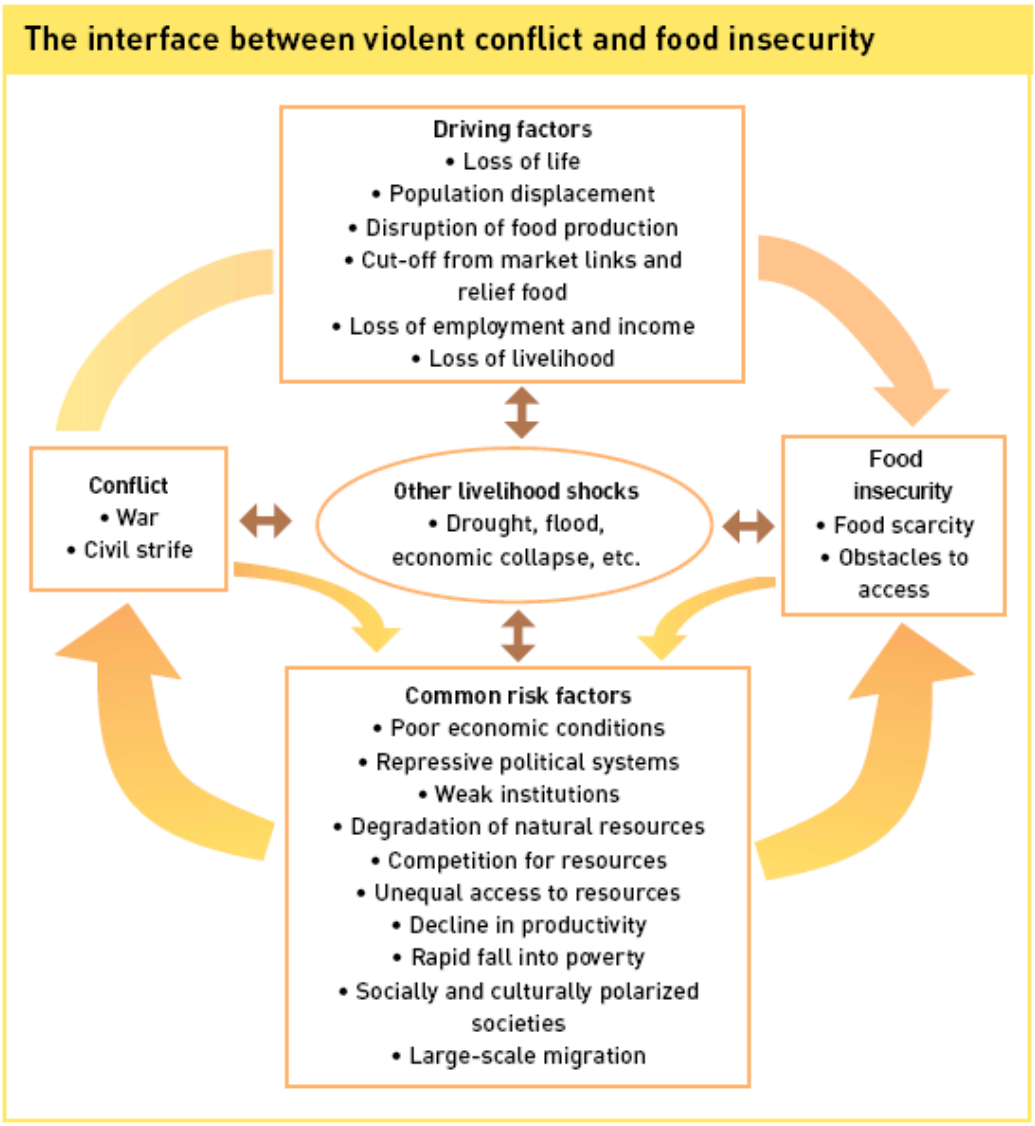
Human suffering, hunger and malnutrition achieve much attention in the context of conflicts, crises and natural disasters due to the media interest which they often attract. However, it is worth noting that hunger and starvation in this context is only the tip of the iceberg, and represent only about 10 percent of the hungry and malnourished people in the world. The great majority of the affected people suffer from chronic forms of hunger and malnutrition – more or less unnoticed and without media and often donor interest.

FNS in the context of conflicts and crises

Food and nutrition security and violent conflicts are closely related and interrelated. Violent conflicts – defined as crises in the context of the German development cooperation – are not merely significant causes of poverty and food and nutrition insecurity. Hunger and underdevelopment are also increasingly recognized as important factors which contribute to conflicts and crises. This leads to the expectation that specific measures can contribute to the mitigation of violent conflicts.

Violent conflicts influence the framework conditions under which the civil society has to fulfill its basic needs. The strategies of the actors of violence and the victors of war increasingly deprive the majority of the population of their basis of living and thus increase their economic and social vulnerability. These processes impede the production of, the access to and the use and utilization of food. The following relationships can be observed:

Figure 10: The interface between violent conflict and food security



Source: FAO (2002), p. 23.

a) Production of food

- Stopping or reducing of field work due to the security situation,
- Expropriation of land through expulsion,
- Devastation of arable land through landmines and overexploitation in the war economy,
- Destruction of productive infrastructure (irrigation systems, drinking water supply, local markets, seed banks etc.),
- Reduction of agricultural labor force through (forced) recruitments of young men and women, expulsion, injuries, mutilation, traumatization, and killing,
- Migration of laborers and specialists out of the conflict affected regions.

b) Access to food

- Limited scope for movement of the population due to the security situation and thus reduced access to local markets (for commercialization of local products and purchase of food),
- Looting of money and stocks,
- Blackmail, kidnapping, collection of 'war taxes' through armed groups,
- Letting people starve as an instrument of war.

c) Use and utilization of food

- Looting or destruction of health, education and sanitation infrastructure,
- Absence or insufficiency of extension and education services in the field of health, education and agriculture,
- Expulsion, injuries, mutilation, traumatization and rape of the civil population leading to insufficient use and utilization of food due to stress.

Under these circumstances the majority of the population try to produce minimum amounts of food or other products for survival. This includes diversification of incomes (subsistence agriculture, petty trade, looking for a job and migration) and redistribution within solidarity networks. Sometimes people are forced to reduce their assets in order to survive, e.g., eating of seeds and overuse of natural resources, which then endanger the basis for their long term food and nutrition security. Some coping mechanisms are not negative per se, but lead to further insecurity of the population because they change the social rules. The classical example is the takeover of traditional male tasks by women.

Food and nutrition security programs in the context of conflicts and crises need an integrated approach which takes into consideration the various structures, behaviors, and attitudes which could fuel the conflict. The objective of such programs is the creation of a stable and just society, which can ensure constructive processes of change – a situation which is described through the term 'structural stability' (Box 7).

Box 7: Definition: Structural Stability

"Structural stability embraces the interdependent and mutually reinforcing objectives of social peace, respect for the rule of law and human rights, social and economic development, supported by dynamic and representative political institutions capable of managing change and resolving disputes without resorting to violent conflict."

Source: DAC (1997)

Overcoming of food and nutrition insecurity quickly in (post)conflict situations reestablishing the preconditions for a healthy and productive life are crucial contributions for creating structural stability. The elimination of the conflict related causes of food insecurity risks as well as the creation of capacity and institution building for non-violent conflict resolution are important medium term contributions to sustainable development processes.

FNS in the context of natural disasters

Apart from political conflicts, natural disasters lead to acute food crises for many people in developing countries. At the same time, food and nutrition insecurity is an important factor which triggers the use of marginal lands and risk areas, and leads to further degradation of resources. This in turn leads to increased vulnerability to disasters.

Programs to improve food and nutrition security in the context of natural disasters aim in the first place at ensuring immediate and medium term food availability and food access. At the same time, a contribution has to be made to decrease the vulnerability of populations to future events through capacity development for prevention, preparedness and rehabilitation. Such measures are important at meso level and have to be supported by adequate decisions, strategies and programs at macro level.

Box 8 Natural disasters and food security – the link

Food and nutrition security and vulnerability to natural disasters are closely interlinked through various direct and indirect effects.

As a consequence of floods, droughts or earthquakes, harvests and market infrastructure can be destroyed which leads to an acute reduction of food availability and access to food. If productive infrastructure is also affected this could reduce the agricultural production in the medium term, thus reducing farmers income and possibilities to ensure access to food. People in urban and rural areas depending on non-farm job opportunities are endangered through long lasting economic crises which can often be observed in the aftermath of the natural disaster.

Conversely, food and nutrition insecurity and poverty increase the vulnerability to natural disasters. Poor people are less able to make provisions for natural calamities and often are forced to settle or work in risk areas. This, in turn, may increase the probability of certain natural disasters, such as landslides and floods.

Challenges of FNS in conflicts, crises and natural disasters

Food security and nutrition in situations of conflicts, crises and natural disasters must encompass three aspects:

- Managing acute emergency situations and formulate assistance in such a way that it promotes peace, recovery and rehabilitation,
- Preventing crises and natural disasters while preserving human dignity once the devastating event has taken place,
- Combating food insecurity and malnutrition as a cause and/or consequence of conflict, crises or natural disaster.

Organizations taking actions in such situations have to take into consideration the following issues (adapted from UN SCN 2002, p. 98):

- Apart from making resources available for immediate live saving actions, there is a need to allocate greater amounts of resources for the implementation of longer term more sustainable programs that promote food and nutrition security and actively seek to reduce vulnerability and risk of future disasters.
- Food aid resources for saving lives should be part of a more flexible system of response to food and nutrition emergencies. In addition, more resources should be made available for non food costs required to support food and nutrition security programs, such as health, water and sanitation activities, and to promote recovery.
- Food and nutrition interventions in conflict situations require more careful analysis of all the potential impacts (positive and negative) of delivering humanitarian assistance and should seek to maximize good and minimize harm.
- The scarcity of resources for humanitarian interventions often requires that aid is targeted to the groups considered most vulnerable. However, vulnerability is often defined using pre-existing assumptions (e.g., women, children and female headed households), which may or may not hold true within a particular context. It is imperative that vulnerability and population needs be accurately assessed, and assistance allocated accordingly. The 'Do no harm'-approach may require compromises in targeting in situations where food and nu-

trition insecure groups correspond to one conflict party. Under certain circumstances, interventions may do well to also target relatively better-off groups in order to support reconciliation rather than adding fuel to a conflict by excluding them.

7. Outlook

Hunger and various forms of malnutrition still affect millions of women, men, girls and boys worldwide (see Background Paper II). It impairs their chances of individual, family and community development and thus the development of whole nations. Current rates of progress are insufficient to achieve the Millennium Development Goals.

The ways to assess and analyze hunger and malnutrition (see Background Papers III – V) and to take appropriate action (see Background Papers VI – VIII) are known. It is up to the governments of the industrialized and developing countries to generate the political will to grant this topic priority, and to make the necessary resources available.

Box 9: Political will needed

"The problem is not so much a lack of food as a lack of political will. The vast majority of the world's hungry people live in rural areas of the developing world, far from the levers of political power and beyond the range of vision of the media and the public in developed countries. Except when war or a natural calamity briefly focuses global attention and compassion, little is said and less is done to put an end to the suffering of a 'continent of the hungry' whose 798 million people outnumber the population of either Latin America or Sub-Saharan Africa."

Countries that succeeded in reducing hunger were characterized by more rapid economic growth and specifically by more rapid growth in their agricultural sector. They also exhibited slower population growth, lower levels of HIV infection and higher ranking in the UNDP's Human Development Index. A few building blocks are identified in the foundation for improving food security – rapid economic growth, better than average growth in the agricultural sector, effective social safety nets to ensure that those who cannot produce or buy adequate food still get enough to eat, improved education – especially female education –, the status of women in the society, and functioning health services (see also BP VIII).

Source: FAO (2003), p. 4 and Smith (2003)

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