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SPECIFIC FOOD SECURITY POLICIES

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Abstract. In this article, the author has analyzed what types of food security policies need to be developed and implemented depending on the dimensions of food security in order to improve the situation of food security. Improving the current situation regarding the food security is a dilemma not only related to the national level of a country but also worldwide. The consequences of economic growth and the level of globalization for some countries have been quite impressive, especially for industrial countries, but not for developing and emerging countries. The European Community together with such organizations as the UN and the FAO have come up with quite impressive policies on improving food security, namely the four specific dimensions: insurance, access, use and stability. The main directions of improvement for each food security policy has been analyzed by the author at the level of the country of the Europe and Central Asia region. The scientific methods used by the author are: analysis and synthesis, induction and deduction, history and logic. As a result of research, we find that regardless of the level of development of the country, the state must pay particular attention to the development of such a direction as: increasing the volume of domestic food production, facilitating food imports in the country, creating jobs.

Keywords: *food security, food security policy, insurance, access, stability, use, dimensions of food security.*

1. Introduction

Following the established food security, situation (high levels of hunger and malnutrition) worldwide, state governance tends to develop and implement food security policies. Food security policy is a component part of a country's national development policy. The main objectives set out in food security policy are the Agenda 2030 objectives, and in particular ODD: "Zero foams", and the realization of people's right to food.

Degree of research.

The concept of food security has been addressed both internationally and nationally. Eminent food safety studies are conducted by Russian scholars such as: Samoilova A. [15], Uscova T. [18], etc. Worldwide, food security was reflected in researchers' works: Ballard T. [2], Kepple A. [2], Hart, T. [9]. In the Republic of Moldova, the study on food security is reflected in the works of local scientists: Bajura T. [1], Boincean B. [3], Stratan A. [17].

In the last period of time a major importance is attributed to food security and especially to the consequences of the latter lacking in the form of malnutrition, subsistence, women's anemia, iodine deficiency, etc. To improve the situation it is necessary to elaborate the food security policy.

The approach to food security policy differs from state to state depending on the level of development of the country. In terms of defining food security policy, there is no such thing as a concept at the moment. Eloquent studies on the treatment of "food security policy" are found in official documents in a state, continent, community. Food security policies have been addressed by world-class scholars such as Maggio A., Crieking T. V., Malingreau, J.P. JRC [11], Leidy Diana de Souza de Oliveira et.all [10].

Simultaneously with researchers' approaches in this field, food security policy has been analyzed by such organizations as: FAO [7], Commission to the Council and the European Parliament [4].

2. Elaboration of food security policies.

According to scientific approaches to designing food security policies, we currently have two ways to develop them [4]:

1. Integrate aspects of food security policy into national and sectoral national and sectoral policies and strategies of a country, Poverty Reduction Strategy, Policies and Strategies of the Agricultural and Social Sector;

2. Prepare a specific food security policy document that includes all aspects relevant to improving food security and taking into account the links that exist between the country's global and sectoral development policies and strategies.

During the development of food security policies, they must identify those food security issues that are not resolved at the moment. The main dimensions underlying food security are:

a) providing; b) access; c) use; d) stability.

Table 1

Policy measures to resolve problems	
Existing problem	Food security policy
Food supply shortage	Increasing the level of supply of food resources by increasing the level of imports in the country
Poor access to food	Improving people's access to food through the development of individual household conditions
Inappropriate use if the food is prepared and consumed in a way that can not be used properly by the body	Improved use, e.g. allowing people to prepare food in a safe way, maintain their nutritious quality, and that nutrients are completely absorbed by the body.
Food instability, ie whether there are food deficits or seasonal food deficits as a result of failures or harvest disasters	Stabilization of food supply, efficient economic management of current and strategic stocks

Source: [7]

Each of the problems identified in Table 1 has direct interaction and sometimes direct influence. In developing food policy, we must take into account the fact that a food security issue leads to the emergence of another, but with a higher degree of disaster development for the level of food security of a country.

Depending on the dimension of food security and on the aspects of food security, the state must implement food security policies.

3. Food insurance policies.

Under this policy, the specific nature of the country's insurance business need to be assessed. The main foundations of internal security are the indigenous food production resources and the import of food in the country. The level of consumer availability for food can be increased through the development of two directions: increasing the volume of domestic food production and / or facilitating food imports in the country.

1. Increasing the volume of domestic food production. The main tactics in solving the related problem are the diagnosis of the current situation regarding the development of agriculture at all levels of the country, the improvement and / or rebuilding of the existing technology, the right adjustment of the investments made from different sources, the major contribution of the state to the allocation of subsidies to the producers working in the field of agriculture, the formation of strategic stocks and their proper management according to storage and transport conditions, the development of rural infrastructure, the application of both classical and modern marketing policies and instruments;

2. Facilitating food imports into the country. If the level of self-sufficiency is inefficient, and the country's government is unable to pursue an effective food security policy, then the only way out is to develop the level of imports. Food security policies contribute to promoting the level of food imports in the country through the following instruments: removing tariff barriers to food imports, trade liberalization, etc. All these facilitation tools are provided for countries that are part of the European community.

As a result of macroeconomic changes in the countries of Europe and Central Asia (ECA), the level of investment in agricultural policy support programs has diminished, because if investments are not made, the power of food processing is diminishing, aggregate supply is decreasing, food and consequently also restricting access to food. Out of the total countries analyzed in the ECA, the least budget allocations to ensure the development of the agricultural sector were in the Republic of Moldova and Ukraine, where the level of allowances fell by 53.8% in the Republic of Moldova and 81.3% in Ukraine, a large increase in the share of budget locations was in Armenia, of 46.9% (Figure 1).

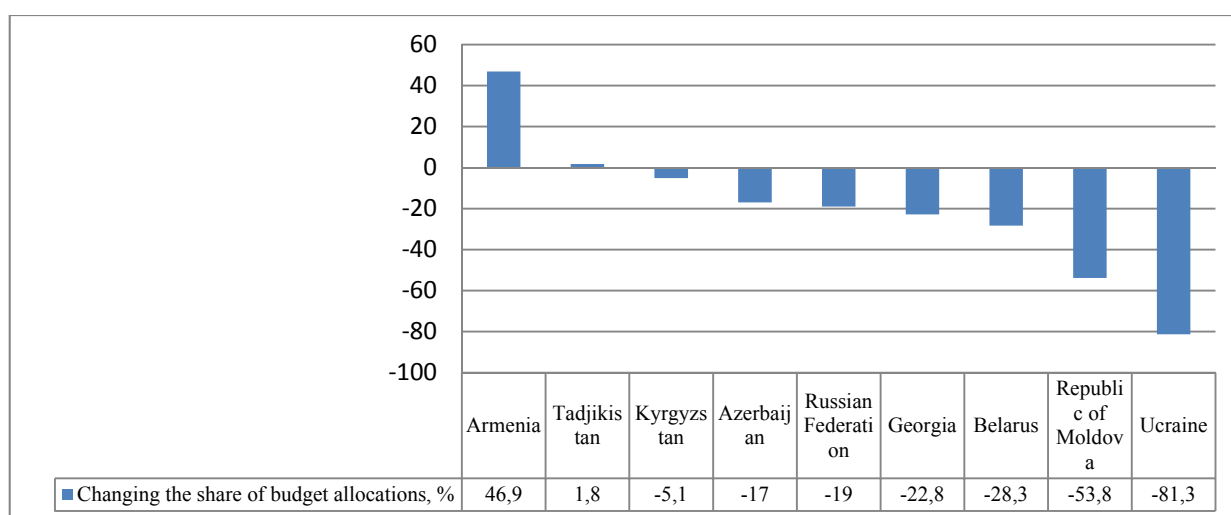


Figure 1. Percentage change in state budget allocations for agricultural programs between 2014 and 2015 (in USD equivalent), Source: [8].

In all ECA countries, agricultural policy mechanisms have remained unchanged and are geared towards developing such a direction as the loyalty of the tax system to

enterprises operating in the agricultural field, the granting of subsidies for procurement of technology and technology for processing agricultural production, participation in grant programs of loans with a lower interest rate for agricultural producers.

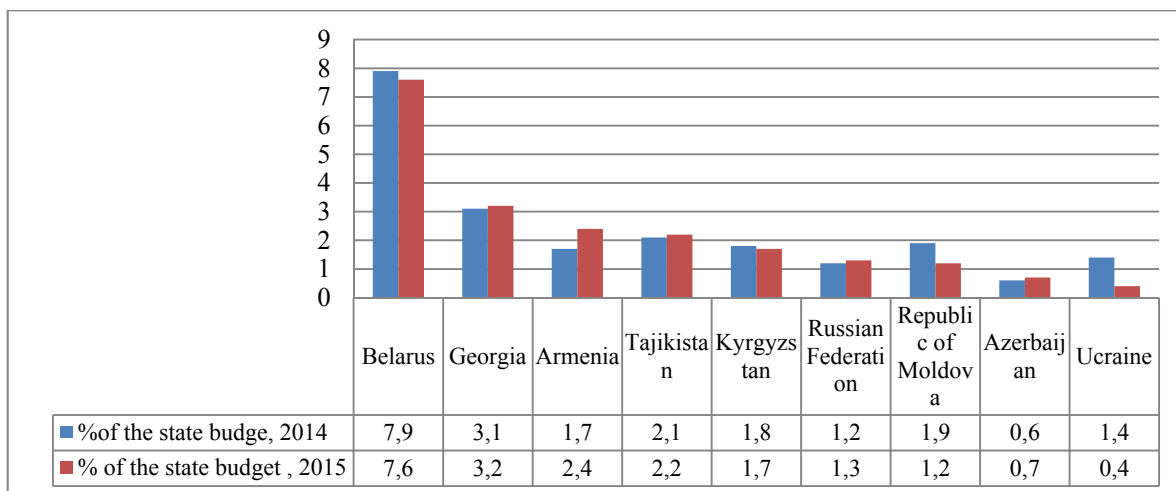


Figure 2. Dynamics of State Support for Agriculture in the selected ECA countries, million USD, Source: [8].

The largest share of the allocation of state budget subsidies in the EAC region lies with 7.6% of Belarus, with Georgia second with 3.2%. Moldova has only 1.2%. As regards the allocation of subsidies from the state budget from the financial point of view, the Russian Federation is with 3700 billion dollars and Belarus second place with 1694 billion US dollars. From the state budget of the Republic of Moldova for subsidizing the agricultural complex in 2015 only 18 billion dollars were allocated.

4. Policies to improve access food poverty reduction.

One of the main issues that lead to food insecurity is the limited or insufficient access of the population to food. The worst consequence of this limited is - poverty, which alters all consumers living below the minimum of existence. Through access we can delimit the ability of households or individual consumers to procure food to meet physiological needs and maintain a healthy living standard. The main direction for the development of food security policies on this issue is to alleviate poverty. The main strategies of food security policy on improving access to food products are:

1. *Focus strategy: Developing agriculture by focusing on poor farmers.* The tactics to be included in this strategy are: rural agricultural development measures and the name of farmers and small households;

2. *Creating jobs.* Tactics on food security policy based on agricultural development must include employment in both urban and rural areas, irrespective of the field of activity. Permanent employment will lead to permanent disposable income from the poor and will be able to afford access to food;

3. *Social protection of the population.* The main instruments on social protection are: granting of allowances to elderly persons and persons with disabilities, food assistance and food programs (feeding in the nursing homes, educational institutions, organizations). However, social protection transfer systems must be designed in such a way that they do not affect the sustainable development of the manufacturing industries.

5. Policies to improve the use of food.

It is considered to be efficient use of food when the nutritional qualities are maintained in the food preparation process and the consumer satisfies not only the physiological nutritional needs but also the maintenance of a healthy way of life. The level of food use may decrease due to the following negative moments [7]:

1. Lack of knowledge about adequate food preparation, nutritional quality of food and ensuring food safety;
2. Lack of knowledge about nutritional requirements and nutrient content of foods (including macro- and trace elements);
3. Disease and poor health; if people suffer from diseases, they have special nutrition and, in addition, consumed nutrients can not be fully absorbed by the body;
4. Lack of hygiene, sanitation, safe drinking water.

Improving the use of food requires policy action in the following areas [7]:

- 1) improving technologies for the preservation and preparation of food;
- 2) establishing appropriate food standards;
- 3) improving public health;
- 4) the provision of safe drinking water;
- 5) improved sanitation;
- 6) hygiene and nutrition education.

6. Policies to assure the stability of food consumption.

The instabilities that occur during food access and availability induce food insecurity. Instabilities can come from the following situations [7]:

1. Seasonal variations in food supply, stockpile exhaustion;
2. Annual variations in food supply, especially during periods of natural disaster persistence.

For conditions that unbalance the stability of food consumption, state governments in food security policies need to be set up to solve the problems they face: to carry out the preliminary diagnosis of areas prone to drought, floods or that are most affected by natural calamities.

7. Multi-impact policy on food security.

FAO researchers have proposed a new food security policy that combines classical food security policies, namely the "Multiple Food Security Policy". According to this policy, most policy measures aimed at improving the food security situation have effects on several aspects of food security. In formulating food security policies, such multiple effects must be taken into account and deliberately used. Policy measures that serve multiple food security objectives are called "two-way approaches" or "multiple approaches" [7].

A broad spectrum of policy impacts across the EU across policy areas that are usually part of food security policies are presented by the author in Figure 3.

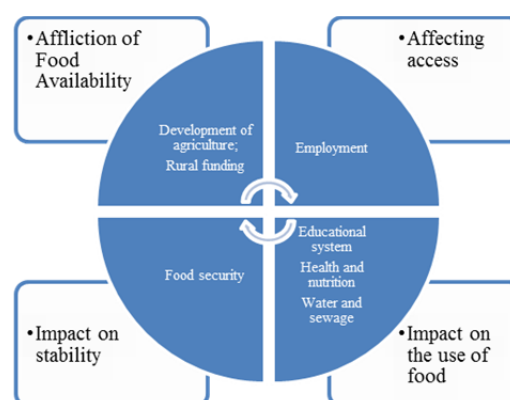


Figure 3. Multiple effects of food security policies Source: written by the author.

The EU's current food security and nutrition policy is strongly focused on development aid interventions, while recognizing that non-development-related policies can have an impact on global food security. That is why the EU, by addressing Policy Coherence for Development (PCD), seeks to minimize inconsistencies and build synergies between policies other than development cooperation, which could have an impact on developing countries [11].

8. Food security policies versus the level of development of the country.

A group of authors Leidy Diana de Souza de Oliveira, Eluiza Alberto de Moraes Watanabe, Dario de Oliveira Lima-Filho and Renato Luiz Sproesserou carried out research into the level of security of countries of different levels of development and types of food security policy implemented. They categorized the countries into four categories [10]:

➤ High income countries (USA, Canada, Australia, New Zealand). All countries use food banks that fulfill the primary role of meeting food needs of vulnerable populations and redistributing surplus food, interconnecting food security and social policies. In Canada, the main strategy to combat food insecurity is to maintain food banks. While the population has a high standard of living and the prospect of hunger is removed, the number of food banks continues to grow, and their presence suggests that food insecurity not only exists but persists. In Australia, the Strategic Food Alliance has developed two strategies to ensure food security: by improving the nutrition of vulnerable groups and by fighting structural barriers to a healthy and safe food such as investing in food production technology and waste reduction, inclusion social and investment in education;

➤ Countries with high average income levels (Brazil, South Africa, Malaysia, etc.). In Brazil, 60% of the population is confronted with food security, 18% with mild food insecurity, 14% with moderate food insecurity and 8% with severe food insecurity. In South Africa, more than 35% of the population is vulnerable to food insecurity, about a quarter of children less than 6 years of age grow in malnutrition and 43% of households have low nutrient levels. Food insecurity in Brazil shows that: a) the probability of food insecurity is reduced in the rural environment, because it predominates with agricultural activities; b) the probability increases when the person is "of color", is a woman or has an informal occupation, and c) the most important determinant is low per capita income. In South Africa, although most families depend on the food processing and food retail industries to meet their needs, subsistence farming or household consumption is considered to be an important component of food security. A national strategy entitled "Integrated Food Security Strategy" was developed in 2000, aiming at integrating different food security programs in the country and eradicating hunger, malnutrition and food insecurity by 2015. The main actions were: increasing the production and distribution of food, income growth and nutrition of the population and food security; increasing employment opportunities;

➤ Countries with lower average incomes (China, India, Ecuador, etc.). Ecuador and India are not self-sufficient in promoting food security and depend on these programs promoted by international organizations such as the World Food Program (WFP), the largest humanitarian anti-hunger agency in the world;

➤ Low income countries (Ethiopia, Nigeria, Vietnam, etc.). Significant actions have been taken in Vietnam to combat poverty. Poverty rates fell from 58% of the total population in 1993 to 29% in 2002, with rapid economic growth. However, many people still lack physical, economic and social access to sufficient, safe and nutritious food to meet

physiological needs. Ethiopian food security strategies are based on three pillars: increasing agriculture and food production and food quality and enhancing food crisis management capacity. Table 2 summarizes the main consequences of food security and food security policies for countries studied by the group of authors.

Table 2

Food security policies and their consequences depending on the level of development of the country

	High Income Countries	Countries with a high average income level	Countries with lower average incomes	Low-income countries
The average rate of malnutrition	2,5%	4,1%	12,6%	31,3%
The average obesity rate	67,85%	44,5%	30,65%	12,95%
The main causes of food insecurity	Disparities related to ethnicity / race, gender, income and education		Low technology and agricultural productivity	
The main consequences of food insecurity	Obesity - due to low food quality and lack of variety		High mortality	
The main welfare policies of the government	National food distribution programs to vulnerable groups		Mainly international organizations	
The main progressive or sustainable public policies	Investments in Food Production and Waste Reduction Technology, Social Inclusion and Investments in Education.	Incentives for family farming.	Poor investment in increasing agricultural productivity and incentives for agriculture.	
Commercial protectionism and subsidies to farmers	High; with a stagnation of economic growth	Low, though rising		

Source: [10]

A very important role, and even deciding have the compensation policies for persons with a minimum consumption of food. Even if the country is in the low-income category, the level of obesity, which is caused by the fact that the population consumes poor quality food, or the emphasis on consumption of such products as potatoes, pasta, bread made from high quality flour low in order to satisfy the primary physiological necessity. Another type of policy implemented to tackle food insecurity is the sustainable food security policy that aims to reduce social inequality through investment in education and the creation of new jobs. To successfully implement food security policies, no matter at what level, the population needs to change their mentality, because it will lead to effective changes in the development of agriculture and obviously the decrease in the level of poverty in the world.

9. Conclusions.

EU food security policies are focused on achieving the following objectives:

1. Development of agriculture;
2. Create a favorable environment for the production of agricultural products;
3. Implementing a balanced, food-based food system.

Food security policies assume responsibility for implementing such objectives as eradierea hunger and malnutrition, based on significant changes in the economic and sustainable development worldwide. Due to the merging of the upcoming changes in the

economic, political, ecological environment - food security will become accessible. In promoting food security policy, the European community tends to further develop countries with a high level of agricultural development in order to strengthen the export of food products in countries with low food security.

In the author's opinion, this food security strategy is still based on a food security dependence of Third World countries on the European community. But we need to realize that developing a food security policy for a particular country does not mean it will bring the same results to other countries: it all depends on the ecological conditions, the political and economic situation, the social distribution existing in the country.

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