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Main indicators of food security development in period the pandemic

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Abstract

This article examines the economic food security of the country implies a complex, as well as a multifactorial concept, which implies a material base for the development of absolutely all other parts of state security. The provision of economic security is considered one of the key problems of the country's work, thus, as well as the appearance of numerous socio-economic difficulties in the country, in the main, is caused at the same time by the fact that the government does not develop preventive events in any way or does not fulfill them in time. The government must guarantee a reliable level of security in order to form the obligations of the internal market for the food security of the world, as well as the external stability necessary for the standard functioning of the state economy, the intensive role of the country in the international economy and increasing the competitiveness of interstate. The research methodology is based on econometric, analytical and statistical methods of analysis. The value of the research is the development of a management model for innovation processes, which will contribute to the analysis of the data obtained during research on projects proposed for investment in agriculture. The results of the study show that the innovative position of the agricultural field in the world is characterized by a significant variation in manufacturing according to years, the dominance of outdated scientific and technical structures, a low degree of productivity, as well as the unstable economic location of many agricultural producers. One with the required circumstances of the exit of economic entities of the agricultural section to a high-quality other degree of management is considered to be the creation and implementation of innovative modifications of their formation. Undoubtedly, the effectiveness of the implementation of such modifications will depend on their complexity and the level of coverage of absolutely all components that characterize the requirement for the functioning of agro-economic concepts, the material and technical basis of economic entities, as well as the corresponding organizational and economic elements. Thus, the research results show that food security plays a crucial role in maintaining and continuing human life in the world.

Keywords: food security, nutrition, COVID-19, malnutrition, pandemic

Пандемия кезіндегі азық-түлік қауіпсіздігін дамытудың негізгі көрсеткіштері

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Түйін

Бұл мақалада елдің экономикалық азық-түлік қауіпсіздігі күрделі, сонымен қатар мультифакторлық тұжырымдаманы қарастырады, бұл мемлекеттік қауіпсіздіктің барлық басқа бөліктерін дамыту мақсатында материалдық базаны білдіреді. Экономикалық қауіпсіздікті қамтамасыз ету ел жұмысының негізгі проблемаларының бірі болып саналады, осылайша елдегі көптеген әлеуметтік-экономикалық қиындықтардың пайда болуы, негізінен, Үкіметтің алдын-алу шараларын әзірлемейтіндігімен немесе оларды уақытында орындамайтындығымен байланысты. Үкімет әлемнің азық-түлік қауіпсіздігінің ішкі нарығының міндеттемелерін, сондай-ақ мемлекеттік экономиканың стандартты жұмыс істеуі, елдің халықаралық экономикадағы қарқынды рөлі және мемлекетаралық бәсекеге қабілеттілікті арттыру мақсатында қажетті сыртқы тұрақтылықты қалыптастыру үшін қауіпсіздіктің сенімді деңгейіне кепілдік беруі тиіс. Зерттеу әдістемесі эконометрикалық, аналитикалық және статистикалық талдау әдістеріне негізделген. Зерттеудің құндылығы ауыл шаруашылығына инвестициялау үшін ұсынылатын жобалар бойынша ғылыми зерттеулер жүргізу кезінде алынған деректерді талдауға ықпал ететін инновациялық процестерді басқару моделін әзірлеу болып табылады. Зерттеу нәтижелері көрсеткендей, әлемдегі ауылшаруашылық саласының инновациялық жағдайы өндірістің айтарлықтай өзгеруімен, ескірген ғылыми-техникалық құрылымдардың үстемдігімен, өнімділіктің төмен деңгейімен, сондай-ақ көптеген аграрлық тауар өндірушілердің тұрақты емес экономикалық орналасуымен сипатталады. Ауыл шаруашылығы бөлімінің шаруашылық жүргізуші субъектілерінің жоғары сапалы шығуының талап етілетін мән-жайларының бірі шаруашылықтың басқа дәрежесі оларды қалыптастырудың инновациялық модификацияларын жасау және жүзеге асыру болып саналады. Мұндай модификацияларды жүзеге асырудың тиімділігі олардың күрделілігіне, сондай-ақ агроэкономикалық тұжырымдамалардың, шаруашылық жүргізуші субъектілердің материалдық-техникалық негіздерінің, сондай-ақ тиісті ұйымдастырушылық-экономикалық элементтердің жұмыс істеу талаптарын сипаттайтын барлық компоненттерді қамту деңгейіне байланысты болатыны сөзсіз. Осылайша, зерттеу нәтижелері азық-түлік қауіпсіздігі адамзаттың әлемдегі өмірін сақтау мен жалғастыруда шешуші рөл атқаратынын көрсетеді.

Кілттік сөздері: Азық-түлік қауіпсіздігі, тамақтану, COVID-19, дұрыс тамақтанбау, пандемия

Основные показатели развития продовольственной безопасности в период пандемии

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Аннотация

В данной статье рассмотрена экономическая продовольственная безопасность страны предполагает собою непростую, а также мультифакториальную концепцию, что предполагает собою вещественную базу с целью развития абсолютно всех других частей государственной безопасности. Предоставление экономической безопасности считается один из ключевых проблем работы страны, таким образом равно как появление многочисленных социально-экономических трудностей в стране, в главном, обуславливается вместе с тем, что правительство, никак не разрабатывает предупредительные события или никак не выполняет их вовремя. Правительство должно гарантировать надежный уровень защищенности, чтобы сформировать обязательства внутреннего рынка продовольственной безопасности мира, а также наружной устойчивости, нужной с целью стандартного функционирования государственной экономики, интенсивной роли страны в международный экономике и увеличения конкурентоспособности межгосударств. Методология исследования основана на эконометрических, аналитических и статистических методах анализа. Ценностью исследования является разработка модели управления по инновационным процессам, которое поспособствуют для анализирования полученных данных во время проведения научных исследований по проектам, предлагаемые для инвестирования в сельском хозяйстве. Результаты исследования показывают, что инновационное положение сельскохозяйственной области в мире характеризуется значительной вариацией изготовления согласно годам, доминированием устарелых научно-технических укладов, невысоким степенью производительности, а также непостоянным экономическим расположением многих аграрных товаропроизводителей. Один с требуемых обстоятельств выхода хозяйствующих субъектов сельскохозяйственного раздела в высококачественно другой степень хозяйствования считается создание и осуществление инновационных модификаций их формирования. Несомненно, то что результативность осуществлении подобных модификаций станет находиться в зависимости с их комплексности а также уровня охвата абсолютно всех компонентов, характеризующих требование функционирования агроэкономических концепций, материально-технической основы хозяйствующих субъектов а также соответственных организационно-экономических элементов. Таким образом, результаты исследований показывают, что продовольственная безопасность играет решающую роль в поддержании продолжения жизни человечества в мире.

Ключевые слова: продовольственная безопасность, питание, COVID-19, неполноценное питание, пандемия

Introduction

A valuable component of financial security is product security. At the rate of economic growth for the purpose of any country, the stable formation of food production remains the main condition for sustainability. Obstacles that lead to a food crisis are considered the basis for other types of security. In conjunction with the data, financial stability is a stable formation of the production of the national economy, including the agricultural economy.

The provision of sufficient food for the use of the public directly has a great impact on the socio-political stability of the country and the support for its independence. It is also considered to be the basis of the demographic increase of residents and guarantees incentives for implementing the primary state strategy.

In the strong formation of each country, it is the rate of increase of the property of the existence of the inhabitants that the leading course must possess. In society, in conjunction with the COVID-19 pandemic, the issue of stable formation of the manufacture of feeding products is very significant in every state. In conjunction with this, the manufacture, use, as well as the sale of feeding products are considered a component of agricultural politicians of any country. The main factors according to which food reserves in society deteriorate are: - reduction of areas due to the satisfaction of farming needs; - increase in residents.

According to the United Nations monitoring, the public will increase by 2.0 billion people by 2050 and achieve 9.1 billion [1]. In this case, agricultural production should be increased by 70 per cent; reduction of sprayed territories, drying up of rivers; removal of the number of livestock breeding, as a result of which the rate of increase in the size of beef becomes lower than the rate of increase in residents.

In order to eliminate barriers to food decline in Kazakhstan, it is necessary to improve domestic production in the agricultural sector. The company will strive to form an effective business model by optimizing key business processes. Successful implementation of the goals and objectives of the development Strategy will require systematic work to improve operational activities by bringing business processes, organizational structure and work of branches in accordance with the strategic vision [2].

In order to form food security, the prevailing trend must be a deviation from import and complete processing of agricultural products. In the field of food supply, "Import Substitution" includes a large set of production facilities combined with the farm sector, aimed at forming the current agro-industrial complex of the deepest processing in the sphere in order to provide food products.

The provision of product security is of great importance for the purpose of Kazakhstan. In order to refrain from foreign products, it is necessary to guarantee a sufficient amount of food, which will require a particular financial policy of the country in the current development trend. In order to protect the market from foreign products, Kazakhstan must implement competitive domestic products and high-quality food-feeding products. For this purpose of this, agricultural production in Kazakhstan is

obliged to possess fundamental and effective knowledge. Similarly, it is possible to guarantee an increase in the part of state products in domestic use and in the foreign market.

Research methodology

The study is based on statistical data according to the formation of the agricultural economy, in particular, the division of animal husbandry and seed areas to consider the composition and structure of functioning agricultural enterprises. In the property of the primary sources of data extraction, sufficient for the purpose of subsequent activity results, advertising studies methods will be applied. The conclusion of these issues can help to introduce regulations according to the enlargement of the agricultural structures of the district, and in addition to create a methodological theory of the development of the modification of the organization. Together with the support of these methods, the exact situation with the capital of the agricultural economy and the provision of high-quality agricultural products to residents is revealed.

There is a possibility of modelling the domestic market of agricultural products and the company of a profitable partnership in this area within the framework of the TC CES [3].

First of all, in general, academic studies were conducted in the district's interests and to what extent academic research and technology commercialisation was productively organized. In order to introduce innovations in the district and provide the necessary criteria and tools, the activities of the district economy in the basis of the formation of innovative agricultural areas will be supported by the public, district authorities, businessmen, etc.

Introducing new technologies is an important source of agricultural production growth in the Republic of Kazakhstan. The availability, accessibility and applicability in the practice of agricultural research and development, the effectiveness of the consulting services provided are the key to solving a number of tasks in the agricultural sector [4]. The pace of innovation processes in the economy largely depends on the level of human resources development. The serious problems that agricultural production constantly faces, as well as its specific features, increase the lag of agricultural enterprises in the field of application of modern management tools [5].

It is only possible to achieve excellent results in innovative work with the necessary investment. Due to the duration of the turnover of financial sources, as well and the significant risk of non-return of the applied capital, agricultural production is not considered a tempting area for. For this reason, farmers do not try to invest their own resources in the innovative activities of the country.

The creation of conditions for the sustainable development of the agricultural sector of Kazakhstan, assistance in ensuring regional food security, and the entry of domestic agricultural products into the markets of foreign countries – all this is impossible without the active participation of the scientific sphere. The interaction of science and production should become the basis for the development of agriculture. The upcoming innovative modernization of the scientific foundations of agricultural labor will require new radical approaches to the renewal of human resources in rural areas [6].

In order to form an innovative agrarian region, the existing form of management of innovative actions is investigated; plans presented for the purpose of investing in agricultural production by the route of research of investment sources are analyzed.

Research and discussion

As a result of the COVID-19 pandemic, the scale of hunger on the planet increased in 2020. After five years of comparative stability, the prevalence of malnutrition in general increased in one year from 8.4 to about 9.9 per cent, further complicating the problem of eliminating hunger by 2030 [7]. The number of undernourished in 2020 is estimated at 720-811 million people. If we start from the mediocre significance of this feature (768 million), in this case, 118 million more people suffered from hunger in 2020 than in 2019 – or 161 million if we take the planned threshold as the basis of the external ones.

More than half of the people suffering from malnutrition in society are in Asia (418 million). And also the most one–third - in Africa (282 million). According to a comparison with 2019, the number of undernourished increased in 2020 by approximately 46 million in Africa, 57 million in Asia, and approximately 14 million in Latin America and the Caribbean.

In general, in accordance with society, the scale of small and intense unavailability of food security (characterized together with the use of the perceived scale of unavailability of food security) has been increasing for a long time since 2014, but in 2020, the size of its increase was the same increase due to all, without exception, the previous five years. In 2020, almost every third person in society (2.37 billion) did not have access to sufficient food in any way; in general, in one year the number of such people increased by almost 320 million [8].

In 2020, in circumstances of intense unavailability of food security, there were almost 12% of society's population, which is 928 million people – 148 million more than in 2019.

A significant price of healthy feeding menus combined with the continuing significant degree of income inequality, made such food unattainable in 2019 with the goal of a regime of three billion. People in absolutely all regions of society, especially the poor (much lower than in 2017).

In the situation of the COVID-19 pandemic, the number of people in society suffering from hunger did not stop growing in 2020. After the comparative sustainability stage in 2014-2019, malnutrition's prevalence increased from 8.4 percent in 2019 to approximately 9.9 percent in 2020, further complicating the problem of eliminating hunger by 2030 (Table 1).

Table 1 - Prevalence of malnutrition (PM) in the world, 2005-2020

Prevalence of malnutrition (%)									
No.	**Country**	**2005**	**2010**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
1	World	12,4	9,2	8,3	8,3	8,1	8,3	8,4	9,9
2	Africa	21,3	18,0	16,9	17,5	17,1	17,8	18,0	21,0
3	North Africa	8,5	7,3	6,1	6,2	6,5	6,4	6,4	7,1

4	Sub-Saharan Africa	24,6	20,6	19,4	20,1	19,5	20,4	20,6	24,1
5	East Africa	33,0	28,4	24,8	25,6	24,9	25,9	25,6	28,1
6	Central Africa	36,8	28,9	28,7	29,6	28,4	29,4	30,3	31,8
7	Southern Africa	5,0	6,2	7,5	7,9	7,3	7,6	7,6	10,1
8	West Africa	14,2	11,3	11,5	11,9	11,8	12,5	12,9	18,7
9	Asia	13,9	9,5	8,3	8,0	7,8	7,8	7,9	9,0
10	Central Asia	10,6	4,4	2,9	3,2	3,2	3,1	3,0	3,4
11	East Asia	6,8	<2,5	<2,5	<2,5	<2,5	<2,5	<2,5	<2,5
12	Southeast Asia	17,3	11,6	8,3	7,8	7,4	6,9	7,0	7,3
13	South Asia	20,5	15,6	14,1	13,2	13,0	13,1	13,3	15,8
14	Western Asia	9,0	9,1	14,3	15,0	14,5	14,4	14,4	15,1
15	West Asia and North Africa	8,8	8,2	10,5	10,9	10,7	10,6	10,7	11,3
16	Latin America and the Caribbean	9,3	6,9	5,8	6,8	6,6	6,8	7,1	9,1
17	Caribbean	19,2	15,9	15,2	15,4	15,3	16,1	15,8	16,1
18	Latin America	8,6	6,2	5,1	6,2	6,0	6,1	6,5	8,6
19	Central America	8,0	7,4	7,5	8,1	7,9	8,0	8,1	10,6
20	South America	8,8	5,7	4,2	5,4	5,2	5,4	5,8	7,8
21	Oceania	6,9	5,3	6,1	6,2	6,3	6,2	6,2	6,2
22	North America and Europe	<2,5	<2,5	<2,5	<2,5	<2,5	<2,5	<2,5	<2,5
Note – compiled by resource [11]									

Due to the initial prerequisites that provide for conditions of uncertainty in the conduct of assessments, the significance of this feature is currently estimated at 9.2–10.4 per cent.

In demographic terms, according to analyses, in 2020, 720 million people suffered from hunger up to 811 million. If we start from the mediocre significance of this feature (768 million), in this case, 118 million more people suffered from hunger in 2020 than in 2019 – the presence in this spectrum of estimates is in the range of 70-161 million.

The present values confirm the persistent and disturbing inequality among the regions. In Africa in 2020, approximately one in five (21 per cent of residents) suffered from hunger; this ratio is almost twice as high as the characteristics of all other regions. This means an increase of 3 profitable places in one time. This is followed by Latin America and the Caribbean (9.1 percent), as well as Asia (9.0 percent), where the

characteristics increased in 2020. according to the comparison, together with 2019, in this, 2.0 and 1.1 are profitable places globally [9].

Of the total number of people suffering from malnutrition in 2020 (768 million), the most fifty per cent were brought to Asia (418 million). as well as most one–third - to Africa (282 million), and approximately 8% (60 million) are brought to the States of Latin America and the Caribbean. According to the comparison, together with 2019, the number of undernourished increased in 2020 by 46 million in Africa, almost 57 million in Asia and approximately 14 million in Latin America and the Caribbean.

In a holistic society, the scale of small and intense unavailability of food security (characterized together with the use of the scale of perception of unavailability of food security) has been increasing for a long time, starting from 22.6 per cent in 2014 up to 26.6 per cent in 2019. Further, in 2020, if the COVID-19 pandemic occurred, the growth of this sign turned out to be equal to the increase due to all the previous five years without exception, and its significance achieved 30.4 per cent.

Similarly, in 2020, almost any third person in society did not have access to a sufficient amount of food in any way; in general, due to one time, the number of such people increased by almost 320 million: together with 2.05 up to 2.37 billion people.

Almost 40% of the present population – 11.9 per cent, or almost 928 million, of the world's population – lived in circumstances of intense unavailability of food security. In 2020, in circumstances of intense unavailability of food security, there were 148 million more than in 2019.

Mainly in general, the characteristics of minor or stressful unavailability of food security increased in 2020, according to a comparison with 2019 in Latin America and the Caribbean (9 percentage points) as well as Africa (5.4 profitable places), the presence of which in Asia it increased by 3.1 positions. Including in North America and Europe, where the lowest characteristics of food security inaccessibility are noted, the scale of this action has increased for the first time since 2014 if the receipt of information according to the SWOPB was started.

At the large-scale level, the gender discrepancy in the sign of the spread of small and intense unavailability of food security has grown even more during the COVID-19 pandemic; among women, the prevalence rate of a minor or intense lack of food security in 2020 was 10% higher than with representatives of the stronger sex, while in 2019, this difference composed 6%.

Observing the costs and the number of people who do not have all the chances for themselves to provide the possibility of healthy feeding rations provides important information that can help to understand better the relationship between these two significant characteristics of food access and the direction of the dynamics of various configurations of inadequate feeding [10].

According to analyses, in 2019, approximately three billion people needed the opportunity to provide themselves with the possibility of useful feeding menus (Table 2) due to their significant price and the continuing large characteristics of profit inequality. Most of these people live in Asia (1.85 billion people), as well as Africa (1.0 billion people), despite the fact that healthy feeding diets also have no chance of providing themselves with a huge number of the population of Latin America and the Caribbean (113 million people), and in addition North America and Europe (17.3 million of people).

Table 2 - Number of people who cannot afford healthy diets in 2017-2019

No.	Country	The cost of a healthy diet in 2019		People who can't afford healthy diets in 2019		
		Cost (USD per person/day)	Change in 2017-2019 (%)	%	Total number (million)	Change in 2017-2019 (%)
1	World	4,04	7,9	41,9	3 000,5	-0,7
2	Africa	4,37	12,9	80,2	1 017,0	5,4
3	North Africa	4,35	5,6	60,5	141,8	4,2
4	Sub-Saharan Africa	4,37	13,7	84,7	875,2	5,6
5	East Africa	4,88	33,0	85,0	342,2	5,3
6	Central Africa	3,81	2,2	87,9	152,0	6,8
7	South Africa	4,07	2,1	61,8	41,2	2,0
8	West Africa	4,30	6,8	86,8	339,7	5,9
9	Asia	4,13	4,1	44,0	1 852,8	-4,2
10	Central Asia	3,42	0,9	16,9	5,8	-22,0
11	East Asia	4,99	6,4	13,5	213,5	-7,4
12	Southeast Asia	4,41	4,9	49,5	316,1	-2,9
13	South Asia	4,12	1,2	71,3	1 281,5	-4,2
14	Western Asia	3,77	5,3	20,3	35,9	8,1
15	Latin America and the Caribbean	4,25	6,8	19,3	113,0	8,4
16	Caribbean	4,49	6,7	48,5	12,9	-1,0
17	Latin America	4,00	6,8	17,9	100,1	9,7
18	Central America	3,93	3,1	20,0	32,0	1,2
19	South America	4,05	9,2	17,1	68,1	14,3
20	Oceania	3,25	6,2	1,8	0,5	-14,9
21	North America and Europe	3,43	6,8	1,6	17,3	-3,6
Groups of countries by income level						
22	Low income	4,06	5,4	87,6	463,0	4,8
23	The income level is below average	4,49	14,3	69,5	1 953,2	-1,4
24	The income level is above average	4,20	5,7	21,1	568,5	-2,0
25	High level of income	3,64	6,6	1,4	15,8	-9,9

Note – compiled by authors from FAO [11]

Table 2 shows the price and financial accessibility of healthy feeding diets in 2019 according to regions and groups of states' degree of profit. The price of a healthy feeding ration is set, as well as its worth in US dollars per person for the period in 2017, noted in the publication of this report due to the past time and also updated together with the index of narrow consumer value (CPI) of the country level and purchasing power parity (PPP) due to the 2019 time published FAOSTAT.

The coefficient of the financial absence of a helpful feeding ration is determined as well as the weight of the profitable part (%) of those who are in no way able to provide this ration for themselves in 2019, taking into account the number of residents (in millions of people) in any area and according to any team of states according to the degree of profit.

For companies of states according to the degree of profit, information as well as due to 2017, thus, and due to 2019, time is taken with the essential systematization of states according to this feature of the World Bank 2019.

This means that the characteristics of the price, as well as financial accessibility for the purpose of state companies according to the degree of profit in the publication of the report of the past years differ from the characteristics of the report of this year since in the period 2017-2019 the position of certain states had the opportunity to change.

Poor food in all its configurations remains a worldwide appeal [11]. Even though the results of the COVID-19 pandemic cannot be absolutely taken into account in the power of non-comprehensibility of information, according to analyses in 2020, 22.0 per cent of the child (149.2 million) in the year up to 5 years were late in increasing, 6.7 per cent (45.4 million) suffered from exhaustion, and 5.7per cent (38.9 million) possessed excessive mass. It is assumed that in the power of the impact of the COVID-19 pandemic, the practical characteristics, especially the lag in increase and depletion, will become more outstanding.

Most of the children under the age of 5 who do not receive complete nutrition in any way live in Africa and Asia. Nine-tenths of all children in a society with underdevelopment in growth, most nine-tenths of children suffering from exhaustion, and the most seven-tenths of children with excessive weight are brought to these regions.

The percentage of infants up to the age of five months who received only breastfed increased in 2019 and collected 44 per cent (and in 2012 – 37%).

The coefficient of anaemia in women aged 15-49 years is included in the number of characteristics of the achievement of the SDGs (2.2.3). According to the society, 29.9% of women aged 15-49 suffer from anaemia; but the information varies significantly by region. In 2019, 30% of girls suffered from anaemia in Africa and Asia, while in North America and Europe, this ratio was 14.6 per cent overall.

In general, according to society, in 2020, 22.0 per cent of children (149.2 million) under the age of 5 were lagging in growing up (SDG 2.1.1 completion rate). The lag rate in increase decreased together from 33.1 per cent in 2000 up to 26.2 per cent in 2012, and in 2020 it dropped even more down to 22.0 per cent. In 2020, almost three-quarters of children with underdevelopment in growth on the planet were brought to two regions in general: Central and South Asia (37%) and sub-Saharan Africa (37%).

In 2020, 45.4 million (6.7 per cent) children a year up to the age of 5 suffered from exhaustion. Almost a quarter of them were brought to the states of sub–Saharan Africa, and the most half - to the states of South Asia, where the highest depletion rate was observed – 14%.

This year, approximately 5.7 per cent (38.9 million) of children under five years had excessive weight. Because of the past two decades, the situation has not changed enough to a large extent: 5.7 per cent in 2020, according to comparison, together with 5.4 per cent in 2000, and in certain regions and the most diverse circumstances, these characteristics are increasing.

The increase in the sign of fullness among adults continues: the global coefficient increased together with 11.7 per cent in 2012 up to 13.1 per cent in 2016. In the period 2012-2016, the tendency to increase the rates of obesity among the older ones was noticed in absolutely all subregions; their macro dynamics indicate a lag through the videography of the resolution of the problem established by the World Health Assembly to stop the increase in this sign by 2025.

In 2015, any seventh newborn had a small birth weight – 20.5 million (14.6 per cent) babies, according to the whole society. Children born with low weight have a greater risk of death in the first 28 days after birth, and survivors have more lag in growth, the most insignificant indicator of mental abilities (IQ), as well as the most significant possibility of overweight and fullness, and in addition prolonged difficulties with well-being in adulthood, including diabetes.

The best deep feeding, including only deep feeding in the initial six months of existence, are important for the child's survival and contributes to strengthening well-being, the formation of the brain and motor skills. In 2019, only 44 per cent of infants under the age of six months acquired deep feeding (in 2012 – 37%).

Past monitoring shows that if radical impacts are not established in any way to force activities, especially events aimed at solving the problems of inequality in access to food, by 2030 the crisis will remain the same. The COVID-19 epidemic has worsened the non-encouraging trends that existed until this decline's arrival.

Monitoring, imposed together with the possible results of the COVID-19 pandemic, indicates in this case, if after that, as well as the scale of hunger in society, will achieve a personal apogee in 2020. (the most 760 million people), the number of undernourished in society will continue to decline for a long time and will amount to 660 million by 2030. And also everything, without exception because this is 30 million more than the target indicator in 2030, determined for the purpose of the circumstances of the unavailability of the pandemic, which shows its long-term results for the purpose of food security in society.

In a holistic society, there is a development in the fight together with certain configurations of inadequate feeding, but the activity according to the conclusion of questions according to each of the characteristics in the field of nutrition by 2030 is going along with the lag [12]. According to the trends of lagging in the increase in children, current rates of activity are small, only deep feeding and low weight presence of birth. According to the directions of overweight, exhaustion in a child, anemia in girls of reproductive age, and fullness in older people, the situation does not change in any way or, among other things, worsens.

The COVID-19 epidemic had the opportunity to influence the characteristics of the scale of different configurations of poor feeding. This effect can persist after 2020, as confirmed by the features of 2021. Aggravating conditions are considered to be the results of poor feeding for the purpose of future generations and their impact on efficiency. Outstanding efforts should be made to counteract the pandemic and overcome its results, as well as one of the components of forcing activities according to the achievement of the mission.

Monitoring of this period according to the dynamics of the PH indicator up to 2030 is based on a structural alignment, which is based on a universal dynamic form of a single balance. There were 2 scenarios modeled: a plan that provides for calculating the results of the COVID-19 pandemic, as well as a plan that does not provide for this condition in any way. In two scenarios, it is implied that the dynamics of these actions do not comply with any of the basic conditions for the unavailability of food security, as well as the fact that short-term temper events required for the purpose of transforming food concepts in the interests of providing food security, as well as reducing inequality in the food access project, are not implemented in any way.

According to the scenario that takes into account the condition of the COVID-19 pandemic, after its own maximum of approximately 768 million (9.9 per cent of the population) was achieved in 2020, the global hunger coefficient can decrease in 2021 to approximately 710 million people (9 per cent) and then will continue to gradually decrease to less than 660 million people (7.7 per cent) in 2030. Still, the macro dynamics of these actions in 2020-2030 will differ significantly according to regions. It is assumed that in Asia, this coefficient will decrease significantly (together with 418 up to 300 million. people). Still, in Africa, it will dramatically increase (together with the most 280 up to 300 million people), as a result of which, by 2030, Asia and Africa will approximately catch up according to the number of people suffering from malnutrition.

Under the scenario in which the condition of the COVID-19 pandemic is envisaged, by 2030 the number of undernourished can be more than 30 million, rather than the presence of a pandemic shortage, which shows in the long-term view of the results of the pandemic for the purpose of world food security. The main condition for this significant difference is considered to be the most significant difference in food access.

In general, according to society, there is a development in the fight together with certain configurations of inadequate feeding, but the activity according to the conclusion of mass issues according to each of the indicators in the field of feeding by 2030 is going along with the lag [13]. Modern rates of activity, according to the trends of lagging in the increase in the child, only deep feeding and low weight presence of birth are insufficient. According to the trends of overweight and exhaustion in a child, anemia in girls of reproductive age and fullness in adults, the situation does not change in any way (there is no improvement) or, among other things, worsens. At the same time, there is no less noticeable development in certain areas in the future: about a quarter of the states have proved that the activities according to the conclusion by 2030 The SDG issues affecting the lag in the increase and depletion of the child are progressing at a planned pace, and about a sixth of the states intend to find a complete solution to the problem of overweight in the child.

It is difficult to predict the dynamics of the characteristics in the shortest few years, since the financial and other results of the COVID-19 pandemic have yet to fully develop. Until then, there is little experimental information regarding the real impact of the pandemic on the dynamics of different configurations of inadequate feeding, in this amount on the characteristics of the scale of lagging in increase, exhaustion, overweight in a child; fullness in older women; anemia in girls of reproductive age; low birth weight; as well as only deep feeding. Aggravating conditions are considered to be the results of inadequate feeding for the purpose of future generations and their impact on efficiency and, as a result, the resumption of the economy. But it is clear that the COVID-19 epidemic had the opportunity to influence the characteristics of the spread of different configurations of inadequate feeding. There is also an impact that may persist after 2020, as confirmed by data for 2021. For this reason, outstanding efforts should be made to counteract the pandemic and overcome its results in forcing activity according to the conclusion of the problem.

Over the past ten years, fluctuations have increased significantly, as well as the saturation of collisions, the variability of the atmospheric climate, its extreme phenomena, and the stages of economic containment and financial regressions. The increasing impact of these strong conditions (the effect of which is currently being complicated by the COVID-19 pandemic) leads to an aggravation of the difficulty of hunger. Also, it makes it difficult to reduce the scale of all configurations of poor feeding, especially in states with low and mediocre degrees of profit.

70% of the states, together with a low and mediocre degree of profit, became affected even though from one of these conditions, as well as 41 per cent of these states (38 from 93 states), in addition, the characteristics of profit inequality are significant, which worsens this impact.

Most of the people suffering from malnutrition and the child, along with the lag in increase, exist in States subject to the influence of numerous conditions. In the period 2017-2019, in absolutely all regions, in states subject to the influence of multiple conditions, there was a maximum increase in the characteristics of the prevalence of malnutrition, which was 12 times higher than the characteristics of states where there was only a single type of circumstance.

In 2020 in Africa, Asia, as well as Latin America and the Caribbean, impressive increases in the PH sign were observed since these regions were in a financial crisis (in a fundamental relationship with measures to contain the spread of COVID-19) in combination with natural disasters, incidents or a combination of both associated with atmospheric climate change. The increase in the price of nutritious food products in absolutely all parts of the food concept is due to external (for example, incidents and climatic shocks), as well as internal conditions (for example, low productivity and fruitless food supply chains), which, in combination with a low degree of profit, reduces the financial accessibility of healthy feeding rations.

In states subject to the influence of numerous conditions in 2019, the profitable part of the inhabitants, who are in no way able to provide good food for themselves, is more elevated (68%), that is, the usual, following this, in 39, as well as 66% earlier than in states in such a place a single condition is functioning, or there are no similar conditions.

Financial lack of healthy feeding rations and the norm is more where there are disagreements.

The reasons before the impact of which, in the final period, there is an increase in the scale of hunger, as well as a slowdown in the pace of activity according to a decrease in absolutely all configurations of inadequate feeding, are considered to be disagreements, variability of the atmospheric climate and its extreme actions, and in addition, slowing down the increase in the economy and financial losses (the impact of which is currently complicated by the COVID 19 pandemic) [14]. Their negative impact is further complicated by the continuing significant degree of inequality. In addition, many people throughout society experience torment with food insecurity, as well as inadequate feeding. Thus, as well as only have a chance to provide an opportunity for a proper feeding diet. Any of these conditions are unique, but they are not considered incompatible in any way, since all of them, without exception, have a negative impact on food security and feeding, initiating numerous, mutually aggravating results in multiple components of our food concepts.

Figure 1 shows a diagram of food concepts illustrating in this case.

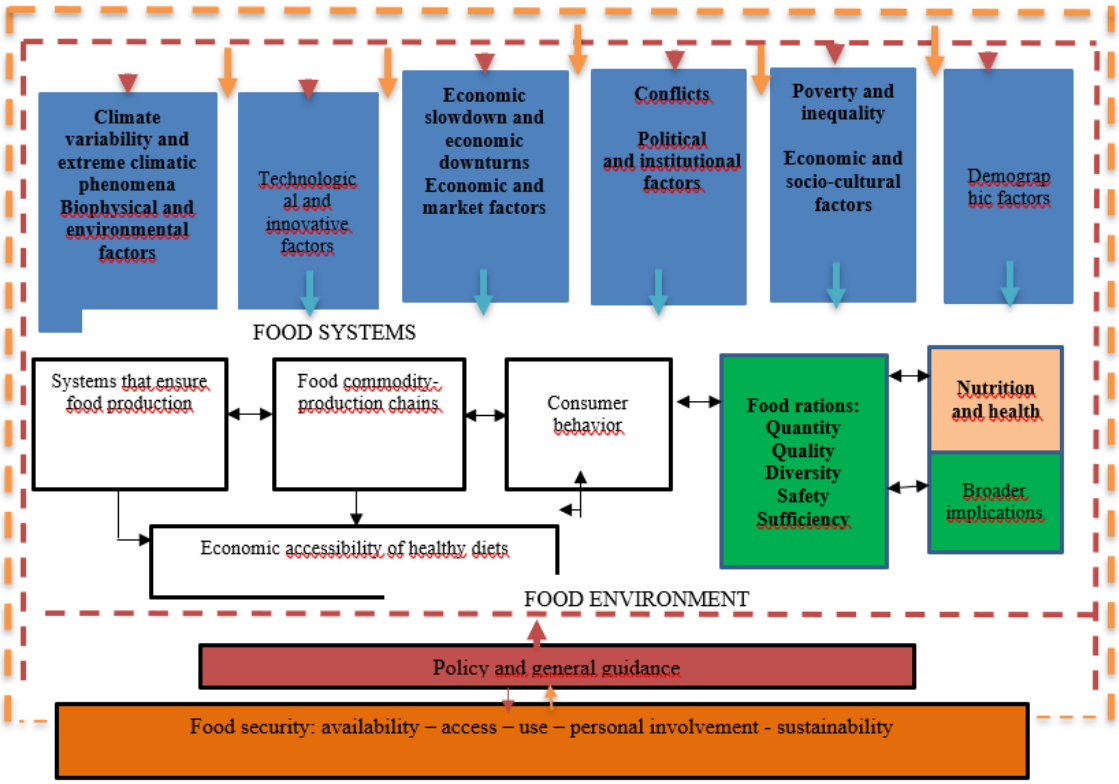

Figure 1 - Development of the world food security concept

Note - compiled by authors

In this way, the current trends in the field of food security and feeding have a significant impact on the development of numerous specific results in absolutely all

components of food concepts (including food spheres), which generates results with the aim of absolutely all four components of food security (presence, admission, application and stability), and in addition for two additional components of it – individual participation and strength.

For example, incidents negatively impact almost any approach of agri-food concepts, from production and harvesting, its processing and transportation, up to the provision of production resources, financing, marketing and consumption. Examples of direct impact are the liquidation of agricultural assets and sources of funds for life, which legitimately generates thorough pathologies and restrictions on trade in products, as well as offers and their movement, negatively affecting the presence of food products, in this amount of exalted calories, as well as costs for them.

The variability of the atmospheric climate and its extreme actions also stimulate numerous mutually aggravating results for the purpose of food concepts [15]. These conditions negatively impact the efficiency of the agricultural economy and significantly impact the import of food, because of the result of which different states are trying to compensate for the loss of domestic production. Natural disasters associated with changes in the atmospheric climate have every chance to significantly impact all the components of food supply chains without exception, activating negative results to increase the division for food and non-food agro-industrial production.

At the same time, on the opposite side, the delay in increasing the economy and financial losses – because this leads to an increase in the absence of work, as well as a decrease in earnings and profits – affect the product concepts, primarily in general due to the results of negative consequences in the project of allowing residents to food, in this amount of financial accessibility strong feeding rations. This happens outside of this connection, provoked by market fluctuations, trade sales, socio-political concerns or a worldwide pandemic, for example, COVID-19.

Conclusion

The economic absence of healthy feeding rations is the result of the impact of other forces or conditions in people's profits, as well as the value of high-calorie food products in all links of the product concept. This condition, as well as a similar one, functions from within food concepts, negatively impacting food security and feeding.

Poverty and inequality are considered primary structural conditions that exacerbate the negative impact of other key conditions. Their influence is expressed in absolutely all links of product concepts and spheres, showing an effect on the financial accessibility of healthy feeding menus and characteristics of food security, as well as feeding.

In addition to influencing product concepts, these critical mass capacities and solid structural conditions soften food security and reduce the feeding property due to the result of a single, as well as having a circular type of influence in other concepts, including ecosystems and health concepts.

Rebuilt on the basis of increased stability to the impact of critical conditions, food concepts have every chance to guarantee economically efficiently accessible strong feeding rations on the basis of the fundamentals of environmental stability and inclusiveness and are also ready to be a strong locomotive for eliminating hunger,

inaccessibility of food security and even poor feeding in absolutely all its configurations [11].

In the regions affected by collisions, the source for the development of stability of more sensitive companies to the influence of external conditions is considered to be the preservation – to what extent this is likely – of the functions of food concepts required in the circumstances of such collisions, coordinating the presence of urgent humanitarian support measures to save existence, as well as sources of funds for life, long-term missions of formation and strengthening of society.

Improving the stability of food concepts to the influence of conditions of increasing variability of atmospheric climate and extreme weather events is guaranteed by modern mechanisms aimed at reducing risks combined with climate, the extensive introduction of climatically optimized and environmentally sound manufacturing methods, and in addition support and renewal of the natural sphere.

The financial results of the COVID-19 pandemic confirm this, during the stages of curbing the growth of the economy and financial regressions, it is sceptically essential to maintain the activity of food distribution chains, providing, in this case, the necessary assistance from sources of funds for the more sensitive companies of residents, the serviceability of the manufacture of nutritious food products, as well as access to them, in this amount in the database for maintaining public security projects.

Since a set of conditions influences product concepts and, in addition, have a significant impact in the most diverse way on the situation of food security and feeding, it is necessary to develop policies that take into account the specifics of the circumstances, investments and law to extract the most significant overall result in the project of transformation of product concepts; in this case, the insufficiency of economic resources should be taken into account [16].

Support for socio-economic inequality focuses on the need for fundamental changes in product concepts for vulnerable and usually socially isolated categories of residents to acquire the most extensive access to production resources, technologies, information and innovations that give them a chance to rapidly participate in the implementation of changes to increase the stability of product concepts.

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