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PECULIARITIES OF MANAGEMENT OF AGRICULTURAL ENTERPRISES UNDER MARTIAL LAW

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**Lohosha R., Pidlubny V., Mazur K., Aliksieieva O., Belkin I.,
Germaniuk N., Harbar Zh., Harbar V., Kubai O.**

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Author's:

Lohosha R., Pidlubny V., Mazur K., Alieksieieva O., Belkin I., Germaniuk N., Harbar Zh., Harbar V., Kubai O.

Editor:

Roman Lohosha, Doctor of Economic Sciences, Professor, Head of the Department of Agrarian Management and Marketing.

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ABSTRACT

Ensuring food security both in Ukraine and in the world is always one of the priority areas of the global agenda. This issue has become especially relevant in connection with the increase in the population on the planet, depletion of natural resources, decrease in soil productivity, climate changes and military conflicts. At the same time, food itself, its production, distribution and consumption are outlined as the most important elements of the functioning of the world economic system. The integration of Ukraine into the world and European community gives considerable attention to the problem of guaranteeing the population's supply of food under any conditions.

In recent years, the number of countries with existing food security problems has increased. However, Ukraine occupies an important place in the world arena of the food market. Before the large-scale Russian invasion of the territory of Ukraine, the strategic potential of the domestic agricultural sector was aimed at exceeding the mark of providing food for the world's 400 million population.

Active hostilities caused a number of large-scale destructive effects on the agricultural sector. Many agricultural and processing enterprises were destroyed and seriously damaged. Crop cultivation areas and production volumes of plant products have decreased. There are breaks in logistics connections, blocking of sales markets. The export of grain products is falling catastrophically.

The state of war made it extremely difficult for the livestock industry to function. Livestock complexes and livestock suffered damage and significant losses. They reduced the production of raw materials for the processing industry of dairy and meat cattle breeding and pig breeding. Poultry farming has lost foreign sales markets.

In the conditions of hostilities, the primary task of the Ukrainian agricultural sector became the reliable supply of agricultural products and food to the population. At the same time, the key role in the preservation and development of local markets and food supply chains in the regions belonged to farmers and agricultural enterprises.

However, agricultural commodity producers in the agrarian sphere are gradually adapting to the economic conditions acquired by the national economy. Strategies for preserving business and balancing benefits and costs are being implemented in conditions of limited access to product sales channels and rising costs of production resource support components. In the structure of production, agricultural enterprises provide almost 32% of agricultural production, which is aimed at meeting the needs of the domestic market.

The post-war reconstruction of agriculture should solve the problem of damages caused to the agrarian sector of the economy from Russian aggression and the vector of structural transformations for the further development of agriculture and rural areas of Ukraine. The issues of the new post-war state agrarian policy of Ukraine in the conditions of limited own resources are aimed at attracting international support to the agricultural sector, which should have a positive effect on the production of agricultural products and food.

In order to preserve the agricultural sector of Ukraine, according to the agreement of the Government with many international organizations, programs to support preferential crediting of commodity producers, the Fund for partial guarantees of loans in agriculture are involved. The 5-7-9 credit program has been extended under 50% state guarantees and assistance from the World Bank. Under this program, agricultural producers can obtain loans in the amount of 100,000 to 90 million UAH at 0-9%. Through the platform of the created State Agrarian Register, the EU financial assistance program operates for small agricultural producers who have confirmed their stability in the conditions of military operations and the conclusion of classical agrarian economic theory that they ensure the existence of production itself. At the same time, farms and peasant farms have a positive effect on the development of rural territories, the preservation of the rural settlement network, village infrastructure, rural lifestyle, rural mentality, language, traditions, and the general autochthonous culture characteristic only of this society. The specified program corresponds to the best European practices, in particular the mechanism of production grants common in the European Union.

The results of the presented research in the monograph are made within the initiative of the Department of Agrarian Management and Marketing of Vinnytsia National Agrarian University "Development of the concept of marketing management of agricultural enterprises" state registration number: 0122U002111 for 2022–2024.

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1. Peculiarities of managing agricultural enterprises on the grain and meat market under martial law

Among the main problems of the functioning of the agricultural market of Ukraine during the war period is the formation of high prices for food products and insufficient consumption due to the low purchasing power of the population. Thus, at the end of 2022, according to the Ministry of Finance of Ukraine, the inflation rate was 26.6%, which is 2.7 times higher than than at the end of 2021 (10%).

Among the reasons for the increase in prices, it should be noted, first of all, the increased demand caused by the war in the country, when people buy essential and long-life products. The price situation in Ukraine is negatively affected by the disruption of logistics chains and relationships between market participants and the real possibilities of setting up logistics, as well as the increase in fuel prices and the rise in energy prices. As for export-oriented products, the national devaluation should be taken into account currency and the rapid growth of the dollar and euro exchange rate. On price fluctuations in the domestic market of livestock products, in particular, affect: loss of livestock and production due to war; changes in production costs - absence or increase in the price of feed, increase in the cost of veterinary drugs, fuel and lubricants. Due to power outages, products that require special production technologies, as well as perishables that require cooling or freezing, suffer the most. This, of course, affects the formation of supply and prices. In particular, a power outage directly and negatively affects the production and cost of meat, because it disrupts production processes. In particular, the process of egg incubation is disrupted, and therefore the production of day-old broiler chickens, which should be raised for meat, young livestock and poultry die due to violations of keeping technologies, difficulties arise with the production of fodder, processing and storage of final products in the retail network. All this ultimately affects and increases the cost of meat. Aggravation of the situation with power outages may lead to a reduction in the supply of beef, pork and poultry [1, p. 42].

Due to the fact that domestic production of poultry meat exceeds consumption, there will be no shortage of poultry meat. Among the main markets for plant and animal products Let's take a closer look at the grain and meat market.

Grain market. Ukraine annually increased the volume of production and export of grain crops and was among the main players on the international market. The tendency to increase production volumes grain remained sufficiently stable for a long period [2, p. 287].

Over the past 20 years, Ukraine has significantly increased the volume of production of agricultural products, especially oriented species for export. Thus, from 2000 to 2021, the production of wheat increased by 3.2 times (from 10.2 to 32.2 million tons), barley – by 1.4 times (from 6.9 to 9.4 million tons). The long-term growth of world demand for Ukrainian corn contributed to an 11-fold increase in its production (from 3.8 million tons in 2000 to 42.1 million tons in 2021). If in 2000 Ukraine grew 24.4 million tons of grain crops, then after 20 years this indicator exceeded the record mark of 86 million tons.

In the last pre-war year of 2021, Ukraine increased production grain crops by 32.5% (or by 21.1 million tons), in particular wheat - by 29.3% (7.3 million tons), rye - by 29.8% (7.3 million tons), barley – by 23.6% (by 18 million tons), corn – by 39% (by 11.8 million tons).

During this period, the export potential of the domestic grain market increased almost 40 times – from 1.3 million tons of grain exported in 2000 to 52 million tons in 2021.

With the beginning of the russian aggression, the world felt the scarcity of Ukrainian wheat. After all, Ukraine ranks 7th in world production. Ukraine's share, which was stable on average, was 3.5% of of total world production in 2021 increased to 4.1%.

However, the armed aggression of russia, the conduct of active hostilities on a large territory of Ukraine caused a number of large-scale problems that have a destructive effect on the current state and prospects for the further functioning of the grain market.

The number of sown areas is decreasing, the technological one is being disrupted discipline of cultivation, grain yield levels decrease crops, transport logistics were broken, many agricultural and processing enterprises were destroyed and significantly damaged grain industry [3-4]. Catastrophically during the first half of 2022 the export of grain products decreased.

A significant share (more than 40%) of the production of grain crops in Ukraine is formed by winter crops of wheat, barley and rye. Under the harvest In 2022, 7.6 million hectares were sown with winter cereals, which is 7% lower than in 2021 (8.2 million hectares). Including the area under winter wheat for the 2022 harvest, it was 6.5 million hectares (-5% from the indicator 2021), under winter barley – 969.0 thousand ha (-15%) and under rye – 108.5 thousand ha (-39%).

The military actions in Ukraine led to a significant reduction of areas, that are available for collection. A large part of the land ended up behind the limit of the physical possibility of its processing. First of all, these are the territories of Kherson, Donetsk, Luhansk, Zaporizhzhya, Mykolaiv, Kharkiv, Sumy, Chernihiv and Kyiv regions.

The decrease in the area of grain crops in 2022 after the start of a full-scale invasion compared to 2021 is estimated at 23.3% (from 15.9 to 12.2 million hectares). The collected area has decreased up to 11.8 million hectares.

Total production of grain and leguminous crops in in 2022 amounted to 53.9 million tons, which is 37.3% lower than in 2021. Wheat acreage during the year of full-scale invasion decreased by 1.8 million hectares. The projected reduction in wheat acreage is estimated at 2 million hectares (or by 25.4%) – from 7.1 to 5.3 million hectares, and harvest losses compared to 2021 reached 11.5 million tons (or 35.7%).

The reduction in the area under corn is estimated at 1.4 million ha (or 25.4%), and production volumes decreased from 42.1 to 26.2 million tons, which is 37.8% lower than in 2021. Crop losses are estimated at almost 16 to 15.9 million tons. The total share of winter crops collected barley for the 2022 harvest in dangerous regions of the country almost 44% of the total area. The reduction of the area under barley is

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estimated at 0.8 million hectares (or by 32.3%), and the harvest losses approached the mark of 4 million tons. Compared to 2021, barley production decreased by 40.4%.

The only positive result was recorded for buckwheat, the production of which during the war period increased by 40.0% (from 105.8 to 147.7 thousand tons). Farmers responded to the call of consumers and the state and significantly increased the acreage under this culture. For the last one In the first decade, buckwheat production exceeded our domestic production consumption, roughly 1.5 times, which made it possible to form an internal reserve, prevent deficits and stabilize the price trend growth [5, p. 11].

The most extensive losses of area and harvest of grain crops in Luhansk, Donetsk, Zaporizhzhia, Kherson, Kharkiv and Mykolayiv region.

To determine the amount of destructive shifts occurring on the grain market of Ukraine, the actual production balances for 2021 and forecasts for 2022-2023 are presented (Table 1).

Table 1

Grain market product balances for 2021-2023, thousand tons

Balance sheet	2021 p.			
	Cereals and legumes	Wheat	Corn	Barley
General offer	86387	32281	42139	9492
Production	86010	32151	42110	9437
Imports	377	130	29	55
General demand	71429	27792	32298	9018
Internal demand	19856	7426	7613	3308
Industrial processing	1158	46	753	301
Consumption fund	5117	4094	158	205
Seed	2227	1365	212	543
Losses, incl. for livestock feed	11354	1921	6490	2259
Export	51573	20366	24685	5710
Stock change +, -	14958	4489	9841	474
<i>Production per person, kg</i>	2078,5	777,0	1017,6	228,1
	2022 p.			
General offer	54069	20834	26205	5629
Production	53864	20729	26187	5608
Imports	205	105	18	21
General demand	53798	18201	30195	4701
Internal demand	15268	6958	5184	2575
Industrial processing	824	79	535	175
Consumption fund	4428	3965	147	167
Seed	1930	1228	130	390
Losses, incl. for livestock feed	8910	1765	4907	2018

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Continuation of table 1

Export	38530	11243	25011	2126
Stock change +, -	271	2633	-3990	928
<i>Production per person, kg</i>	1566,7	602,9	761,6	163,1
	2023 p. (forecast)			
General offer	58307	20237	28405	5836
Production	58111	20142	28386	5809
Imports	196	95	19	27
General demand	54929	18039	29149	5296
Internal demand	16389	6764	5279	2536
Industrial processing	848	65	525	165
Consumption fund	4989	3912	155	152
Seed	1898	1181	134	383
Losses, incl. for livestock feed	8654	1606	4465	1836
Export	38540	11275	23870	2760
Stock change +, -	3378	2198	-744	540
<i>Production per person, kg</i>	1704,1	590,7	832,4	170,4

Sources: the calculations use data from the State Statistics Service of Ukraine and Expected production of agricultural products in Ukraine in 2023: methodology and calculations (August 2023) / [Lupenko Yu.O., Nechiporenko O.M., Ludvenko D.V., Hryshchenko O.Yu.] ; under the editorship Yu. O. Lupenko, OHM. Nechiporenka.Kiev: NNC "IAE", 2023. 58 p. [6].

Domestic demand in 2022 is estimated at 15.3 million tons, which by 291% below the pre-war level, industrial processing – y 0.82 million tons (by 0.38 million below the indicator of 2021). Consumption fund decreased by 13.5% (from 5.1 to 4.4 million tons). In turn, reduction and of seed material is estimated at 1.9 million tons (as a result of significant reduction of sown areas under warm grain crops in 2022). Export grain from Ukraine in 2022 amounted to 38.5 million tons [1, p. 46].

According to the expected data of the Institute of Agrarian Economics, the harvest of cereals and legumes in the 2023 season may exceed the previous year's indicator by 7.8% and reach 58 million tons. Wheat is planned collect 20.1 million tons (-2.8%), barley – 5.8 million tons (+3.6%), corn – 28.4 million tons (+8.4%). Therefore, the total supply of grain in 2023 is predicted to be 58.3 million tons, in particular: wheat – 20.2 million tons, rye flour – 28.4 million tons, barley – 5.8 million tons.

Accordingly, grain production per person will increase to 1704.1 (compared with 1566.7 kg in 2022). Domestic demand compared from 2022, it will increase by 7.2% (from 15.3 to 16.4 million tons). The consumption stock may increase by 11.7% (from

4.4 to 5.0 million tons). Abbreviation seed material is not predicted. Export of grain from Ukraine in 2023 may reach last year's figures of 38.5 million tons (11.3 million tons of wheat, 23.9 million tons of corn, 2.8 million tons of barley).

Meat market. The meat market is an important component of the food market the country's market, the stability of which functions to a large extent the standard of living of the population and ensuring the food security of the country depend. Meat and meat products are among the most important food products. However, for most agricultural of livestock and poultry producers is unprofitable. The market did not become them as an economic base for the reproductive process. The main components of the meat market are the market pig farming products, livestock products market and meat market birds [7, p. 92].

Until February 24, 2022, the meat market in Ukraine functioned in quite difficult economic conditions. Meat producers increased production volumes during the decline of certain branches of animal husbandry (cattle breeding and pig breeding).

During the period 2000-2021, transformational processes took place in the livestock industry of Ukraine, which led to changes in the structure of the meat market. The share of poultry meat in the structure of meat production of all types since 2000. by 2021 increased from 11.6% to 56.3%. It is worth emphasizing that agricultural enterprises increased the volume of meat production birds In the structure of meat production of all types, the share of pork decreased from 40.6% in 2000 to 29.7% in 2021. To a critical level the share of beef and veal in the production structure decreased all kinds of meat. If in 2000 it was 45.4%, then in 2021 – only 12.7%. This actually narrows the formation of a rational meat balance of the country, where beef should occupy at least 30%. Such structural changes were the result of crisis phenomena in industries livestock and pig breeding.

Pork production has somewhat stabilized by 2021. However, significant damage is caused by African swine fever and fluctuations in grain and animal feed prices.

Cattle breeding remains an unprofitable business. In Ukraine, the trend of excision continues cattle. The total unprofitability of cultivation is great of cattle and pigs led to a decrease in the livestock population [8, p. 127]. As a result of a significant

reduction in beef production by agricultural enterprises, households became the main producers of this type of product. In households in 2021, 62% of the cattle population was concentrated. In 2021, this category of farms provided 75.0% of the volume of beef and veal production in Ukraine.

Problematic issues of the functioning of the livestock industry in Ukraine, there is a decrease in the number of cattle productivity, deterioration of production indicators and its efficiency, the unsatisfactory level of the fodder base, selection and breeding work and technological support, insufficient state support [7-8].

The Resolution of the Cabinet of Ministers of Ukraine dated April 22, 2020 № 341 «On measures to stabilize prices for goods, having significant social significance, anti-epidemic goods appointment» as amended by a number of Resolutions of the CMU. Subjects businesses on the food market must comply with the current norms of state price regulation, namely: the maximum levels of the trade allowance (markup) in the amount of no more than 10% when forming prices for such products as: wheat flour of the highest grade grade, pasteurized milk with a fat content of 2.5% (in a film), rye-wheat bread, chicken eggs of category C1, poultry (chicken carcass, quarter of a chicken carcass), loaf, sunflower oil refined in accordance with the Decree of the Cabinet of Ministers of Ukraine dated 09.12.2020 №1236; introduction of the procedure for declaring price changes and/or registration prices for goods that have significant social significance, respectively to Resolution №341.

One of the options for controlling the prices of the main types of food products is the application of the practice of public procurement in the period of low prices and their intervention in the market in the peak periods of high prices for smoothing out price fluctuations and curbing food inflation [9, p. 36]. This is exactly the function of the Agrarian Fund for objects of state price regulation according to the Law of Ukraine «On Amendments to Certain Laws of Ukraine Regarding the Improvement of Mechanisms of State regulation of the market of agricultural products» №1447-VI from 04.06.2009.

Grain market. After harvesting a record grain crop in 2021/2022, Ukraine predicted a record export volume of world market. But due to the war, and with it

logistical problems, Ukrainian exports stopped. More than 20 million tons of grain and oil crops were blocked in the ports of the Black and Azov seas. Grain export was limited to 500,000 tons in the first months per month compared to 5 million tons before the war. According to the Ministry of Agriculture, Ukraine lost 170 million dollars every day due to blocked ports. The problem was partly solved by the grain agreement, which was signed at the end of July and according to which 3 Ukrainian ports were unblocked: «Odesa», «Chornomorsk» and «Pivdenny». Ports remain blocked Mykolaiv, which are among the largest in Ukraine and were transported before the war 35% of Ukrainian food exports. Thanks to the functioning grain corridor, as of June 1, 2023, the export of grain and leguminous crops amounted to 45.3 million tons or 96% of the indicator of the previous 2021/22 MY [1, p. 48].

In terms of grain crops, wheat has already been exported 15.4 million tons (83.2% of the level of last year's period), barley – 2.6 million tons (or 45.6% of last season's volumes). As of the middle of June 1, 2023, the export of corn has already exceeded the previous year's indicators – 26.9 million tons of grain were exported compared to 22.3 million tons for the entire 2021/22 MY.

The suspension of the «grain corridor» has a significant impact on the export dynamics of the grain market. During the new 2023/ 2024 MR Ukraine has already exported 6.1 million tons of grain and leguminous crops, which is 15.3% (or 1.2 million tons) less than the same indicator of the past 2022/2023 MR. Wheat has already been exported 2.9 million tons, corn – 2.5 million tons, barley – 0.6 million tons.

Meat market. Further functioning of the livestock industry and its effectiveness directly depends on government policy and motivational mechanism One of the ways to increase the efficiency of the industry, as evidenced by previous experience and foreign practice, is the concentration of production, including on the basis of cooperation of producers. In addition, for the development of the industry, it is necessary to improve the fodder and breeding base, ensure the modernization of the extremely outdated material and technical base, and increase investment and innovation activity [7, 9].

It is worth citing the example of the poultry industry, which with the help of the state and significant amounts of financial support increased the volume of poultry meat production from 2000 to 2019 by 7.2 times. The short cycle of poultry farming and the quick return on capital investment in the production of poultry meat led to the growth of investments in this industry, construction of modern large poultry farms and creation of powerful vertically integrated companies. In particular, MHP is the largest chicken producer in Ukraine. According to the company's own estimates, it occupies 55% of the domestic chicken market. In 2017-2019, MHP received almost UAH 2.4 billion. state financial support. Over the years the distribution was as follows: 2017 – 1.4 billion hryvnias, 2018 – almost 970 million hryvnias, 2019 – 29.4 million hryvnias.

We believe that overcoming the crisis phenomena in the field of animal husbandry in general, and cattle breeding in particular, without state support and involvement significant investment resources is practically impossible. The livestock sector and the meat market require significant financial support from the state. However, at the moment, the first priority is the victory of Ukraine in war against the invaders [10, p. 56].

Features of the functioning of agricultural enterprises on the agricultural market. The assessment of the functioning of the agricultural market was carried out in relation to two main criteria: affordability and physical sufficiency [11, p. 19]. Pre-war (2020) and wartime consumption adequacy indicators have been established period (2022) show – if in 2020 bread and bread products, potatoes, vegetables and melons and oil, eggs are close to rational consumption norms, i.e. we can talk about sufficiency, then for all products in 2022 the indicator decreased Indicators of milk consumption should be considered critical and dairy products – this is 47%, fish and fish products – 40% of the established rational norms.

If the population spent on food in the last five years needs grew steadily with an almost unchanged share of to the family budget – 47-52%, then in 2022 significant things happened cost growth, and the share reaches at least 60%. That is, it is available in the country decrease in the purchasing power of the population along with inflationary and devaluation processes.

According to our calculations, it was established that for the consumption of basic food products in accordance with the normative indicators, the population of Ukraine had to spend under the conditions of 2022 UAH 58,817.3 per year, while UAH 33,518.9 was actually spent per year, i.e. 1.7 times Less. At the same time, the main cost of purchases in the structure was made meat, milk and dairy products – 66%. Apart from the inconsistency demand for rational norms, there is a large differentiation consumption of food products in households, depending on of average per capita total income per person per year.

Study of the dynamics of consumer prices for food products in wartime conditions show their significant growth. Yes, the price of sunflower oil has undergone minor changes. At the end of the year, it was UAH 69.75/l, which is 14.3% more than at the beginning of 2022.

The price of apples at the end of the year was UAH 15.13/kg, which 18.4% more than at the beginning of the year. During the year, there was a seasonal price fluctuation from 12.78 to 18.32 hryvnias/kg.

Since the beginning of 2022, prices have increased significantly - more than doubled on citrus fruits and bananas, which are objectively necessary imports. By according to the Ministry of Finance, at the end of December 2022, in supermarkets, oranges cost UAH 65.0/kg, tangerines 64.50 UAH/kg, lemons – UAH 70.0/kg, bananas – UAH 69.0/kg [1, p. 50].

Average consumer prices for borscht vegetables during the year changed significantly. By the end of 2022, according to the State Statistics Service, the price of white cabbage dropped to UAH 12.95/kg (by 23.9%) and beets to UAH 12.25 (21.4%). While during the year their price reached 39.57 ta UAH 33.40/kg, respectively. The price of spring onions remained high and carrots – 30.63 and 22.37 UAH/kg, which is higher than at the beginning of the year in 2.2 and 1.7 times, respectively. The price of potatoes in December was practically at the same level as in January 2022 – UAH 9.20/kg. She is the highest fixed in July, i.e. in the season of the new harvest – UAH 18.93/kg [12, p. 313].

Significant price increase – 1.7 times by the end of 2022, comparatively with the beginning, the eggs were exposed. In December, their average consumer price, according to the State Statistics Service, amounted to UAH 62.03 for 10 pcs.

The prices of milk and milk products by types increased from 18.5 to 26.6%. In particular, pasteurized milk with a fat content of up to 2.6% 18.5% to UAH 34.28/kg, soft fatty cheeses by 19.3% to UAH 159.34/kg, sour cream with a fat content of up to 15% and butter up to 26.6% to UAH 95.11 /kg and UAH 65.98 per 200 g, respectively.

Grain market. Russian aggression had a significant impact on the grain markets due to the limitation of export opportunities and crop areas in Ukraine. As a result, world prices for wheat and corn soared to record levels and slightly adjusted only with the beginning of the new harvest in the countries of the Northern Hemisphere. The exchange price of wheat increased significantly and reached 400-420 dollars per tonnage.

Domestic price policy for grain crops in Ukraine during the first half of 2022 was very unfavorable for farmers. In the spring and summer, grain prices in Ukraine fell as a result of blocking of ports and limited ability to export. Market grain products trading has undergone drastic changes and continues to adapt to new challenges [13, p. 314].

The price of CHN-port wheat by train in September - December 2022 fluctuates between \$200-210/tonne, the price of DAP – the border decreased by this period from 305 to 245 dollars /t.

Negative price trends in the grain market have undergone more significant changes in the retail markets of cereals, bread and bread products.

Cereal prices in December 2022 compared to January 2022 changed as follows. The largest increase was experienced by import-dependent rice, which doubled in price (from UAH 29.03 to UAH 59.65 per kg).

Buckwheat increased in price by 1.6 times during 2022 and now costs an average of UAH 74.69 per kg, compared to the price of UAH 47.61 in January 2022. Millet groats for analysis period increased the price by almost 40% (from UAH 18.74 to UAH 25.98), semolina rose in price by 19% and cost UAH 22.43 per kg in December 2022

compared to the price of UAH 18.85 at the beginning of the year. Barley groats and wheat increased in price during the year comparatively not so significantly – by only 8% and now cost an average of UAH 17.7-18.7 per kg.

The price peak for cereals, with the exception of import-dependent rice, arrived in June-August. So, during this period, buckwheat cost almost UAH 100 on average, semolina – UAH 24.24, millet – UAH 28-29, barley and wheat groats – UAH 20-21 per kg [1, p. 52].

The following price trends have been established in retail markets bread and bakery products. Yes, as of the end of December 2022 with at the beginning of the year, the price of wheat flour rose by 8.5% (from 15.48 to 16.79 hryvnias per kg), bread made from high-grade flour rose in price by 21.8% (from 33.61 to 40.94 hryvnias per kg), made from first-grade flour by 22.6% (from UAH 27.1 to UAH 33.23 per kg). Rye, rye-wheat bread increased in price by 18.1% and costs UAH 35.11 per kg compared from UAH 29.73 in January 2022. The price of a loaf increased by 18.7% (from 36.2 to UAH 42.96 per kg). During the same period, soft pasta products wheat varieties increased in price by an average of 27.7% (from 24.95 to UAH 31.86 per kg).

The seasonality of the new harvest factor could not but affect the price dynamics of cereals. So, during the last four months (from September to December 2022), a steady trend of monthly the growth of prices for cereals has stopped a little. Yes, as of late in December compared to September, the price of buckwheat fell by 16.8% (from 96.10 to 74.69 UAH), buckwheat fell by 8.5% (from 94.7 to 86.66 UAH), the price for barley, wheat, semolina and millet decreased by 9.1, 6.4, 5.2 and 4.7%, respectively. Wheat flour has become cheaper during this period by 2.6%, and pasta lost 2% in price.

However, the influence of the seasonality factor on the price dynamics of bread and bread products have been leveled by the aggravation of the energy crisis in the country. Thus, in the period from September to December, wheat bread made from the highest grade flour rose in price by almost 5%, from first grade flour – by 3.2%. Rye, rye-wheat bread increased in price by 4.3%, and a loaf rose in price by 3%.

Objective challenges and problems of the grain market, which caused by full-scale war are the following [13-14]:

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- increase in the price of material and technical resources, mainly fertilizers and fuel;
- relative labor shortage due to mobilization and migration within the country and abroad;
- disruption of production processes due to the strengthening of the energy crisis;
- a significant lack of resources due to the loss of funds and property due to shelling or theft by occupiers, destruction of crops, untimely harvest, low product prices or inability to export grain;
- the impossibility of carrying out technological operations and processes due to minefields and proximity to the war zone;
- damage and destruction of agricultural infrastructure and equipment: warehouses, granaries, agricultural machinery and equipment;
- occupation of enterprises, theft and removal of crops, equipment, equipment and other means of production;
- catastrophic consequences for the land fund as a result of mining, artillery shelling, bombing, movement of heavy equipment;
- insufficient working capital due to the increase in the cost of production, inflation, the increase in the cost of bank lending due to an increase in the NBU accounting rate, non-reimbursement of VAT and fixed exchange rate;
- increase in the cost of logistics in hryvnia equivalent by 2-3 times at the expense of raising railway tariffs, increasing the cost of delivery and inflation (the cost of logistics is about 2/3 of the price of grain, making its production unprofitable for Ukrainian farmers in certain regions).

Meat market. In 2021, the total production of meat of all types decreased by 1.6% compared to 2020 and amounted to 2438.3 thousand tons. Thus, the production of beef and veal decreased in 2021 by 9.9% compared to 2020 and amounted to 311 thousand tons. Import decreased by 6.6% to 17,000 tons. At the same time, exports increased by 7.4% to 29,000 tons. Personal consumption of beef by the population and veal decreased by 9.9% to 7.3 kg.

In 2021, pork production increased by 3.9% in comparison from 2020 to 724 thousand tons. Imports increased by 14.6% against the level 2020, and exports increased by 20.0%. The personal consumption of pork by the population decreased by 5.9% and amounted to 19.9 kg.

Production of poultry meat in 2021 decreased by 2.3% compared to the previous year and amounted to 1,373 thousand tons. Imports increased by 12.4% to 127,000 tons. Exports increased by 7.1% up to 466 thousand tons. Personal consumption by the population decreased by 4.2% up to 25.0 kg. Domestic production of poultry meat fully covers domestic needs and has reserves for export. Demand for poultry meat will continue to be stable because it is the cheapest among other types of meat. In the structure of consumed meat on per person per year, the share of poultry meat is about 50%.

There are no official data from the State Statistics Service of Ukraine for 2022 on livestock and poultry, their cultivation, and the amount of meat production of all types. In the conditions of the war, it is impossible to assess the real state of the livestock industry and the meat market. It is difficult to estimate the number of farms affected by the occupation and hostilities, as well as their losses. First of all, we note that the victims were and continue to be in danger from military aggression Russia, the entire territory of Ukraine, the entire population, all farms. But the level of losses and consequences for both the country and a specific enterprise and person are different. These losses are calculated not only in financial resources, material and property complexes, but also losses of qualified personnel and priceless human life. Clear now count and name the number of poultry farms, pig farms and farms that raised livestock and poultry, which were affected by the actions of the Russian occupiers are difficult.

In Ukraine, before the war, a powerful network of poultry farms was created, located in most regions of the country. In particular, only in five regions of Ukraine (Vinnytsia, Kyiv, Cherkasy, Dnipropetrovsk and Lviv region) at the beginning of 2022 was concentrated around 55% of the entire poultry population and there are the largest poultry farms, the main type of production of which is the production of poultry meat and meat products from it. The regions listed by us, with the exception of Kyiv, were

not territories where active hostilities were conducted, and therefore the production infrastructure of poultry farms in these regions was not destroyed or destroyed.

Russia's military aggression had the biggest impact on the pork market and, accordingly, on the price of pork. This is explained by the fact that the largest producers of pork were located in the regions of active hostilities or under the occupation of the aggressor (Donetsk, Dnipropetrovsk and Kharkiv regions). According to the State Statistics Service of Ukraine, in 2021, these three regions provided 26% of the volume of pig meat production by agricultural enterprises in slaughter weight. According to the information of the Association «Pigs of Ukraine», direct about 400 pig farms in ten felt the impact of hostilities regions of Ukraine and to a large extent these actions covered operators in regions where pig farming was quite actively developed. In the absence of occupiers on the territory of Ukraine, prices for pork would be much higher lower.

According to the Ministry of Agrarian Policy and Food of Ukraine, in 2022 the fund for the consumption of meat and meat products will be completely meets the needs of the domestic market and has the ability to meet export demand. This is mainly due to poultry meat. Consumption per capita is provided at the level of 52 kg of meat per person per year. This indicator is comparable to 2021 in pre-war times.

Currently, in Ukraine, in the territories where there are no combat operations, such as the main types of meat (beef, pork, poultry) are available in food markets and grocery supermarkets.

The dynamics of consumer prices for meat in wartime conditions shows that among the main types of meat, the biggest changes during 2022, experienced average consumer prices for pork meat. Growth prices for various types of pork reached 36.0-63.3%. In particular, in December 2022, consumer prices for pork increased by 36.0% compared to January 2022 and amounted to UAH 168.56/kg. The consumer price of lard increased by 63.3% compared to January 2022 and amounted to UAH 171.08/kg. Consumer prices for poultry meat (chicken carcasses and chicken fillets) since January by December 2022, increased by 10.6% and 11.4%, respectively, and amounted to 81.29 UAH/kg and 136.58 UAH/kg. It is worth noting that consumer prices for beef

experienced the least changes in the analyzed period. During the year, the consumer price for this type of meat increased by only 3.9% and amounted to UAH 203.18/kg [1, p. 55].

We emphasize the fact that the meat market is characterized by a tendency of price fluctuations. A slight decrease or increase (depending on month) of beef prices is explained by the fact that prices for this type of meat and so are always the highest, and the demand is the lowest. The increase in retail prices for beef, pork and chicken is driven by growth production costs. The significant increase in the price of pork is due to the increase in both production costs, the complexity of logistics chains, and the reduction in the supply of pork due to the occupation and destruction pig farms in many regions.

Power outages directly and negatively affect the production and cost of meat. Lack of electricity disrupts production processes. In particular, the incubation process is disrupted eggs, and therefore obtaining day-old broiler chickens, which should be raised for meat, young livestock and poultry die due to violations maintenance technologies, difficulties arise with feed production, processing and storage of final products in the retail network. All this affects and increases the cost of meat.

In our opinion, in 2023, for the formation of the general offer on the domestic agricultural market during the war, there is a possible decrease in demand in connection with a decrease in the purchasing power of the population and an increase in the price for producers of such basic cost components as mineral fertilizers and fuel and lubricants, which will form corresponding prospects of the new crop.

In 2023, it is expected that the most consumed products that were outside commodity-monetary relations – potatoes, vegetables and eggs, and less - bread and bread products, fish and fish products, oil and sugar. According to preliminary calculations, the capacity of the domestic agricultural market in 2023 may amount to UAH 1,250 billion, which is UAH 1,180 billion less than the normative capacity established on the basis of rational norms (these are losses for the state budget). In 2023, the capacity of the food market may increase by 15% compared to 2020 and only by 5% compared to 2021. As a result, despite the likely increase in prices for almost

all food products in 2023, the cost of capacity will not change fundamentally compared to the previous year due to inflationary and devaluation processes, a decrease in the number of the population and its purchasing power.

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