TRENDS IN THE MARKET OF ORGANIC PRODUCTS IN UKRAINE

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Abstract
In the article studies the situation on Ukrainian market of organic products basing on the dynamics of the number of certified organic farms, the organic farm areas and the output volume of organic products, comparing the basic factors of their growth, according to which the main trends of the development of the relevant Ukrainian agricultural sector are outlined.

Key words: *organic products, organic farming, organic market, certified organic farms, trends.*

JEL Classification: *Q00*

I. INTRODUCTION

In the whole world the organic agricultural production is a strategically important innovation of the permanent development in the agricultural sector for the last decade. It attracts the attention of the community due to the exacerbation of global issues concerning the growth of negative human impacts on the environment.

The rapidly growing demand for organic products in all regions of the world sales in 2011 is 61 billion U.S. dollars, up 170 % more than in 2002 (Organic World*:* Organic agriculture statistics, organic farming statistics, Research Institute of Organic Agriculture FiBL). Moreover, this market segment is characterized by a concentration of demand in developed countries, increased demand in developing countries, consolidation of market participants and the development of the distribution of organic products (Maslak, 2011). As for Ukraine, the domestic consumption of organic agricultural production in 2008 was only 600 thousand euros, while in 2012 it increased to 7.9 million (Organic Federation of Ukraine, 2014), that is more than 13 times.

The purpose of the article is to explore the main trends of the Ukrainian organic market.

II. THE INVESTIGATION RESULTS

The development of the organic market in the domestic space can be divided into two periods, basing on the presence or absence of legal regulation in this area. The first period, the incipience period, is considered as being before the Law of Ukraine "On the production and circulation of organic agricultural products and raw materials" № 425 - 18 of 3 September 2013. With the adoption of the Law the second period started, the period of development of the organic production in Ukraine.

Ukraine as an agricultural country has great potential for the development of organic agricultural production, the main perspectives are next:

- The anthropogenic pollution of the lands in Ukraine is not entire, but localized, there are four regions where the soil is not contaminated to dangerous limit and are suitable for the cultivation of organic products (Kobets', 2004, p.14);
- Relatively cheap labor;
- Export attractiveness because of the neighborhood with the EU market;
- The possibility of expansion of the domestic market, because the areas of organic farmlands are not inferior than in most European countries, the volume of domestic consumption of organic products is significantly behind the average activities in Europe.

In Ukraine there are global trends to the implementation and development of alternative agriculture, including the extension of areas for cultivation of organic crops and increasing of the number of organic producers.

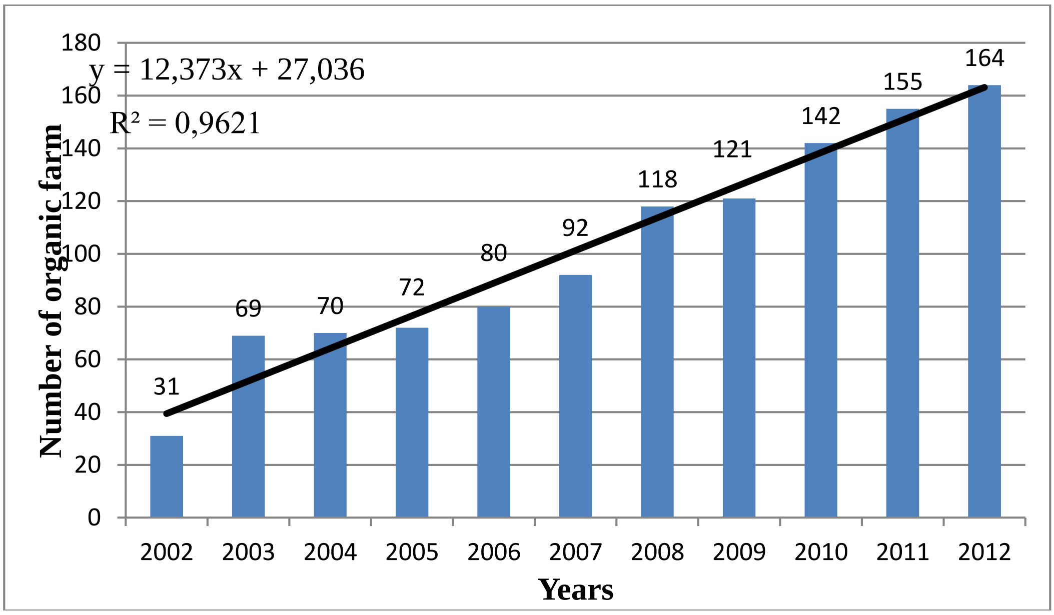

Fig. 1. The number of certified organic farms in Ukraine

Source: constructed by the author according to data (Organic Federation of Ukraine, 2014).

Based on data for 2002-2012 years, the number of organic farms increased from 31 to 164 economic entities (Figure 1). Our linear trend of the quantity of organic farms shows that if a current trend of the emergence of new farms is preserved, their quantitative importance will grow in the future. Based on the coefficient of determination, which in this case is 0.96 the selected trend fairly well describes the dynamic range.

Over the period 2002-2012 the growth trend is observed concerning the area of organic farmland, although the rate of increase is rather small, since 2008 (Figure 2).

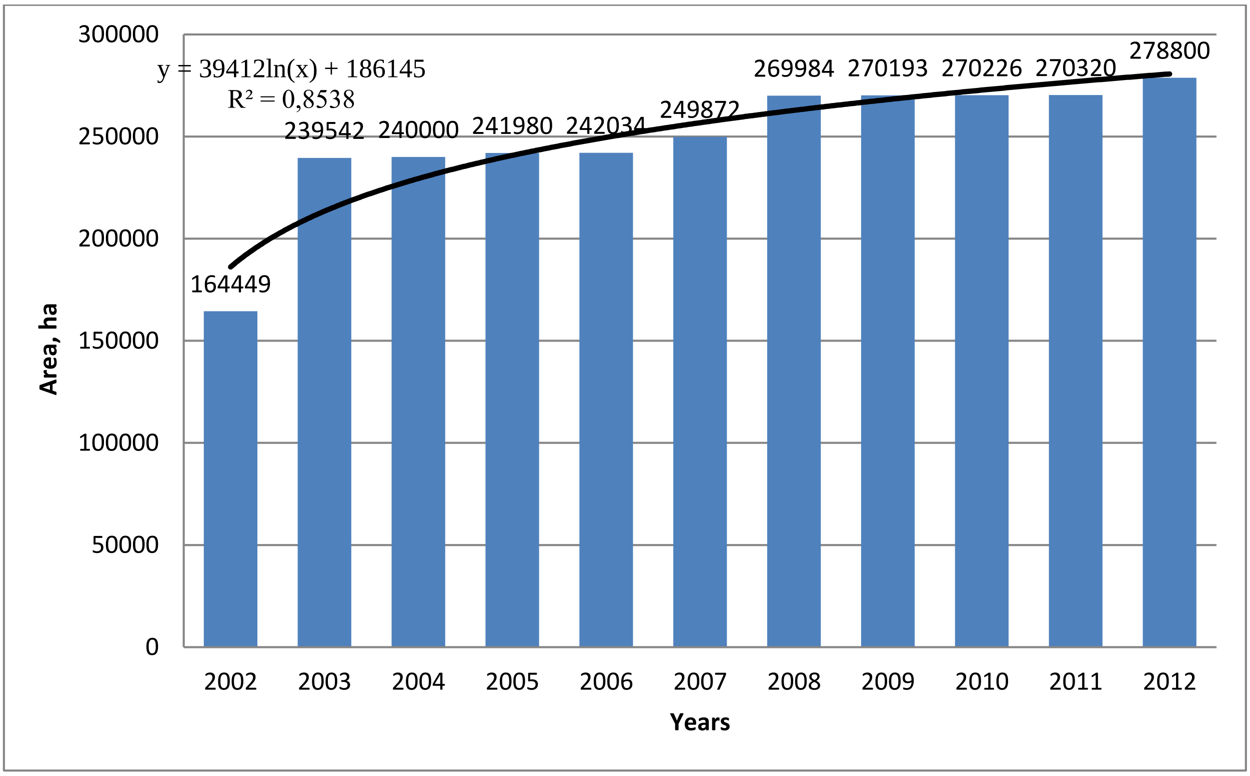

Fig. 2. Dynamics of the area of organic farmlands in Ukraine, hectares

Source: constructed by the author according to data (Organic Federation of Ukraine, 2014).

We have built a logarithmic trend of the areas occupied by organic agricultural production, which states that if maintaining the existing rate of market development of organic production, the corresponding area will increase. The reasonableness of the applied model is confirmed by the high value of the coefficient of determination equal to 0.85.

The reasons for the slow growth in the area of organic farmlands are the lack of economic incentives for businesses and imperfections founded Ukrainian organic market.

It should be noted that Ukraine has repeatedly fell to the ranking list of European countries with the largest area of farmlands occupied by organic crops. In 2002, Ukraine ranks 10th, in 2003-2006 it ranks 9th place, from 2007 to 2012 – 11-13 ranks. But despite the fact that the largest area of farmlands occupied by organic agricultural production Ukraine stands well among European countries, their share is not more than 0.7% of the total area of domestic farmland. However, it isn’t so pessimistic, because the analysis of the specific gravity of lands occupied by organic production in Europe (Table 1) reveals that in 2012, 23% of countries have a share of organic lands less than 1%, 31% of countries allocate under organic production from 1 to 4.9% of the land, 28% of countries have a share of lands, certified as organic, from 5 to 9.9%, and only 18% of countries have a share of organic lands more than 10%.

The countries with a large share of land certified as organic, are traditionally Liechtenstein, Sweden, Estonia and others.

In absolute values in Europe the largest area of lands certified as organic, possesses Spain (1.59 million hectares), and Italy is leading by the number of organic producers (43.85 million).

Table 1. The share of land certified as organic in Europe in 2012

	Less than 1%	1 - 4,9%	5 - 9,9%	10% or more
Countries	Albania, Bosnia and Herzegovina, Iceland, Malta, Moldova, Montenegro Russian Federation, Serbia Ukraine.	Belgium, Bulgaria, Croatia France Hungary, Ireland Luxembourg, Netherlands Poland, Romania Macedonia, United Kingdom	Denmark, Finland, Germany, Greece, Italy, Lithuania, Norway, Portugal Slovakia, Slovenia, Spain.	Austria, Czech Republic, Latvia, Estonia, Liechtenstein, Sweden Switzerland.

Notes:

1. Source: constructed by the author according to data (Organic World*:* Organic agriculture statistics, organic farming statistics, Research Institute of Organic Agriculture FiBL).

2. There are no data from the following countries: Andorra, Belarus, Vatican City, Monaco and San Marino.

The distribution of agricultural lands (Table 2) shows that in the whole Europe under organic farming is employed 11,151 hectares, that represents 2.3% of the area of all agricultural lands in the region, and the average area of a farm is 34.71 ha. Ukraine belongs to the group of countries with the lowest number of organic producers, but the average area of one farm (1700 ha) is one of the largest, conceding the first position to Russian Federation (2588.73 ha).

Table 2. Agricultural land occupied under organic production in some European countries (2012)

Country	Area of organic land, ha	Share of organic land in total agricultural land	Producers	The average area of one farm, ha
1.	2.	3.	4.	5.
Austria	533 230	19,7	21843	24,41
Albania	560	0,0	46	12,17
Belgium	59 684	4,4	1389	42,97
Bulgaria	39 138	1,3	2754	14,21
Bosnia and Herzegovina	343	0,0	25	13,72
UK	590 010	3,4	4281	137,82
Greece	462 618	5,6	23433	19,74
Denmark	182 930	6,9	2677	68,33
Estonia	144 149	15,3	1478	97,53
Ireland	54 122	1,3	1400	38,66
Iceland	8 240	0,4	35	235,43
Spain	1 593 197	6,4	30462	52,30
Italy	1 167 362	9,1	43852	26,62
Latvia	195 658	10,8	3496	55,97
Lithuania	156 539	5,4	2527	61,95
Liechtenstein	1 086	29,6	35	31,03
Luxembourg	3 924	3,0	102	38,47
Macedonia	26 431	2,5	419	63,08
Malta	23	0,2	9	2,56
Moldova	22 102	0,9	172	128,5
Netherlands	48 038	2,5	1646	29,18
Germany	1 034 355	6,2	23032	44,91
Norway	55 260	5,1	2590	21,33
Poland	661 956	4,3	25944	25,51
Portugal	201 054	6,0	2434	82,60
Russia	126 848	0,1	49	2588,73
Romania	288 261	2,1	15315	18,82
Serbia	6 340	0,1	1073	5,91
Slovakia	166 700	8,8	365	456,71
Slovenia	35 101	7,6	2682	13,09
Hungary	130 609	3,1	1560	83,72
Ukraine	278 800	0,7	164	1700,00
Finland	197 751	8,7	4322	45,75
France	1 032 941	3,8	24425	42,29
Croatia	31 904	2,4	1528	20,88
Czech	488 658	11,5	3934	124,21
Montenegro	3 068	0,6	62	49,48
Switzerland	125 961	12,0	6173	20,41
Sweden	477 685	15,6	5601	85,29
Total area in Europe	11 151 991	2,3%	321 323	34,71

Source: constructed by the author according to data [(Organic World*:* Organic agriculture statistics, organic farming statistics, Research Institute of Organic Agriculture FiBL; Organic Federation of Ukraine, 2014).

As is noted above, the Ukrainian organic market’s characteristic is a small number of producers and a large area of lands certified as organic, which account for one farm. However, as can be seen from Table 3, the average value of the lands for the organic production, which belong to the same economy, is gradually reduced. It is due, firstly, to increasing of the number of small domestic producers of the relevant product, and secondly, the process of subdivision the existing farms.

Table 3. The average area of a certified organic farm in the Ukraine , ha

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Area	5304,81	3471,62	3428,57	3360,83	3025,46	2716	2288	2233	1903	1744	1700

Source: constructed by the author according to data (Organic Federation of Ukraine, 2014).

The domestic market for organic products began its rapid growth in 2006 – 2007, until there were only sporadic attempts of sales of the relevant product in Ukraine, dominated by exports, it is particularly confirmed by the structure of areas under crops, where the major part belongs to the cereals, legumes and oilseeds, which were the raw materials for subsequent export, only a small part was set to vegetables, berries and fruit (Fig. 3).

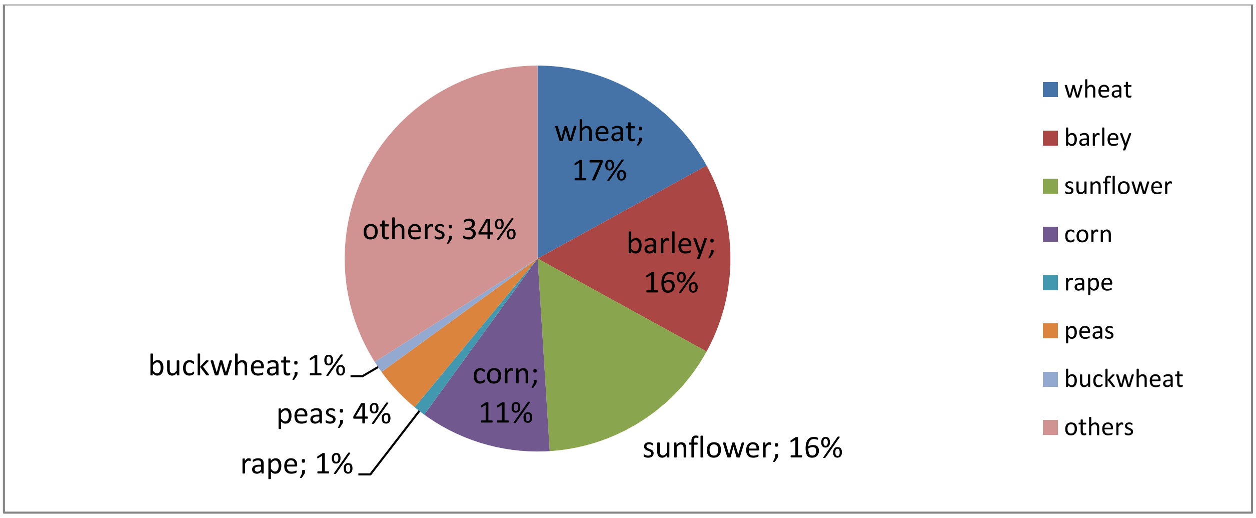

Fig. 3. Structure acreage crops certified as organic (Schneider et. al., 2005, p. 17)

Meanwhile, there was no organic animal farming in Ukraine.

According to the Organic Federation of Ukraine the capacity of the domestic organic market is growing rapidly (Fig. 4).

As noted in the Organic Federation of Ukraine in the last three years there has been a tendency to fill the domestic market, organic products through the establishment of recycling organic materials. In particular, there are cereals, syrups, meat and dairy products, jam, juice, honey and dried fruit (Organic Federation of Ukraine, 2014).

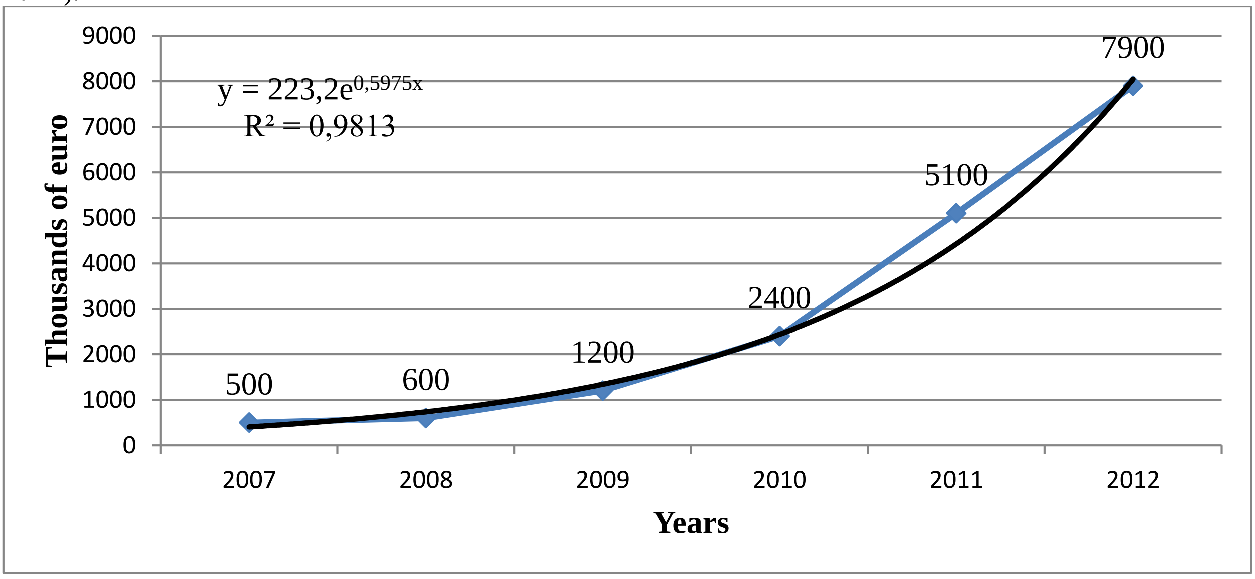

Fig.4. The dynamics of the domestic consumer market for organic products in Ukraine

Source: constructed by the author according to data (Organic Federation of Ukraine, 2014).

We built the exponential trend of the organic market in Ukraine on the basis of data for the 2007-2012, which states that with preservation of current trends in the development of the relevant domestic market its scale will increase.

According to preliminary data, the volume of domestic consumption of organic products in 2013 will cross the limit of 12 million of euro [4], which is almost 52% higher than a year earlier.

Of course, comparing the scale of the consumption of organic products in 2011 in the leading countries that are reckoned among the ten leaders with the largest market for organic products in Europe such as Germany (6590 million) ranked 1st, France (3756 million) ranked 2, or even the Netherlands (761 million) ranked 10; the capacity of the corresponding Ukrainian market is still too small to hold a leading position in these rankings.

Therefore, if we compare the consumption of organic products per capita in some European countries (Table 4), it is also evident that the Ukrainians spend ten times less money to buy these products.

Of course, it has its objective explanation, list some of them:

- first, the low purchasing capacity of the population, where the part of individuals belongs to the middle and upper class, is insignificant in tote;
- second, the lack of sufficient consumer information about usefulness and a quality of organic products;
- third, the relevant domestic market recently developed without legislative ensuring that would regulate the specific relationships between entities in the field of the agricultural sector;
- fourth, the limited supply, which consists mainly of plant products;
- fifth, the lack of state financial support for organic producers etc.

Table 4. The cost of consumption of organic products per capita in 2011 in some European countries, the euro

Switzerland	Denmark	Luxembourg	Austria	Liechtenstein	Sweden	Germany	France	Netherlands	UK	Czech	Romania	Hungary	Poland	Portugal	Bulgaria	Slovakia	Ukraine
177	161	134	127	100	94	81	58	46	30	7	4	3	3	2	1	1	0,1

*Source: constructed by the author according to data (Organic World: Organic agriculture statistics, organic farming statistics, Research Institute of Organic Agriculture FiBL)***.**

During 2007-2012 the condition of the Ukrainian organic market should be evaluated using base rates of growth areas of organic agricultural lands, of the domestic consumer market volume for organic products and the quantity of organic farms (Table 5).

Table 5. Base rates of growth areas of organic farmlands of the domestic consumer organic market and the quantity of organic farms,%

Years / Basic Coefficients for:	2007	2008	2009	2010	2011	2012
1) the agricultural land	100	108	108	108	108	111
2) the consumer domestic market	100	120	240	480	1020	1580
3) the number of organic farms	100	128	131	154	168	178

Source: constructed by the author according to data (Organic Federation of Ukraine, 2014).

The data in Table 5 are served in graphical form for better visibility (Fig. 5).

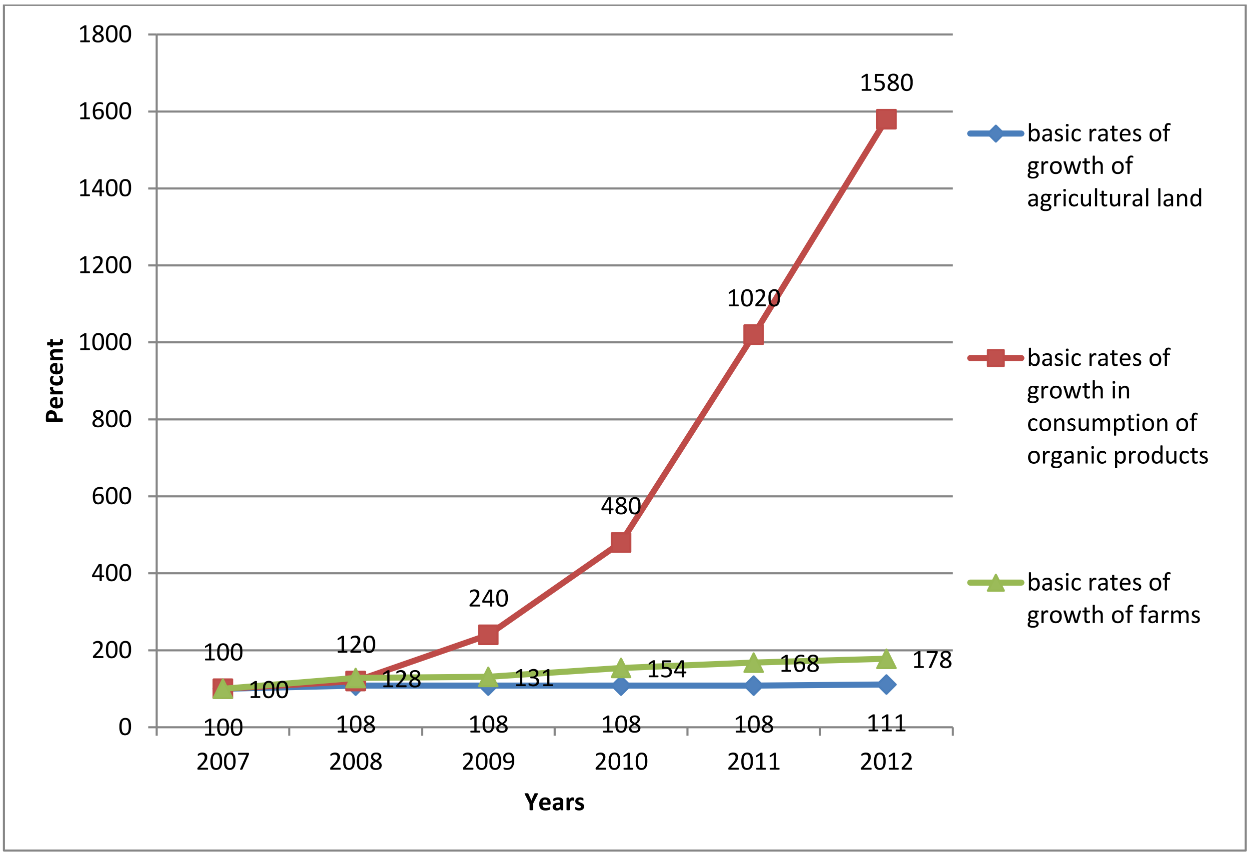

Fig 5. The dynamics of the basic factors of the growth areas of organic farmlands, of the volume of domestic consumer market of organic products and the quantity of organic farms

For the purpose of calculating the changing of one number dynamics versus another, we calculate the coefficients of advance. If in 2012, the volume of the domestic consumption of organic products increased by 1580 % and the number of organic farms, by 178 %, while the area of organic agricultural lands increased by 111 %, the rate of advance increasing of the market of organic products volume to the number of economies is 8.88, and to areas of lands – 14.2.

As shown in Fig. 5 the basic factors of growth of the consumption of organic products is much higher than the base rates of growth of the number of organic farms and lands set for the cultivation of the product; this phenomenon may indicate the annual consumer increase, that is, the increase of the demand for organic products, or (and) the raising of prices. However, only minor changes are observed by the current proposal, the situation in the market is likely to result in higher products prices in order to establish balance in the market. Of course such a balance of supply and demand is not very favorable for the domestic market of organic products, as the price is a factor that influences the choice of consumers.

III. CONCLUSIONS

So in Ukraine if current trends in the area of organic farmlands are preserved, the number of organic farms and the volume of domestic consumption of organic products will increase hereafter. However, we should not forget about the existing imbalance between the rate of growth of demand and supply, leading to an artificial increase in product prices.

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