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Prices and price formation in the market of cereals

Scientific problem. The problem of pricing and functioning the agricultural market for the modern history of agriculture in Ukraine has always been extremely acute. The current pricing system in agriculture does not provide parity in the norms of reproduction to the production of advanced capital and labor, virtually eliminates the possibility of expanded reproduction, deepening economic interest to a level sufficient for stimulating translational, innovative development of the agrarian economy.

Price – a converted form of value and its monetary expression. In a market economy is an important regulator of development. The price – this is a guide that allows to make the right decisions for producers and consumers: what to produce, when to produce and how much, what and how much to buy.

Analysis of recent researches and publications. Research of the problem of pricing as well as the formation and functioning of grains market, including cereals, devoted a lot of works of domestic scientists, in particular V.I. Boiko [3], M.V. Kalinchyk [5], P.M. Makarenko [7], V.Y. Mesel-Veselyak [10], P.T. Sabluk [9], L.M. Khudoliy [6], O.M. Shpychak [8] and others. However, this issue remains important and needs to be a scientific substantiation new theoretical and methodological approach and adapt to changing business conditions.

The objective of the article is to analyze the price situation on the cereals market in Ukraine and identify factors influencing for to change it.

Statement of the main results of the study. Price is a key indicator of market conditions

shaped by supply and demand, dynamics and ratio which determine the vector of price fluctuations. Investigation of the origin price factors and their influence on the main parameters of the internal market crops, including cereals, determines the need to analyze the dynamics of supply and demand [4].

The analysis of the parameters of the production of cereals has shown that in recent years a decrease in harvested areas and, therefore, the croppage of buckwheat and millet. In particular, in 2000 the area of collection of buckwheat was 528.9 thousand hectares, in 2005 – 396.2 thousand hectares and in 2010 it decreased to 198.6 thousand hectares, resulting in a total production amounted to only 133.7 thousand tons. As a result, harvest was the lowest for two decades, and the situation of producing instant impact on market conditions.

During the years 2011-2012 due to increased acreage and productivity increase, croppage remained stable and was in the range of 239–282 thousand tons, almost twice higher than in 2010. In 2013, the harvesting area of buckwheat decreased by 38% over the previous year, but at the expense of increasing the yield to 10.6 kg/ha, total yield reached a level of 179.0 thousand tons. This volume of products together with the transitional residues allowed to fully provide domestic consumption, which is within 180 thousand tons.

During analyzed period revealed that millet cultivation areas in Ukraine significantly reduced, accordingly, reduced and grain production of this crop. The smallest of its area was in 2013 – 78.0 thousand hectares, in 2010 – 85.30 thousand hectares and in 2007 – 91.6 thousand hectares. Most of millet were sown in 2004 – 376.50 thousand hectares, in 2000 – 366.50

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thousand hectares and in 2003 – 258.10 thousand hectares. It was established that the gross yield of millet in 2013 was only 102.0 thousand tons, up 76.1% from 2000.

The positive dynamics of production is observed in rice cultivation of Ukraine. Area of crops is relatively stable, varying from 21.4 thousand hectares in 2005 to 29.6 thou-

sand hectares in 2011. For the whole history of rice cultivation in our country during the years 2012-2013 is set a record yield of the crop at the level of 60.0 – 62.1 kg/ha. In this connection emerged the trend of increasing of the production of rice, and in 2011 received 169.9 thousand tons, which is 89.4% more in line with 2000 (Table 1).

1. Dynamics of indicators of production of cereal crops in Ukraine in all categories

Indicator	Year						2013 in % till 2000	2013 in % till 2010
	2000	2005	2010	2011	2012	2013		
Buckwheat								
Harvesting area, thousand Ha	528,9	396,2	198,6	285,7	273,3	168,4	31,8	84,8
The gross yield, thousand tonnes	480,6	274,7	133,7	281,6	238,7	179,0	37,2	133,9
Yield, kg/ha	9,1	6,9	6,7	9,9	8,7	10,6	116,5	158,2
Millet								
Harvesting area, thousand Ha	366,5	120,4	85,3	156,4	152,5	78,0	21,3	91,4
The gross yield, thousand tonnes	426,1	140,6	117,1	278,8	157,4	102,0	23,9	87,1
Yield, kg/ha	11,6	11,7	13,7	17,8	10,3	13,1	112,9	95,6
Rice								
Harvesting area, thousand Ha	25,2	21,4	29,3	29,6	25,8	24,2	96,0	82,6
The gross yield, thousand tonnes	89,7	93,0	148,0	169,9	159,8	145,1	161,7	98,0
Yield, kg/ha	35,6	43,4	50,5	57,3	62,1	60,0	168,5	118,8

Source: The State Statistics Service of Ukraine.

Some farms refuses cereal crops or reduce their crops, the industry moves to enterprises that are able to see own segment and can organize it into a reasonably efficient level. To such were mostly often include enterprise or association of enterprises engaged in agricultural production and have their own facilities for the production and packaging of cereals. At the expense of the sale of finished products, they significantly increase the amount of received added value [11].

Assessment of the dynamics of prices for basic products of cereals produced in Ukraine, gives reason to believe that there is a fact of the instability of the constant price. In 2007, the average sales price of buckwheat was 1682.6 UAH/t, and in 2008-2009 decreased to the level

of 1418.6 – 1475.7 UAH/t, respectively, in 2011, the market recorded a sharp increase to 4787.5 UAH/t. We note significant increase in prices for grain millet. If in 2005 the average price was only 295.4 UAH/t, then in 2011 it increased by 5 times and was fixed at the 1540.5 UAH/t. The price situation on the rice market in Ukraine is relatively stable, only in 2008 the price has doubled compared to the previous year. However, during the years 2008-2013 found that the average price of rice grains was within 2500.0 UAH/t (Table 2). This pricing situation caused by the instability proposal and ineffective intervention policy.

2. Dynamics of volumes and selling prices for cereals in Ukraine

Year	Buckwheat		Millet		Rice	
	Volume, tonnes	Price, UAH/t	Volume, tonnes	Price, UAH/t	Volume, tonnes	Price, UAH/t
2005	134803	883,8	117982	295,4	54335	1017,9
2006	113012	1218,2	80356	420,6	61980	985,4
2007	105987	1682,6	48462	1013,6	75408	1059,1
2008	118587	1418,6	67418	866,1	53900	2340,1

extension table.

2009	149995	1475,7	117293	590,3	71338	2893,2
2010	104622	3910,0	114892	1036,2	82154	2348,1
2011	111860	4787,5	83031	1540,5	82818	2585,0
2012	121649	3771,7	117756	1202,1	106107	2350,5
2013	120569	2681,4	94513	1451,6	110140	2506,0
2013 in % till 2005	89,44	303,39	80,11	491,40	202,71	246,19

Source: The State Statistics Service of Ukraine.

The main sales channel cereals traditionally remains for "other channels" through which the overwhelming amounts of grain sold to commercial producers and other structures of with the highest prices compared to other marketing channels. In 2013, their share accounted for more than 80% of the total volume of buckwheat, millet and rice. To processing enterprises were sold 8.3% of buckwheat, 1.6% – millet and 2.3% rice. From 6 to 10% grouts crops sold in the market. Shareholders at the expense of rent for land and property shares transferred to 2.7% millet and 0.3% buckwheat. The main share of sales channels – population at the expense of wages – is less than 1%.

The price situation on the cereals market in Ukraine has another negative sign, namely, the prices vary considerably by regions. In 2013, the biggest price of buckwheat were in Mykolaiv region – 7.2% on the average selling price for Ukraine, in Ivano-Frankivsk (6.4%) and Kharkiv (5.5%) regions. Lowest prices recorded in Zaporizhia, Chernivtsi regions and in Crimea. For the best prices millet implemented in Zhytomyr, Chernihiv and Cherkasy regions – by 86.4%, 59.6% and 14.4% respectively. The lowest they have been in Ivano-Frankivsk, Khmelnytsky and Sumy regions. Price situation in rice follows: highest price listed in the Crimea – 2562.4 UAH/t, which is 2.3% more than the average for Ukraine, and in the Kherson region, the price was 2382.5 UAH/t, which is almost less than 5.0% to the average selling price.

The market pricing of cereals happens primarily reflecting the cost of raw materials and then the cost of processing. An important factor in pricing is seasonal. Usually early in the season (October-November) prices lower.

In addition, the pricing environment in the market of cereals is completely determined by cereal crops in Ukraine and speaking about rice – the determining factor is the price situation on

the world market due to its small domestic production. Given that the yield of cereal crops are harvested mainly in autumn and pre-autumnal period, gross yield more influence on pricing in the next calendar year.

Domestic prices for cereals committing a regulatory effect on export operations. In case of high prices of this product becomes uncompetitive in the global market and export almost stops. Significant increase in prices contributes to the problems with the sale of cereals on the domestic market. Given the low level of income, a sharp increase in the prices of cereals makes consumers reorient on other cheaper products. Avoiding large stocks of products, producers are forced to cut prices. During the last years, which were characterized as not fecund, marked by price fluctuations.

So, I-II quarters of 2010, the average retail price of buckwheat has fluctuated within a range from 5.35 to 8.64 UAH/kg, and in the third or fourth quarters due to the decrease in gross collection price increased from 9.71 to 13.21 UAH/kg. In January-February 2011, prices continued to rise, reaching levels of 18.07 UAH per 1 kg of buckwheat. Overall for the year, they increased almost threefold. However, since the fourth quarter of 2011, prices began to fall buckwheat groats, and during 2012-2013 averaged 10.19 UAH/kg. In 2014, the lowest retail price in January was recorded at around 8.97 UAH/kg, and the highest in July – 10.53 UAH/kg.

Average retail prices in urban markets of Ukraine for millet in late 2009 – first half of 2010 were marked by stability and fluctuated in the range of 3.44 to 3.85 UAH/kg. But since August 2010, prices began to rise in the market. This is due first of all to the increase in production costs and a reduction in acreage under this crop and, consequently, a decrease in the gross yield. Since the beginning of 2011 the price of millet increased by 24.2% and the average for

Ukraine were 6.53 UAH/kg. However, after collecting the new crop price has changed, and during the years 2012-2013, prices have fallen and ranged from 5.75 to 6.11 UAH/kg. In 2014

there is a growth of retail prices for millet. In September, the price was 8.61 UAH/kg, which is 36.9% more in line with the beginning of the year (Figure 1).

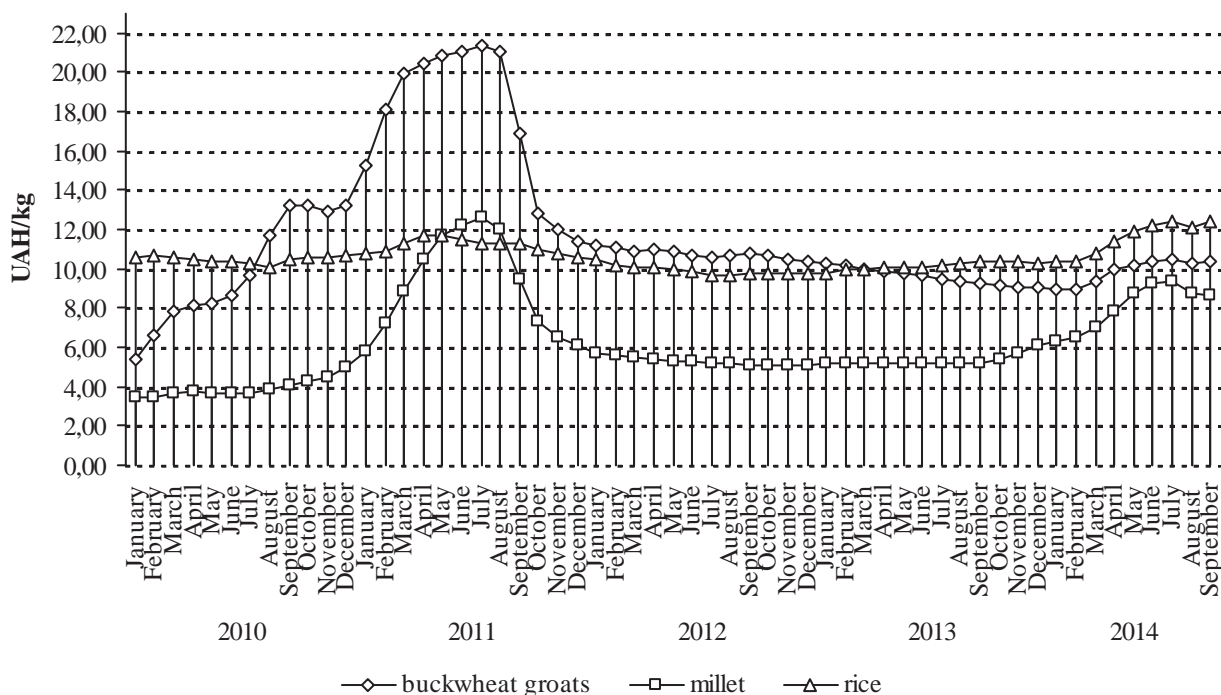


Figure 1. Retail prices in urban markets for cereals Ukraine, UAH/kg

Source: The State Statistics Service of Ukraine

Price situation in urban markets Ukraine in rice relatively stable. Thus, during the 2010-2011 marketing year, prices ranged 10.61 – 11.69 UAH/kg. In the third quarter of 2012, the price of the rice fell to the level of 9.66 UAH/kg. But since the March 2013 we notice price increases from 10.02 UAH/kg to 12.43 UAH/kg in September 2014.

Assessing the competitiveness of cereals from the standpoint of pricing should be noted that as always determinative indicator of economic evaluation is efficiency of production.

According to the analysis of economic efficiency of production of buckwheat in recent years, with lucrative crops she moved into the category of unprofitable. If 2011 was obtained 1768.1 UAH/t income, already in 2013, unprofitable amounted to 36.2 UAH/t.

According to the State Statistics Committee of Ukraine during 2009-2013 the economic performance of millet cultivation varied considerably. The level of the cost of 1 ton increased from 743.8 to 1385.6 UAH. Unfavorable for the cultivation of millet were 2009 and 2012

when the rate of return was negative. However, in 2013 there is a slight increase this figure to 3.0% [1].

Researches show that the recent increased interest to rice producers in Ukraine. It should be noted that the production of rice during 2009-2013 was quite profitable. Over the years the level of profitability of firms involved in the cultivation of rice was 61.7% in 2009, 26.4% – in 2010, 12.0% – in 2011, 12.3% – in 2012 and 18.1% in 2013 (Table. 3).

According to experts, low economic efficiency of the industry was the result of several factors, including the deteriorating social and economic conditions of management, insufficient provision of material and technical means of production and non-compliance in this regard, technology requirements of growing crops, and increased cost of production (higher prices for pesticides, fertilizers, fuels and lubricants, seeds, etc.) [11].

The complex administrative and economic measures for regulation of socially important food products which are declared by the Gov-

ernment of the country as a whole can to stabilize production and consumption of the cereal crops at a level that fully guarantees food security. In particular, should play a positive role in these regulatory measures, such as trade and financial state intervention in the market of

consumer products, the introduction of targeted subsidies to agricultural producers, for which there are sharp price fluctuations, financial support enterprises through the mechanism of cheaper loans [2].

3. Economic efficiency of cereal crops in Ukraine

Indicator	Year					2013 till 2009 (+, -)
	2009	2010	2011	2012	2013	
Buckwheat						
Full cost of 1 t, UAH	1504,9	2336,1	3002,6	3031,4	2709,6	1204,7
The average selling price for 1 t, UAH	1473,2	3974,8	4770,7	3775,2	2673,4	1200,2
Income (loss) from sales of 1 t, UAH	-31,7	1638,7	1768,1	743,8	-36,2	-4,5
The level of profitability (loss ratio) production,%	-2,1	70,1	58,9	24,5	-1,3	0,8
Millet						
Full cost of 1 t, UAH	743,8	932,6	1137,6	1356,7	1385,6	641,8
The average selling price for 1 t, UAH	585,9	1034,9	1510,3	1186,6	1427,7	841,8
Income (loss) from sales of 1 t, UAH	-157,9	102,3	372,7	-170,1	42,1	200,0
The level of profitability (loss ratio) production,%	-21,2	11,0	32,8	-12,5	3,0	24,2
Rice						
Full cost of 1 t, UAH	1617,8	1839,1	2008,4	1948,4	2218,8	601,0
The average selling price for 1 t, UAH	2615,5	2324,3	2250,2	2187,1	2621,2	5,7
Income (loss) from sales of 1 t, UAH	997,7	485,2	241,8	238,7	402,4	-595,3
The level of profitability (loss ratio) production,%	61,7	26,4	12,0	12,3	18,1	-43,6

Source: Calculated by the author according to the State Statistics Service of Ukraine.

Conclusions. Analytical study of pricing in the market of cereals suggests that price instability caused by conditions of supply and ineffective intervention policy. The formation of prices affects seasonality and volume of production, in the case of rice – no small role played by the price situation on world markets. Prominent factors pricing in the market of cereals is economic efficiency.

It is necessary to develop and implement an effective pricing mechanism in the market these crops and public support production, thus enabling greater profitability. Particular attention should be paid to the resolving been a problem in the coming years a significant increase in acreage, yield and gross harvest of cereals due to the widespread introduction of modern intensive production technologies.

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Новини АПК

Ідентифікація тварин підвищить конкурентоспроможність експортерів

Нагальним завданням державної політики в аграрній сфері є впровадження дієвої системи ідентифікації тварин. Це слугуватиме запорукою забезпечення населення якісними продуктами, стабільної епізоотичної ситуації, а також виходу вітчизняних виробників на світові ринки. На цьому наголосив заступник Голови Держветфітослужби України Віталій Башинський.

Кінцева мета ідентифікації – захистити вітчизняного споживача м'ясопродукції від неякісних товарів. У планах держави розмішувати всю інформацію, що стосується якості продукту, на етикетці. Це стане можливим, оскільки контролюючі органи зможуть відстежити шлях проходження тваринної продукції, всі етапи її виробництва та, відповідно, здійснювати постійний контроль за безпекою.

«У всьому світі діє правило: неідентифікована тварина – під заборону на переміщення з одного в інше господарство, продаж і забій на м'ясо, реалізація продуктів таких тварин неможлива. Тому українські виробники, приєднавшись до Єдиного реєстру тварин, зможуть забезпечити до себе довіру на зовнішніх ринках та відповідно підвищити свою конкурентоздатність», – зазначив В.Башинський.

Чинне законодавство у сфері реєстрації та ідентифікації сільськогосподарських тварин передбачає бюджетне фінансування реєстрації худоби фізичних осіб, тим самим забороняючи останнім самостійно оплачувати цю процедуру, що може стати причиною зриву реєстраційної кампанії в 2015 р.

Вартість реєстрації становить від 22 до 49 грн за голову, і для того, щоб покрити витрати на цю процедуру, до кінця 2014 р. Держветфітослужба вишуквала 30 млн грн.

Для проведення реєстраційної кампанії в 2015 р. необхідно або внести зміни до законодавства, або ж закласти в бюджет на наступний рік кошти на такі цілі.

Прес-служба Мінагрополітики України