

Parkhomenko L. A.

*Candidate of Economic Sciences, Associate Professor,
Uman National University of Horticulture,
Ukraine; e-mail: parhomenkoludmila9@gmail.com*

Gerasymchuk N. A.

*Doctor of Economic Sciences, Associate Professor
National Academy of Management: Ukraine
e-mail: 90999nag@gmail.com*

Skurtol S. D.

*Candidate of Economic Sciences, Associate Professor,
Uman National University of Horticulture,
Ukraine; e-mail: skurtol@i.ua*

Kolupaieva I. V.

*Candidate of Economic Sciences, Associate Professor
Kharkiv Trade and Economics Institute of
Kyiv National Trade and Economics University,
Ukraine; e-mail: volirinawork@gmail.com*

ESTIMATION OF HOUSEHOLDS' EXPENDITURES ON THE CONSUMPTION OF FRUITS AND VEGETABLES AND OF MARKET CAPACITY IN UKRAINE: PROBLEM-METHODICAL ASPECT

Abstract. Vegetable growing as a separate link of agricultural production includes a wide range of products, which are devoted to satisfy the needs of population and industry. The period of the development of the economy of Ukraine led to the deformation of persistent connections "production-processing" of horticultural products. Therefore, at the present stage, the main producers and consumers of vegetables are households. The capacity of the domestic vegetable market depends on the high-quality and complete satisfaction of the population's needs for vegetable production. However, the changes in the level of households' income and expenditures and the rising prices for vegetables require additional research. Domestic methods of full-fledged vegetable production, approved at the state level, contain many shortcomings and do not correspond to the real state of things and foreign practice.

Keywords: population, households, vegetables, potatoes, price, consumption, satisfaction, market vegetables.

GEL Classification: Q18

Formulas: 1; fig.: 0; tabl.: 6; bibl.: 12

Пархоменко Л. А.

*к.е.н., доцент,
Уманський національний університет садівництва,
Україна; e-mail: parhomenkoludmila9@gmail.com*

Герасимчук Н. А.,

*д.е.н., доцент, Національної академії управління
e-mail: 90999nag@gmail.com*

Скуртол С. Д.

*к.е.н., доцент, Уманський національний університет садівництва,
Україна; e-mail: skurtol@i.ua*

Колупаєва І. В.

*к.е.н., доцент,
Харківський торговельно-економічний інститут
Київського національного торговельно-економічного університету,
Україна; e-mail: volirinawork@gmail.com*

ОЦІНКА ВИТРАТ ДОМОГОСПОДАРСТВ НА СПОЖИВАННЯ ОВОЧІВ ТА ЄМНІСТЬ РИНКУ ОВОЧІВ В УКРАЇНІ: ПРОБЛЕМНО–МЕТОДИЧНИЙ АСПЕКТ

Анотація. Овочівництво як окрема ланка аграрного виробництва включає широкий асортимент продукції, реалізація яких направлена на задоволення потреб населення та переробної промисловості. Транзитивний період розвитку економіки України призвів до деформації стійких зв'язків «виробництво – переробка» продукції овочівництва. Тому на сучасному етапі основними виробниками і споживачами овочів виступають домогосподарства населення. Від якісного та повноцінного задоволення потреб населення овочевою продукцією залежить ємність внутрішнього ринку овочів. Однак зміни рівня доходів та витрат домогосподарств та зростання цін на овочі потребують додаткового дослідження. Вітчизняні методики повноцінного забезпечення продукцією овочівництва, затверджені на рівні держави, містять багато недоліків та не відповідають реальному стану речей та зарубіжній практиці.

Ключові слова: населення, домогосподарства, овочі, картопля, ціна, споживання, задоволення потреб, ємність ринку овочів

Формул: 1; рис.: 0; табл.: 6; бібл.: 12

Пархоменко Л. А.

к.э.н., доцент,

Уманский национальный университет садоводства,

Украина; e-mail: parhomenkoludmila9@gmail.com

Герасимчук Н. А.

д.э.н., доцент, Национальная академия управления, Украина;

e-mail: 90999nag@gmail.com

Скуртол С. Д.

к.э.н., доцент,

Уманский национальный университет садоводства,

Украина; e-mail: skurtol@i.ua

Колупаева И. В.

к.э.н., доцент,

Харьковский торгово–экономический институт

Киевского национального торгово–экономического университета,

Украина; e-mail: volirinawork@gmail.com

ОЦЕНКА РАСХОДОВ ДОМОХОЗЯЙСТВ НА ПОТРЕБЛЕНИЕ ОВОЩЕЙ И ЕМКОСТЬ РЫНКА ОВОЩЕЙ В УКРАИНЕ: ПРОБЛЕМНО–МЕТОДИЧЕСКИЙ АСПЕКТ

Аннотация. Овощеводство как отдельное звено аграрного производства включает широкий ассортимент продукции, реализация которой направлена на удовлетворение потребностей населения и перерабатывающей промышленности. Транзитивный период развития экономики Украины привел к деформации устойчивых связей «производство – переработка» продукции овощеводства. Поэтому на современном этапе основными производителями и потребителями овощей выступают домохозяйства населения. От качественного и полноценного удовлетворения потребностей населения овощной продукцией зависит емкость внутреннего рынка овощей. Однако изменения уровня доходов и расходов домохозяйств и рост цен на овощи требуют дополнительного исследования. Отечественные методики полноценного обеспечения продукцией овощеводства, утвержденные на уровне государства, содержат много недостатков и не отвечают реальному положению вещей и зарубежной практике.

Ключевые слова: население, домохозяйства, овощи, картофель, цена, потребление, удовлетворение потребностей, емкость рынка овощей

Формул: 1; рис.: 0; табл.: 6; библи.: 12

Introduction. The establishment of Ukraine as an independent State opened new horizons for the development of agriculture. While during Soviet times the advantage of growing vegetables and potatoes was given to large enterprises – collective farms and state farms, nowadays the largest producers are subsidiary farms. Vegetable market includes a wide range of products aimed at meeting the needs of the population and industry. The level of competitiveness of local vegetables and potatoes is quite high and almost completely meets the needs of the population in fresh products. Starting from 2014, the deformation in the volumes of consumption and expenditures on vegetables in the total consumer basket of the country population has taken place. The study of these factors' influence on the market capacity is a priority task.

Analysis of Publications and the Research Purpose. The formation of a competitive vegetable market in Ukraine, by increasing the incomes of households and agricultural producers of vegetables, is investigated through various approaches of scientists. S. Dombrovska analyzes approaches to the definition of the essence and objectives of the organizational and economic mechanism of business entities in the market of fruit and vegetable products [1]; V.E. Roganina explores the regional peculiarities of the development of market for vegetables [2]; L. Leschenko substantiates expediency of improvement of material and technical support of development of vegetable growing on open ground [3]; R. V. Logosa described the factors that influence the formation of prices of vegetables [4], O. Spichak, O. Lupenko, M. Beetle et al. characterized theoretical and methodological aspects of the formation of market capacity, including that of vegetables [5], etc.

It is important to use methodological information which will help to monitor and to analyze the dynamics of the market for vegetables. Ukraine adopted and enforced the Resolution of the Cabinet of Ministers of Ukraine "On approval of food sets, sets of non–food products and sets of services for major social and demographic groups of population" [6], on the basis of which the Methodology for Determining the subsistence minimum [7] was developed and adopted [7].

Thus, the theoretical and methodological basis of the study is formed. The capacity of the internal market of vegetables and canning products has been recently narrowing. All regions of Ukraine without exception are characterized by the indicated tendency. It is associated with several major issues:

Firstly, the reduction in real incomes and a gradual rise in food prices;

Secondly, substantial increase in tariffs for housing and utility services, which distracts households' spending and creates a problem of proper nutrition;

Thirdly, the reduction of the population of Ukraine, which, respectively, led to the reduction in the capacity of the market for fresh vegetables and canning products.

Thus, there is a need for identifying the effective mechanisms to promote the effective development of the market for vegetables and to provide the population with high–quality, inexpensive vegetable products.

The formation of the efficient development of the market for vegetables directly depends on the economic situation in the country. The capacity of the market for vegetables is affected by a number of factors, among which it is important to mention the level of income, prices for fresh vegetables and potatoes, the volumes of their production, the share of imports of vegetables, etc. Thus, an additional deeper research and determination of the potential level of production and consumption of vegetables is required.

The aim of the study is to define the current level of population consumption of vegetables by its kinds and the capacity of the market for vegetables.

Research Findings. In the context of the economic transformation and the transition to the market relations, individual farms increased the production of vegetables and potatoes, and agricultural enterprises reoriented to the production of products which are characterized by higher demand and having higher profitability (cereals and oilseeds).

Grown vegetables and potatoes are mainly sold on the market in fresh form to the intermediaries or cannery plants. The largest consumer of fresh vegetables and potatoes is the population of the country.

Demand for vegetables is fully satisfied by the internal production. Vegetable market is characterized by pronounced seasonality. In this case the supply of domestic products is predominantly formed by households, which share in the domestic market is growing [4, s. 62].

According to official statistics, in the second quarter of 2017, one household monthly spends 2844.81 UAH on food, 7.2% of which is directed on the purchase of vegetables and almost 2.0% on potatoes. As of 2017, the number of households in Ukraine equated to 14986 th. The average size of one household is 2,58 people.

The data from Tab. 1 demonstrates a gradual reduction in the consumption of vegetables and potatoes by population. With shrinking population by 3.5 million people, consumption of vegetables has decreased by 32.7%, and potatoes – 25.0%. Reduction in the level of real income is directly related to the increasing expenditures on food.

Table 1

General indicators of consumption of vegetables and potatoes
and household expenses on them in Ukraine *)

Indicators	2009	2010	2011	2012	2013	2014	2015	2016	2017
Population	46143,7	45962,9	45778,5	45633,6	45553,0	45426,2	42929,3	42760,5	42584,5
Consumption per person in the household, kgs average per month:									
– vegetables	10,1	9,5	9,9	10,1	9,4	9,0	8,8	9,2	6,8
– potatoes	8,0	7,7	7,9	7,8	7,1	6,9	6,6	6,7	6,0
The index of consumption of the previous year									
– vegetables	1,086	0,941	1,042	1,020	0,931	0,957	0,978	1,045	0,739
– potatoes	0,952	0,963	1,026	0,987	0,910	0,972	0,957	1,015	0,896
Consumer price indices for food and non-alcoholic beverages	1,119	1,109	1,064	0,979	0,978	1,112	1,459	1,090	1,124
including vegetables	0,817	1,145	0,929	0,540	0,883	1,041	1,308	0,936	1,092
inflation	1,123	1,091	1,046	0,998	1,005	1,249	1,433	1,124	1,125
Cumulative cost on average per month per one household, UAH.	2754	3073	3458	3592	3820	4049	4952	5720,4	5881,8
Including food and non-alcoholic drinks	1377,1	1585,8	1774,0	1799,6	1914,0	2101,4	2629,5	2848,8	2844,8
The hryvnia exchange rate to US dollar	7,79	7,93	7,95	7,99	7,99	11,89	21,9	25,6	26,6
Expenses in an average month on food and non-alcoholic beverages, USD.	176,8	200,0	223,1	225,2	239,5	176,7	120,1	111,3	106,9
The proportion of total expenditure on food and non-alcoholic beverages, %	50,0	51,6	51,3	50,1	50,1	51,9	53,1	49,8	48,4

*) Source: statistics and own calculations.

Against the background of devaluation of the national currency and the growth of exchange rate of the US dollar, data on food expenditures is distorted. With no doubt, the statistics indicates the growth of real income in hryvnia terms in 2.1 times. However, if we look at the growth of the dollar value by 3.4 times and will convert the indicators into dollars, on the contrary, the expenditures on food decreased by almost 40%.

We adjust the expenses on food and soft drinks, taking into account the consumer price index and the hryvnia to the US dollar exchange rate, and we obtain a multiplicative model of the following type:

$$I_{cost} = I_{cp} \cdot I_{nd} \cdot I_{exp} \quad (1)$$

where

I_{cost} – indicator of adjusted expenditures on food and non-alcoholic beverages;

I_{cp} – the consumer price index for food and non-alcoholic drinks;

I_{nd} – UAH to the US dollar exchange rate;

I_{exp} – the index of averaged expenditures on food and non-alcoholic drinks.

We group our calculations in Table 2.

Table 2

Adjusted calculation of expenditures on food and non-alcoholic beverages *)

Indicators	2009	2010	2011	2012	2013	2014	2015	2016	2017
Consumer prices for food and non-alcoholic drinks	1,119	1,109	1,064	0,979	0,978	1,112	1,459	1,09	1,124
The index of the cost of food and non-alcoholic drinks	1,087	1,152	1,119	1,014	1,064	1,098	1,251	1,083	0,999
Index of money course	1,429	1,018	1,003	1,005	1,000	1,488	1,842	1,169	1,039
The overall index of costs	1,739	1,300	1,193	0,998	1,040	1,817	3,363	1,380	1,166

*) Source: own calculations.

The calculations show that the largest expenditure was borne by the population in 2015, as consumer prices for major groups of goods increased significantly in comparison with previous periods (in national currency). The indicated trend is shown in the Table. 3

Table 3

Dynamics of prices for vegetables and potatoes, UAH/kg *)

Type of product	2009	2010	2011	2012	2013	2014	2015	2016	2017
Potatoes, UAH/kg	3,19	4,73	1,97	2,18	3,3	3,22	6,01	5,25	5,61
–USD/kg	0,41	0,60	0,25	0,27	0,41	0,27	0,27	0,21	0,21
Cabbage, UAH/kg	2,37	6,56	1,33	2,35	2,38	2,88	10,08	3,8	5,18
–USD/kg	0,30	0,83	0,17	0,29	0,30	0,24	0,46	0,15	0,19
Carrots, UAH/kg	2,81	6,42	2,81	2,51	3,47	2,96	10,19	4,08	7,42
–USD/kg	0,36	0,81	0,35	0,31	0,43	0,25	0,47	0,16	0,28
Beets, UAH/kg	2,47	5,75	2,56	2,55	2,95	3,1	7,61	3,76	6,21
–USD/kg	0,32	0,73	0,32	0,32	0,37	0,26	0,35	0,15	0,23
Onion, UAH/kg	2,15	7,06	2,21	1,51	3,91	3,19	9,84	4,39	6,14
–USD/kg	0,28	0,89	0,28	0,19	0,49	0,27	0,45	0,17	0,23

*) Source: [8–11] and own calculations.

Commenting on this, V.E. Roganina adds, that the current system of pricing in the market for vegetables in the country does not provide self-regulation, because it is not balancing the prices of producers and consumers [2, p. 244].

There is a similar problem with the distortion in the data when the indicators are represented in hryvnia, so it is expedient to use the listed data in US dollars. The above reasons negatively influenced the formation of consumer prices for potatoes – by 48.5% and for vegetables, in particular: cabbage – by 36.0%, carrots – 22.7%, beets – 26.4%, and onions – by 16.4 % The decrease in prices is due to the above-mentioned factors, as well as due to the growth of vegetable production of agricultural enterprises and households (Table 4). During 2009–2017, potatoes' production increased by 12.7%, vegetables' – 2.3%, including that per person by 22.1% and 10.9%, respectively. While in 2017 the production of potatoes per person comparing to 2009, 2012, 2015 and 2016 tends to increase, then the production of vegetables per person (compared with 2012, 2015 and 2016) tends to decrease.

Table 4

The dynamics of the production of vegetables and potato, thousand t *)

Product name	2009	2010	2011	2012	2013	2014	2015	2016	2017	2017 in % to			
										2009	2012	2015	2016
Potatoes	19666,1	18704,8	24247,7	23250,2	22258,6	23693,4	20839,3	21750,3	22166,6	112,7	95,3	106,4	101,9
including per person, kg	426,2	407,0	529,7	509,5	488,6	521,6	485,4	508,7	520,5	122,1	102,2	107,2	102,3
Vegetables	8341,0	8122,4	9832,9	10016,7	9872,6	9637,5	9214,0	9414,5	8533,4	102,3	85,2	92,6	90,6
including per person, kg	180,8	176,7	214,8	219,5	216,7	212,2	214,6	220,2	200,4	110,9	91,3	93,4	91,0

*) Source: statistics and own calculations

Currently, there is a strengthening competition on the market of vegetables; it is due to the fact that the domestic market of vegetables is largely influenced by the growth in the supply of more competitive imported products [3, p. 240].

According to S. Dombrowska, planned reduction in the level of population provisioning with the products of the fruit and vegetable sector of the agroindustrial complex of Ukraine can carry a huge amount of macroeconomic risks. This tendency [1, p. 44]:

1. will generate a shortage of domestic fruit and vegetable products;
2. will open the domestic market of fruit and vegetable products for foreign suppliers (the processes of European integration of Ukraine contribute to this at a great extent);
3. will considerably increase competition in the domestic market of our country;
4. will significantly increase the likelihood of bankruptcies of domestic enterprises of the fruit and vegetable sub-sector of agro-industrial complex.

To determine the regulatory capacity of the market for vegetables and potatoes in Ukraine, while meeting the needs of the consumer basket in 2017, we will use the norms of the Cabinet of Ministers Resolution "On Approval of Food Sets, Non-Food Sets and Sets of Services for Major Social and Demographic Groups" [6]. The calculations show that the normative capacity of the vegetable and potato market equals to 2115.19 million USD. At the same time, the framework of the market significantly narrowed, as evidenced by studies carried out by O.M. Shchichak, Yu.O. Lupenko and other scholars [5, p. 104]. In particular, in 2011, according to their calculations, the regulatory capacity of the potato market amounted to 2603.8 million USD which is more than three times higher than in 2017; of vegetables – 4176.1 million USD or 3.3 times more. If, however, one takes into account the level of hryvnia devaluation in these studies, then we will get the indicators approximately the same as in 2017.

Table 5

Normative capacity of the market for vegetables and potato in Ukraine in meeting needs according to the consumer basket for 2017 *)

Type of product	The demand for vegetables and potatoes in accordance with the standards of the consumer basket (minimum standards) for one person, kg per year				Population, million people				
	children up to 6 years	children from 6 to 18 years.	employed person	unemployed person	total	including:			
						children up to 6 years.	children from 6 to 18 years	employed person	unemployed person
Potatoes	73,0	93,7	95,0	108,0	42,45	2,74	4,88	26,0	8819,2
Cabbage	16,4	21,9	28,0	27,5					
Tomatoes	16,4	21,9	25,0	11,0					
Carrots	8,2	10,9	9,0	8,0					
Cucumbers	6,6	8,7	9,0	11,0					
Beets	6,6	8,7	9,0	8,0					
Bow	6,0	7,9	9,1	7,1					
Garlic	0,6	0,9	0,9	0,9					
Other seasonal vegetables (squash, pumpkin)	11,3	13,0	13,0	10,0					
Total capacity									

Extension table 5

Indicator	The demand for vegetables and potatoes in accordance with the standards of the consumer basket (minimum standards) in the age group of persons, thousand tons per year				The average consumer price for 1 kg in 2017, USD.*	Market capacity of vegetables and potatoes	
	children up to 6 years	children from 6 to 18 years.	Employed person	Unemployed person		Thousand tons	Million dollars
Potatoes	200,0	456,9	2470,0	952,5	0,21	4079,3	860,34
Cabbage	44,9	106,8	728,0	242,5	0,19	1122,2	218,54
Potatoes	44,9	106,8	650,0	97,0	0,53	898,7	473,01
Carrots	22,5	53,2	234,0	70,6	0,28	380,2	106,05
Cucumbers	18,1	42,4	234,0	97,0	0,28	391,5	110,39
Beets	18,1	42,4	234,0	70,6	0,23	365,1	85,23
Bow	16,4	38,5	236,6	62,6	0,23	354,2	81,75
Garlic	1,6	4,4	23,4	7,9	1,41	37,4	52,68
Other seasonal vegetables (squash, pumpkin)	31,0	63,4	338,0	88,2	0,24	520,5	127,20
Total capacity	397,5	914,8	5148,0	1688,9	x	8149,1	2115,19

*) Source: [6] and own calculations.

As a result of the studies, it was found that the updated methodology for the calculation of the CPI (introduced since 01/01/2017) contains 7 items less than in 2012, and 90 – less than in 2000. Reduction in the number of grocery items directly reduces the size of the consumer basket and distorts the definition of subsistence minimum.

According to IMF data, provided in the International Financial Statistics Country Notes, the CPI in Italy includes 1148 goods and services, in Hungary – 906, in Lithuania – 858, in Czech Republic – 710, in Slovakia – 709, in Germany – 700, in Great Britain – 650. By the word, in recent years inflation was about 1–3%, and even zero, in these countries. And with such high inflation and a small consumer set, as in Ukraine, the accuracy and reliability of its measurement is reduced [12].

Data in Table 6 indicates that the actual data per person is 25% lower than that calculated according to the data of Table 5. This does not correspond to the need (both in terms of consumption, and assortment) for the vital minimum set of vegetables for a full-fledged life.

Table 6

Structure of weights for the calculation according to the Classification of Individual Consumption for the purposes of 2017 *)

Code	Indicators	Weight	Expenditures per person, UAH/month			
			actually listed on the CPI	in fact	corrected data	according to the tab. 5
00	consumer price index	1,00000	2279,76	2279,76	2429,43	3033,66
01	Food and non-alcoholic beverages	0,41801	952,96	1102,64	1102,64	1376,88
01.1	Food	0,40253	917,68	1061,82	1061,82	1325,90
01.1.7	Vegetables	0,03288	74,97	86,74	86,74	100,62
01.1.7.1	Leaf and stem vegetables (fresh, chilled, frozen)	0,00049	1,11	1,28	1,28	1,60
84	Salads	0,00049	1,11	1,28	1,28	1,60
01.1.7.2	Cabbages (fresh, chilled, frozen)	0,00424	9,67	11,19	11,19	11,42
85	Cabbage	0,00424	9,67	11,19	11,19	11,42
01.1.7.3	Vegetables grown from their seeds (fresh, chilled, frozen)	0,00860	19,61	22,69	22,69	28,33
86	Cucumbers	0,00290	6,62	7,66	7,66	9,56
87	Tomatoes	0,00375	8,54	9,88	9,88	12,34

Extension table 6

88	Zucchini	0,00053	1,20	1,39	1,39	1,74
89	Eggplant	0,00043	0,99	1,14	1,14	1,42
90	Sweet pepper	0,00099	2,26	2,62	2,62	3,27
01.1.7.4	Root vegetables, onions and mushrooms (fresh, chilled, frozen)	0,00814	18,57	21,48	21,48	22,81
91	Onion	0,00279	6,36	7,36	7,36	4,27
92	Beets	0,00077	1,77	2,04	2,04	4,45
93	Carrots	0,00198	4,53	5,24	5,24	5,54
94	Mushrooms	0,00260	5,92	6,85	6,85	8,55
01.1.7.5	Dried vegetables and mushrooms	0,00089	2,03	2,35	2,35	2,93
95	Legumes	0,00089	2,03	2,35	2,35	2,93
01.1.7.6	Canned and processed vegetables	0,00344	7,84	9,07	9,07	9,07
96	Canned vegetables	0,00246	5,60	6,48	6,48	8,09
97	Canned mushrooms	0,00020	0,45	0,52	0,52	0,65
98	Tomato paste	0,00079	1,79	2,07	2,07	2,59
01.1.7.7	Potatoes	0,00708	16,14	18,68	18,68	44,94
99	Potatoes	0,00708	16,14	18,68	18,68	44,94

*) Source: statistics and own calculations.

It is unclear on the basis of what initial data, the weight structure was constructed for the CPI calculation. Some products (garlic, pumpkins) are not listed at all in the CPI list. Some digital data may be misleading. So, for example, the consumption of zucchini, eggplant and canned mushrooms does not correspond to the real volumes and consumption expenditures. The seasonality is also not considered, because the price of the product can vary significantly.

Conclusions. Research of the capacity of the Ukrainian market for vegetables and potatoes and their consumption contains the signs of deformation. Changes in the consumption of vegetables depend on the following factors:

- a decrease in the volume of real incomes of the country's population. Moreover, households with one or two family members can spend on consumption of vegetables and potato more cash;

- the reduction in the population of the country directly affects the reduction in the capacity of the market for vegetable products. During 2009–2017, the country's population declined by 7.7%, while the consumption of potato per capita decreased by 32.7% and that of vegetables by –25.0%;

- the consumer price index grew 2.5 times, which was also influenced by the growth in the inflation index by almost 3 times. Thus, the price of 1 kg of potatoes increased by 75.9%, of cabbage – 2.2 times, of carrots – 2.6, of beets – 2.5 and of onions – 2.9 times;

- physical consumption of potatoes and vegetables. Each Ukrainian, with a minimum allowable consumption rate in 2017, consumed potatoes at a level of 96.1 kg / year, which 15.1% less than the normative, vegetables – at 95.9 kg / year or 24.9% less than standard;

- the minimum capacity of the market for vegetables in monetary terms. According to our estimates, the capacity of the market for vegetables and potatoes has significantly decreased in 2011–2017. While in 2011 the capacity of the market amounted to 6779.9 million USD, then in 2017 it decreased 3.2 times;

- the saturation of the domestic market for vegetables and potatoes. The actual need for vegetables (despite a broader range of vegetables) exceeds the needs of the market, e.g. the actual consumption of potato is 3.5 million tons and while the minimum required for a healthy nutrition of people – 4.1 million tons, the amount of potato at the market exceeds these indicators by more than 80%.

At the same time, the calculations carried out evidence the distortions in digital data, in particular:

– prices for products when converted into the US dollar do not increase, but on the contrary are declining. Thus, the price for 1 kg of potatoes decreased by 48.5%, of cabbage – by 36.0, of carrots – by 22.3 and of onions – by 16.4%.

– the index of total expenses. We suggested a calculation of the general cost index, which takes into account the changes in the consumer price index for food and soft drinks, the food and non-food prices index and the exchange rate index. Accordingly, the index of total expenditures significantly exceeds the level of the consumer price index, and shows that the total expenditures of the population, taking into account the indicated disproportions, do not correspond to the real state of affairs;

– the actual consumption of food by the population, incl. vegetables. The actual expenditures on vegetables, according to the statistics, are 1102.64 UAH per person on average. If you take into account the minimum required rates of consumption of certain types of vegetables ("borscht set"), then you'll see that they are lower by 25%. It should also be noted that not all types of vegetables that have a steady demand are reflected in the Weight structure used for the calculation of CPI, in particular, garlic, pumpkin, etc.;

– the method for calculating consumption expenditures, taking into account CPI, does not correspond to the actual state of things and needs to be further adjusted. The use of foreign experience and the increase in the number of positions in the CPI calculation will more fully reflect the consumption of the population, including consumption of food, in particular, of vegetables and potatoes.

Література

1. Домбровська, С. С. Аналіз підходів до визначення сутності та цілей організаційно-економічного механізму суб'єктів підприємництва на ринку плодоовочевої продукції України [Текст] / С. С. Домбровська // Економіка та управління підприємствами, регіонами і країнами в умовах ризиків : матеріали міжнар. наук.-практ. конф., 27–28 листопада 2014 р., м. Чернігів. – Дніпропетровськ, 2014. – С. 44–47.
2. Роганіна, В. Є. Рівень розвитку ринку овочевої продукції в Харківській області [Електронний ресурс] / В. Є. Роганіна. – Режим доступу: <https://www.pdaa.edu.ua/sites/default/files/nppdaa/2011/01/242.pdf>.
3. Лещенко, Л. О. Сучасний стан розвитку овочівництва відкритого ґрунту Харківської області [Текст] / Л. О. Лещенко // Вісник ХНАУ. Серія: Економічні науки. – 2015. – № 5. – С. 239–246.
4. Логоша, Р. В. Трансформації ринку овочів в Україні [Текст] / Р. В. Логоша // Економіка. Фінанси. Менеджмент : актуальні питання науки і практики. – 2016. – № 3. – С. 55–66.
5. Сміність внутрішнього споживчого ринку сільськогосподарської продукції та продовольства [Текст] : монографія / [О. М. Шпичак та ін.] ; за ред. О. М. Шпичака. – К. : ННЦ ІАЕ, 2013. – 186 с.
6. Про затвердження наборів продуктів харчування, наборів непродовольчих товарів та наборів послуг для основних соціальних і демографічних груп населення [Електронний ресурс] : постанова Кабінету міністрів України від 11 жовтня 2016 р. № 780. – Режим доступу : <http://zakon2.rada.gov.ua/laws/show/780-2016-%D0%BF/page>.
7. Про затвердження Методики визначення прожиткового мінімуму [Електронний ресурс] : наказ Міністерства соціальної політики України, Міністерства економічного розвитку і торгівлі України, Державної служби статистики України від 03.02.2017 № 178/147/31. – Режим доступу: <http://zakon2.rada.gov.ua/laws/show/z0281-17/page#n18>.
8. Дані моніторингу цін на соціально значущі товари та нафтопродукти [Електронний ресурс]. – Режим доступу: <http://www.me.gov.ua>.
9. Динаміка цін (тарифів) на споживчому ринку [Електронний ресурс]. – Режим доступу: http://www.ukrstat.gov.ua/operativ/operativ2015/ct/mon_c/mon_c.htm.
10. Індекси споживчих цін на товари та послуги у 2002–2016 р. [Електронний ресурс]. – Режим доступу: http://www.ukrstat.gov.ua/operativ/operativ2008/ct/cn_rik/icsR/iscR_u/isc_tp_rik_u_.htm.
11. Оперативна інформація про рівень середньозважених цін на основні види сільськогосподарської продукції та продукти її переробки [Електронний ресурс]. – Режим доступу: <http://agroua.net/news>.
12. Ревенко, А. Індекс споживчих цін: особливості складних для розуміння оновлень [Електронний ресурс] / А. Ревенко // ZN.UA. – Режим доступу: https://dt.ua/macrolevel/indeks-spozivchih-cin-osoblivosti-skladnih-dlya-rozuminnya-onovlen-244422_.html.

Стаття надійшла до редакції 10.06.2017

© Пархоменко Л. А., Герасимчук Н. А.,
Скуртол С. Д., Колупаєва І. В.

References

1. Dombrovska, S. S. (2014, November). Analiz pidkhodiv do vyznachennia sutnosti ta tsilei orhanizatsiino-ekonomichnoho mekhanizmu subiektiv pidpriemnytstva na rynku plodoovochevoi produktsii Ukrainy. *Ekonomika ta upravlinnia pidpriemstvamy, rehionamy i krainamy v umovakh ryzykiv*, 44–47.
2. Rohanina, V. Ye. (2011). *Riven rozvytku rynku ovochevoi produktsii v Kharkivskii oblasti*. Available at <https://www.pdaa.edu.ua/sites/default/files/nppdaa/2011/01/242.pdf>

3. Leshchenko, L. O. (2015). Suchasnyi stan rozvytku ovochivnytstva vidkrytoho gruntu Kharkivskoi oblasti. *Visnyk KhNAU. Seriya: Ekonomichni nauky*, 5, 239–246.
4. Lohosha, R. V. (2016). Transformatsii rynku ovochiv v Ukraini. *Ekonomika. Finansy. Menedzhment: aktualni pytannia nauky i praktyky*, 3, 55–66.
5. Shpychak, O. M. (ed.). (2013). *Yemnist vnutrishnoho spozhyvchoho rynku silskohospodarskoi produktsii ta prodovolstva*. Kyiv: NNTs IAE.
6. Postanova Kabinetu ministriv Ukrainy. (2016, October). *Pro zatverdzhennia naboriv produktiv kharchuvannia, naboriv neprodovolchyykh tovariv ta naboriv posluh dlia osnovnykh sotsialnykh i demografichnykh hrup naselennia*. Available at: <http://zakon2.rada.gov.ua/laws/show/780-2016-%D0%BF/page>
7. Nakaz Ministerstva sotsialnoi polityky Ukrainy, (2017, February). Ministerstva ekonomichnoho rozvytku i torhivli Ukrainy, Derzhavnoi sluzhby statystyky Ukrainy. *Pro zatverdzhennia Metodyky vyznachennia prozhytkovoho minimum*. Available at: <http://zakon2.rada.gov.ua/laws/show/z0281-17/page#n18>
8. *Dani monitorynhu tsin na sotsialno znachushchi tovary ta naftoprodukty*. Available at: <http://www.me.gov.ua/>
9. *Dynamika tsin (taryfiv) na spozhyvchomu rynku*. Available at: http://www.ukrstat.gov.ua/operativ/operativ2015/ct/mon_c/mon_c.htm
10. *Indeksy spozhyvchykh tsin na tovary ta posluhy u 2002–2016rr.* Available at: http://www.ukrstat.gov.ua/operativ/operativ2008/ct/cn_rik/icsR/iscR_u/isc_tp_rik_u_.htm
11. *Operatyvna informatsiia pro riven serednozvazhenykh tsin na osnovni vydy silskohospodarskoi produktsii ta produkty yii pererobky*. Available at: <http://agroua.net/news/>
12. Revenko, A. (2017). Indeks spozhyvchykh tsin: osoblyvosti skladnykh dlia rozuminnia onovlen. *ZN.UA*. Available at: https://dt.ua/macrolevel/indeks-spozhyvchih-cin-osoblivosti-skladnih-dlya-rozuminnya-onovlen-244422_.html

Received 10.06.2017

© *Parkhomenko L. A., Gerasymchuk N. A., Skurtol S. D., Kolupaieva I. V.*