

## CONCEPTUAL ASPECTS OF FOOD SECURITY

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**Abstract.** Food security is considered a global issue, but it is also an indispensable element of national security and needs rigorous treatment at country level. Ensuring food security at country level is when the country's population is supplied with safe, harmless and appropriate food and with free, physical and economic access.

**Keywords:** *food security, levels of food security, national security*

### 1. General information

One of the main physiological problems faced by mankind along its development was - the issue of food security. Lack of food, access to drinking water was a consequence of thefts, social conflicts. One of the basic functions that the leaders of the countries met and fulfilled was also ensuring food security.

The main and first instinct a man has in this world is - the instinct to eat, for it is the basic foundation of the instinct for self-preservation.

Food security is considered a global issue, but it is also an indispensable element of national security and needs rigorous treatment at country level. Ensuring food security at country level is when the country's population is supplied with safe, harmless and appropriate food and with free, physical and economic access.

Throughout the development of economic theories, problems have arisen in ensuring food security. The most obvious view issues concerning food security belongs to T. Malthus, who believed that chronic food insecurity is associated with decreased fertility of land. He said that population grows in geometric expression, and natural arithmetic in natural resources, and in order to achieve balance between population and natural resources, there must be as many wars, contagious diseases and that is the only way to meet the human feeding needs. Malthus T. analyzed the increase of the population in his country, but he did not take into account the fact that during that period the population grew because of migration, not because of the birth rate [7].

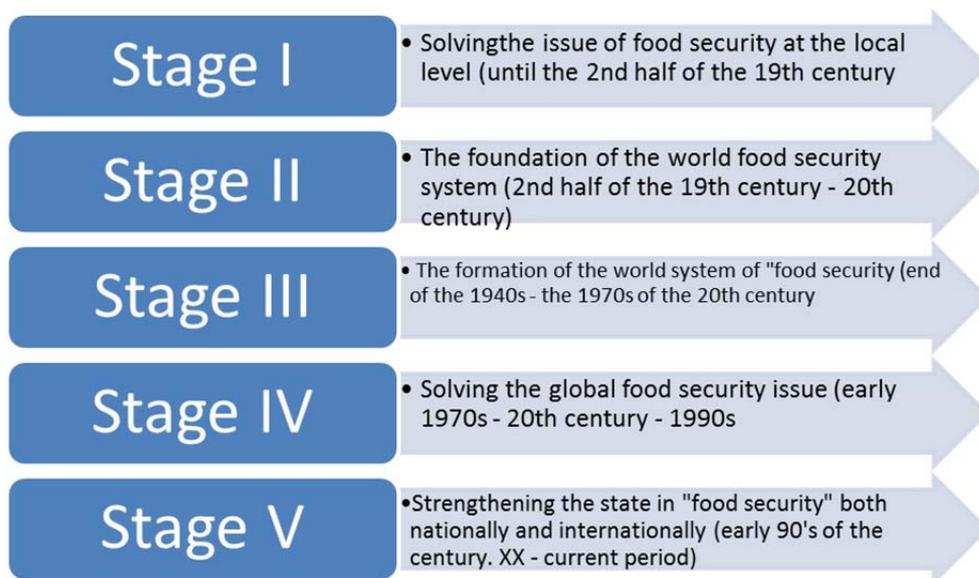
Later, the issue of food security was addressed in the light of the fact that the agro-food complex in many countries is not developing. In the 1970s, XX-th c., at the level of the world economy, the issue of food security had a contradictory character, if in developed countries there was an overproduction of food, then in the third world, the world suffered from hunger and mass malnutrition. This underpinned even greater aggravation of global food security, which served as a basis for increasing the gap between decent living and livelihoods. The global food security issue has led to countries with high capacities to help third world countries.

Currently, there is no an opinion and an universally accepted definition. Some approaches focus on "food security," others identify it with "food independence," and last but not least, the concept of "food safety" is also used.

However, confusion often occurs, for some scholars confuse the term "food security" with "food safety." Indeed, the given concepts have tangential points and marginality is very "fine", but "food safety" determines food innocuity and harmlessness based on quality standards, and in terms of food security we will try to deduce it after studying the views of scholars both autochthonous and international.

Addressing "food security" as a concept differs from generation to generation, from scholar to scholar, from society to society. Largely depends on the stage of development of society in which the determination of this concept takes place. The more the development of society takes place through the modernization of technologies, the more the food security rigor is growing.

The stages of development of the "food security" system depend on the level of society development that can be illustrated by a figure 1.



**Figure 1.** Stages of development of the "food security"

Source: elaborated the author

## 2. Discussion of the experimental study

The first stage in the development of the food security process was that in majority of countries it was based on the country's traditions. The function of redistributing the products belonging to the social categories of the society belonged to the state, but it also fulfilled only in exceptional cases.

A new stage of the development of economic thought led to the "birth" of the public security mechanism, which is characteristic for the end of the nineteenth century - the beginning of the 20th century, namely "replacement" of the state frontiers, and as a result have appeared "mobile" open companies. As a result of the changes, the function of redistribution of production came to the state institutions. It was during this period that the transition to a market economy took place, where obviously the main economic security instrument was the market. As a result of the changes in society, social discrepancies have

emerged in terms of structure and consumption patterns depending on the level of available income, territorial distribution and social affiliation.

As a world-class problem, food security was recognized only in the mid-twentieth century. The most decisive role in the formation of food security as an integral system has been played by international organizations, especially the UN.

Under the aegis of the United Nations, the right of all to food and hunger protection was officially registered in the Universal Declaration of Human Rights (1948) [21] and the International Covenant on Economic, Social and Cultural Rights (1966) [15]. The latter indicates not only human rights to freedom from hunger but also obliges the state to ensure the implementation of this right in practice.

When the world crisis on cereals occurred in 1972-1973, the UN proposed to use the concept of "food security".

Primordial global food security was considered as "Maintaining the food safety fundamentals in the food markets for all countries of the world. "This approach was declared by the UN General Assembly in 1974 in the Universal Declaration on the Elimination of Hunger and Malnutrition" And also in the Resolution" International Commitments to Ensure Food Security in the World" [17].

Also at the same conference in Rome in 1974, the Food and Agriculture Organization (FAO) has developed the International Food Security Assurance Strategy.

During the 1980s, there were cardinal changes in the harmony of the state of food security. It has been established that it predicts not only the availability of food on the world market and its regularity of supply, but also access to food for the entire population of the globe and nutritional quality at the standards to lead an active and healthy life.

In 1983, the FAO changed its concept of "food security" to include ensuring vulnerable people's access to available food, that is, the balance between supply and demand that is nothing but the food security equation: "ensuring that all people have at all times physical and economic access to the basic foods they need" [5].

The World Bank report "Poverty and Famine", presented in 1986, focused on the temporal action of food insecurity. It introduced "the widely accepted distinction between chronic food insecurity, associated with problems of continuing or structural poverty and low incomes, as well as transient food insecurity, which involved periods of increased pressure caused by natural disasters, economic collapse or conflict." This concept of food security is further elaborated in the terms "access of all people at all times to sufficient food for an active and healthy life" [9].

The UNDP Human Development Report of 1994 promoted human security, including a number of aspects of which food security was just one [16].<sup>3</sup> This concept has a close link with the human rights perspective on development, which, in its turn, has influenced food security discussions [4].

The concept of "food security" was fully highlighted in the Rome Declaration on Global Food Security in 1996. According to the Rome Declaration, food security has "dressed" the following form: "food security is a state of the economy in which the population of each country has the guarantee of access to food and drinking water in the quantity and quality necessary and sufficient for the physical and social development of the individual, health insurance and increased reproduction of the population"[20].

In 2001, FAO proposes a redefinition of food security: "Food security is a situation when all people at a time have physical, social and economic access to sufficient, safe and

nutritious food that meets their needs food and food preferences for an active and healthy life" [6].

**Naiken** [22] considers that the basic requirements for food security are:

- The energy used for the functioning of an individual in a state of complete rest (basal metabolic rate);
- Energy required for food digestion, food metabolism and storage and increased food consumption;
- Energy required to carry out physical activities, both in work and outside work.

Romanian researcher Banu C. in his paper "Sovereignty, safety and food security" states that "food security does not imply that the state assumes its obligations or legal mechanisms for the poorest (malnourished) to defend itself against those who can forbid them from access to food (large land plots, corporations, state authorities, etc.)"[1, p. 2].

According to Bulgaru M. "food security is given by the amount of food required for an individual, expressed in physical, conventional units (calories)", and trophins, in order to ensure their physiological balance and to cover their daily consumption rations: ration of maintenance, ration of growth and ration of activity "[2].

A significant contribution to the concept of food security have russian scientists such as Beleacov A., Altuhov A., Nazarenco V., etc.

In Table 1 the author presents the scientific approaches to the concept of food security from the point of view of different scientific schools. In the last period of time, the concept of food security has found a widespread not only in scientific literature but also in official documents elaborated at country level.

Table 1

### The concept of food security approach

Author	The concept of food security approach
Rome Declaration on Global Food Security, 13-17 November 1997 [23]	Food security is a state of the economy where the population of the country as a whole and each citizen individually have access to food, drinking water and other food products of the quality, range and volume necessary and sufficient for the physical and social development of the individual and the reproduction of the country's population
The concept of food security of the Eurasian Economic Community, adopted by the EURASEC Interstate Council Decision 11-19 dcembrie 2009 N° 464 [18]	Food security is understood as a state of state economy in which the country's food independence is ensured at the expense of its own production, the physical and economic availability of food and drinking water to the entire population is guaranteed in the quantity and quality required for an active and healthy life
The concept of improving food security of CIS Member States, adopted by Council Decision of CIS heads of government November 19, 2010 [19]	Food security is defined as a condition of the state economy where the country's food independence is ensured by its own production and the physical and economic accessibility of food and clean drinking water for the entire population in the quantity and quality required for an active and healthy life;

Table 1 (continuation)

Anderson [3, p.2]	The basic definition of food security is that it refers to the ability of individuals to get a sufficient amount of daily food. International food security is defined as the ability of people to provide adequate food. More specifically, it was defined by researchers as the access of all people at all times to sufficient food for an active, healthy life.
Hart [3, p. 3]	He noted that longest food security definition includes the phrase "at any time" and, as such, does not distinguish between different duration and intensity of food insecurity. In addition, food insecurity has a temporal dimension as well as an intensity. The temporal dimension may be chronic (long-term or persistent), transient (referring to short periods of extreme availability and access to food) as well as seasonal or cyclical. The dimension of intensity, on the other hand, refers to the size of the food gap. It is also important to have a good understanding of the vulnerability of concepts and food insecurity. Vulnerability has an external and internal dimension, and food insecurity has a temporal and intense dimension
Altuhov A [11]	Food security the capacity of the state to ensure that the need for food is attained at a level that ensures the usual existence
Beleacov A [24]	The country's food security is the permanent capacity of the state and society to ensure the availability of food for the entire population in the quantity and quality necessary for an active and healthy life
Ahmetova C [10]	Food security is a state of the economy where the food needs of the population are met in accordance with physiological norms; and food security is part of the national security of the country. Food security in many respects depends on the development of the agro-industrial complex
Serova E [14]	Food security, in the broadest sense, means the level of food availability for the majority of the country's population to maintain a normal lifestyle

Source: elaborated by the author

Unfortunately, so far, there is no scientific and normative basis in the Republic of Moldova which stipulates the main determinations, tools of food security. In the Republic of Moldova, the study on food security is reflected in the works of local scientists Stratan A., Perciun R., Bajura T., Artiomov L., Boaghi L., Mocanu N., Moroz V.

According to researcher Bajura T, "Food security is a major factor in the economic, social, and political stability of a country, region, and / or global. With different dimensions of approach, the food security category, in terms of the relatively free economic and physical access of consumers to these products (in a required volume and rich assortment), can be presented as a basic treatment" [12].

Mocanu N. has raised the threats to food security both at international and national level, so, "The specificity of the threat to food security (worldwide) is that the advancement of alternative sources of energy originates, first of all, in industrialized countries - the main producers of agricultural raw materials, therefore, the main suppliers of this matter on the international food market" [13].

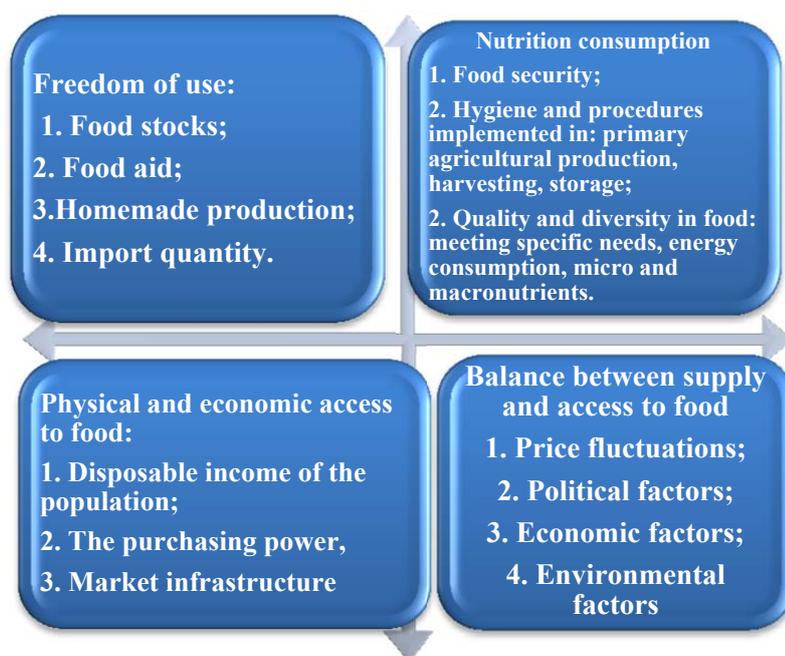
Regarding the existence of laws, doctrines or strategies on food security in the Republic of Moldova at the moment are not elaborated.

In the "National Security Project Conception of the Republic of Moldova " we can find the following objective regarding the food security "The credibility, safety and quality of the foodstuffs are fundamental criteria to which the Republic of Moldova will comply in order to ensure the protection of consumer health and the competitiveness of food products on internal markets and external markets. Taking into account the influence of this policy on the social and economic spheres, the elaboration and implementation of such a policy, as well as the surveillance of the pricing policy for the first products, the concrete measures to support the domestic producers, the quality of the imported products, including the genetically modified ones, constitute priority tasks for the agri-industrial sector institutions. In order to develop an agricultural sector with a production corresponding to the European and global requirements and a competitive quality, the competent institutions will undertake measures for the modernization of the production technologies, quality assurance throughout the process of production and distribution, promotion and development of the market.

Internal food security will be one of the priorities for the development of the agro-industrial sector. The principle "From a safer food to a healthy diet" will underpin the development of policies and action plans, the development and adoption of the regulatory framework in the area of food quality, safety and security, as well as the protection of consumer health. In order to protect the health of consumers, programs for monitoring the risks in the food chain will be developed and implemented [25].

Thus, we can conclude that in the "National Security Project Conception of the Republic of Moldova ", food security is regarded as a more limited concept but is in a clear correlation. By synthesizing the definitions of food security proposed by both foreign and native researchers, we can see that this concept is quite complex and multilateral.

According to the author, food security is the category that has its own power resources that regardless of what level, but that can satisfy consumers with enough food to lead a healthy lifestyle. By reviewing the ideas of several scientists, researchers, we believe that food security is a commitment of the state, both in physical and economic terms, to ensure that the population has quality food that that meet vital human needs and to lead a healthy life. We also believe that the state must develop the competitive environment of the agro-food complex on the basis of increased investment, because if the agro-food complex is developed then food security will be efficient. Summarizing the theoretical aspects of food security, we have the following pillars, figure 2:



**Figure 2.** The pillars of food security

Source: elaborated by the author

Each hierarchical level of the food security system has problem-solving subjects, table 2:

*Table 2*

<b>Subjects responsible for ensuring food security</b>	
Levels of food security	Subjects
World level	UN, FAO, World Trade Organization (WTO), World Health Organization (WHO)
Interstate level	Regional associations
National level	Government, legislative bodies
Regional level	Interregional enterprises of relevance
Local level	Territorial authorities
Consumer groups	Households according to income level
Households	Households

Source: [8, p. 9]

Regardless of the established level, the problems that have arisen must be settled by a body responsible for the area whose functions are: ensuring the supply of food products in the distribution networks, creating the necessary conditions for the actual production of the necessary products, etc

### **Conclusion**

Based on the reported information, the author considers that food security can determine that the level of the economy must be developed to such a level that, regardless of the international market, the supply of foodstuffs is guaranteed by the state according to the consumption norms established by the respective bodies.

By highlighting all the approaches to the concepts of "economic security" and "food security", we can say that they express the entrustment of life without taking into account several circumstances: economic security of economic unity, and also food security primary for the individual or for the entire population of a region, country or even continent.

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