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Анализ продовольственной безопасности в мире и в Армении

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Аннотация

Продовольственная безопасность — это ситуация, когда все люди во все времена имеют физический, социальный и экономический доступ к достаточному, безопасному и питательному продукту питания, который отвечает их диетическим потребностям и предпочтениям в еде для активной и здоровой жизни. Проблема продовольственной безопасности присутствует почти во всех странах мира, и эта проблема углубляется с ростом населения мира. Продовольственная безопасность сегодня рассматривается как глобальная проблема, устранение которой требует единого подхода. Вот почему глобальные цели в области устойчивого развития были разработаны для улучшения жизни людей, для чего государства должны работать вместе. В статье представлены основные правовые акты, связанные с продовольственной безопасностью, уровнем самообеспеченности основными продуктами питания в Республике Армения, уровнем бедности по типам населенных пунктов, уровнем образования и т. д.

Ключевые слова: продовольственная безопасность, проблемы, коэффициент самообеспеченности, бедность, образование.

Analysis of Food Security in the World and in Armenia

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Abstract

Food security is a situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life. The problem of food security is present in almost all countries of the world, and this problem deepens with the growth of the world's population. Food security is seen as a global problem, and we need a unified approach in order to solve it. That is why the Sustainable Development Goals were designed to improve people's lives, and states must work together to achieve this goal. The article presents the main legal acts related to food security and self-sufficiency ratio of the basic foodstuffs in the Republic of Armenia, to the poverty level by type of settlement, the level of education etc.

Key words: food security, challenge, self-sufficiency ratio, poverty, education.

Every day too many men and women across the globe struggle to provide their children with a nutritious meal. In a world where we produce enough food to feed everyone, 821 million people—one in nine—still go to bed on an empty stomach each night. Even more—one in three—suffer from some form of malnutrition. Eradicating hunger and malnutrition is one of the great challenges of our time. Not only do the consequences of inadequate—or wrong—food cause suffering and poor health, they also slow progress in many other areas of development like education and employment. In 2015 the global community adopted the 17 Sustainable Development Goals to improve people's lives by 2030. Goal 2—Zero Hunger—pledges to end hunger, achieve food security, improve nutrition and promote sustainable agriculture.

The world has made great progress in reducing hunger: there are 216 million fewer hungry people than in 1990–92, despite a 1.9 billion increase in the world's population. But there is still a long way to go, and no organization can achieve Zero Hunger if it works alone. If we want to see a world free of hunger by 2030, governments, citizens, civil society organizations, and the private sector must collaborate to invest, innovate, and create lasting solutions [1].

The issue of strengthening of intersectoral collaboration in general and to improve food security and nutrition in particular is in the agenda for Armenia. The discussions during the high-level workshop (held early June 2019) suggest: although the cooperation mechanisms are set in country, still the interministerial/interagency and intersectoral effective cooperation remains a challenge and requires further enhancement and strengthening. And the issue is even more critical now, as the country is in way of taking steps in implementing the Agenda 2030 and aligning its goals to the Sustainable Development Goals, particularly ending poverty in all its forms (Goal 1) and eradicating hunger, achieving food security and elimination of malnutrition of all forms, promoting sustainable agriculture (Goal 2) [2]. I would like to note that I also attended the workshop held early June 2019, which made it possible to better understand the challenges of food security.

In general, there are different definitions about food security. According to the Food and Agriculture Organization (FAO), food security is a situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life [3]. Unlike the definition, social access to sufficient is not defined in the Law of the Republic of Armenia On Ensuring Food Security. According to the law, food security is a state of the economy that ensures food independence of the country and guarantees the physical and economic accessibility of foodstuffs conforming to health standards for the population. Physical access to food is the provision of food supply to meet the population's purchasing demand. Economic access to

food is the level of purchasing power of the population, which provides the population with access to food in accordance with physiological norms [4].

The main objectives of the Armenian government's policy in the area of food security are:

- 1) ensuring physical and economic access to food;
- 2) ensuring food security for the population;
- 3) establishment, maintenance, and replenishment of the state food reserve [5].

Food security is a complete and evolving system. Therefore, changes in the socio-economic environment affect the qualitative and quantitative parameters of the system. One of the basic concepts of food safety is the food basket, or the list of the most consumed foods and consumption norms. Based on the latter, the value of the minimum food basket is calculated, which is the main component of the minimum consumer basket in the conditions of the Republic of Armenia [6].

Consumer demand in the domestic market for the most vital foodstuff included in the minimum food basket is at the expense of local production, a key precondition for food security. It describes the level of food independence (self-sufficiency) of the country. Experts estimate that food independence of the country is secured if the level of self-sufficiency is 75–80% [7]. According to the official statistics of the Armenian National Statistical Service, the cost of the minimum consumer basket is estimated 60,057.5 drams per month in 2018 and the cost of the food basket was 33,930.8 drams. That is, the value of the food basket was 56.5% of the consumer basket.

The most important indicator for food security in the country is the level of food self-sufficiency. There are multiple understandings of food self-sufficiency that can apply at different levels of analysis. According to FAO, “The concept of food self-sufficiency is generally taken to mean the extent to which a country can satisfy its food needs from its own domestic production.” This most basic definition can apply at the level of individuals, countries, or regions. In the context of debates on trade and food security, self-sufficiency

typically refers to countries that seek to produce all or most of their own food for domestic consumption [8].

The level of food security in Armenia is still low, but the development trends are obvious, as evidenced by the increase in crop yields from year to year, the development of livestock, increasing yields and productivity. The proof of the latter is the increase of the sown areas of crops from year to year, the development of animal husbandry, the increase of yield and productivity. The role of the state in the development of the agricultural sector is also important here, as high-yielding heifers and bulls were imported into the country through state intervention, as well as elite high-grain cereals and seeds of vegetable crops, which increased the level of food security [9].

In Armenia, the self-sufficiency ratio of potato, vegetables, fruits, grapes, mutton and goat meat, egg and fish is quite high. The self-sufficiency ratio of beef, milk is above average and the self-sufficiency ratio of wheat, vegetable oil, poultry and pork are low. As it is seen from the table in 2018 the lowest self-sufficiency ratio were vegetable oils (2.2%), poultry (26.6%), and wheat (31.5%) (Table 1).

Self-sufficiency ratio of the primary foodstuffs in Armenia, %

Primary foodstuffs	Self-sufficiency ratio, %			
	2015	2016	2017	2018
Wheat	50.9	53.2	33.2	31.5
Potatoes	101.7	101.3	102.6	102.6
Vegetables and melons	100.0	103.3	102.5	104.7
Fruit and berry	102.0	98.1	109.7	108.9
Grapes	101.2	119.3	106.4	104.8
Leguminous crops	58.2	61.6	49.7	38.6
Vegetable oil	7.8	5.6	4.3	2.2
Sugar	89.6	91.4	65.2	68.6
Eggs	99.5	99.4	98.2	99.5
Milk	93.0	88.6	91.2	86.8
Beef	92.3	92.5	91.5	89.2
Pork	57.8	64.1	58.0	53.3
Mutton and goat meat	107.7	133.8	138.9	128.6
Poultry	21.8	28.5	22.5	26.6
Fish	114.2	108.6	101.8	109.0

Таблица 1

Generally speaking, more developed a country is, the smaller the percentage of household income it spends on food. There are only eight countries in the world that spend less than 10% of their household income on food. Four of these are in Europe: the UK is third at 8.2%, followed by Switzerland at 8.7%; Ireland spends 9.6% and Austria 9.9%. The remaining four countries are spread across the globe. The US spends the least at 6.4%, Singapore spends the second lowest amount at 6.7%, Canada spends 9.1% on food, while Australia spends 9.8%. Nigeria spends over half of household income on food, and there are nine other countries that spend over 40% on food. Four of them are in Africa: Nigeria (56.4%), Kenya (46.7%), Cameroon (45.6%), and Algeria (42.5%). Four are in Asia: Kazakhstan (43.0%), Philippines (41.9%), Pakistan (40.9%), and Azerbaijan (40.1%). Guatemala is the only South American country to appear in the list and spends 40.6% of its household income on food. These numbers do not mean that food is more expensive in Nigeria than in the US. In fact, quite the reverse. The average American spends \$2,392 per year on food, the average Nigerian spends half that: \$1,132. The average Kenyan spends just \$543 a year on food. However, there can be wide disparities within a country. Over the past 25 years, the poorest 20% of households in the US spent between 28.8% and 42.6% on food, compared with 6.5% to 9.2% spent by the wealthiest 20% of households [10].

If the world's food security issues are based on population growth, the population growth in Armenia is not noticeable. On the contrary, there are decreasing trends. In 2015 the population of Armenia was 2998.6 thousand people, in 2019 the population was 2959.2 thousand people. However, the problem of food security still exists in Armenia. One of the major causes of malnutrition is poverty that, in order to be eradicated, needs sustainable development mechanisms and a more equitable distribution of wealth, especially in the agricultural sector. It is estimated that 75% of those under poverty level live in rural communities and are primarily small-scale farmers. This explains why a point of growth in Gross Domestic Product generated by the agricultural sector has twice effect in reducing poverty

and hunger, compared with economic growth generated by other sectors. The complexity in relations and management of the various positions of individual countries and the lack of agreement on choices and decisions to be taken, often force supranational institutions to suspend or postpone the search and implementation of solutions and initiatives. Situations of this type create significant slowing in economic and social development with disastrous consequences for the population, especially the poorest one [11].

In 2018 the poverty level comprised 23.5% in Armenia, which was below than the same indicator of the previous year by 2.2%. In 2018 the poverty level was higher within urban population than rural population, which decreased by 0.1% compared to 2017 and comprised 24.9%. Meanwhile the decrease of poverty level was registered in the rural settlements by 5.5% and comprised 21.3% (Table 2) [12].

Poverty incidence by types of settlement

	2016	2017	2018
Poverty incidence	29.4	25.7	23.5
Poverty incidence in urban settlement	28.8	25.0	24.9
Poverty incidence in rural settlement	30.4	26.8	21.3

Таблица 2

People with higher education are less likely to be poor. Poverty rate is the lowest among those with higher education—around 1.5 times lower than the national average for the population over 16 years of age, and 2.1 and 1.9 times lower than for those with elementary and primary or incomplete secondary education. Persons with general secondary education comprise the largest group within the poor population (51%). Among the people over 16 years of age, this group faces difficulties in finding jobs (Table 3) [13].

Poverty Rate by educational level, 2008 and 2018 (for population over 16 years of age)

Educational level	2008	2018
Elementary and primary	36.1	31.6
Incomplete secondary	40.1	28.5
General secondary	30.2	24.8
Vocational secondary	21.9	20.2

Higher	14.7	14.8
Total	26.6	22.0

Таблица 3

As a long-term measure to ensure food security, I consider the development of a state program to provide a profession for children from poor families. The program will enable the children of poor families to get the appropriate profession and avoid poverty in the future. The latter will be able to provide a more prosperous life for themselves and future generations. Studies and analyzes are the basis for suggesting that in order to increase the level of food security, it is necessary to overcome the poverty in the country, in which I have made recommendations in one of my previous articles [14].

In 2019 monthly average nominal wage in Armenia was 182,673 AMD, and in 2015 that figure was 171,615 AMD. In other words, 6% growth was registered [15]. Statistics show that the growth rate of nominal wages was higher than the growth rate of food products. However, in terms of real wage growth rates, there is a slower pace. It should be noted that today there is a large variety of food products in the Armenian market, but economically they are not available to all segments of the population. In order to increase the economic accessibility of food security, I propose to carry out state control over the prices of foodstuffs. At present, the minimum wage in Armenia is 55,000 drams. Taking into account the minimum consumer and food basket prices, I propose to increase the minimum wage in Armenia to increase the level of food security.

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