

Lesia V. Zaburanna¹

DIVERSIFICATION OF BUSINESS ACTIVITIES IN RURAL AREAS ACCORDING TO THE CONCEPT OF SUSTAINABLE DEVELOPMENT

The article discusses the importance of sustainable development for rural areas. The main criterion for sustainable development of the agricultural sector is the improvement of farmers life quality based on the preservation of life supporting systems. It is revealed that agricultural production and agricultural employment alone are not able currently to provide the appropriate level of income as a basis for quality living conditions for farmers. Therefore, there exists an objective need for diversification of rural economy. Several promising fields for diversification of business activities in rural areas are determined that would ensure sustainable development of the agrarian sector, namely the development of organic farming and rural tourism.

Keywords: sustainable development; rural areas; diversification; rural economy; organic farming; rural tourism.

Леся В. Забуранна

ДИВЕРСИФІКАЦІЯ ПІДПРИЄМНИЦЬКОЇ ДІЯЛЬНОСТІ В СІЛЬСЬКІЙ МІСЦЕВОСТІ НА ЗАСАДАХ СТАЛОГО РОЗВИТКУ

У статті розглянуто необхідність та можливості сталого розвитку сільських територій. Основним критерієм сталого розвитку аграрного сектору є поліпшення якості життя сільських жителів, що має базуватись на збереженні основних систем життєзабезпечення. Встановлено, що лише сільськогосподарське виробництво і зайнятість у сільському господарстві не в змозі забезпечити відповідний рівень доходу для сільських мешканців, тому існує об'єктивна потреба у диверсифікації сільської економіки. Визначено перспективні напрями диверсифікації господарської діяльності на сільських територіях, які забезпечуватимуть сталий розвиток аграрного сектору, зокрема, розвиток органічного сільського господарства та сільського туризму.

Ключові слова: сталий розвиток; сільські території; диверсифікація; сільське господарство; органічне сільське господарство; сільський туризм.

Рис. 3. Табл. 4. Літ. 20.

Леся В. Забуранна

ДИВЕРСИФИКАЦИЯ ПРЕДПРИНИМАТЕЛЬСКОЙ ДЕЯТЕЛЬНОСТИ В СЕЛЬСКОЙ МЕСТНОСТИ НА ПРИНЦИПАХ УСТОЙЧИВОГО РАЗВИТИЯ

В статье рассмотрены необходимость и возможности устойчивого развития сельских территорий. Основным критерием устойчивого развития аграрного сектора является улучшение качества жизни сельских жителей, которое должно базироваться на сохранении основных систем жизнеобеспечения. Установлено, что только сельскохозяйственное производство и занятость в сельском хозяйстве не в состоянии обеспечить соответствующий уровень дохода для достижения соответствующих условий качества жизни сельских жителей, поэтому существует объективная потребность в диверсификации сельской экономики. Определены перспективные направления диверсификации хозяйственной деятельности на сельских территориях, обеспечивающие устойчивое развитие аграрного сектора, а именно – развитие органического сельского хозяйства и сельского туризма.

Ключевые слова: устойчивое развитие; сельские территории; диверсификация; сельское хозяйство; органическое сельское хозяйство; сельский туризм.

¹ National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine.

Introduction. In the history of Ukrainian society, Ukrainian village always played a crucial role, because historically the Ukrainians had sedentary lifestyle which involved tillage and farming. Yearly several dozen of villages disappear from the map of Ukraine and rural population is decreasing rapidly. Ukrainian village is generally characterized by the phenomenon of "aging nation" because young rural dwellers often leave their homes in search for better life in cities. Overall, according to the State Statistics Committee, Ukraine lost 475 villages during the years of its independence and only 71 villages were founded (State Statistics Service of Ukraine, 2014). The reasons for disappearance of villages and decreasing number of rural population are demographic crisis, urbanization and nation ageing. Prospective villagers move to cities because of the hopelessness of rural hinterland: the lack of work and collapsed social infrastructure (non-functioning hospitals, schools, cultural institutions) do not allow creating proper living conditions for youth. For this reason, the principles of environmental and sustainable development are quintessential. A significant criterion for sustainable development of agriculture should also be the improvement of life quality for farmers, rural population, and the nation in general; based on the preservation of life supporting systems. This criterion can be interpreted as a criterion for protection of life support, security of an individual as a biosocial being and natural means for agricultural labour, such as land and water used in agricultural production.

Summarizing the characteristics of socioeconomic conditions in villages and the processes typical for agriculture and rural areas in general, it is possible to conclude that there are not only necessary conditions for diversification of rural economy, but also sound reasons for that, among which is the low level of employment and financial well-being of rural dwellers.

Latest research and publications analysis. The importance of sustainable development in rural areas and different aspects of diversification of rural economy have been investigated by T. Balanovska et al. (2014), A. Balmann (2014), A. Gannon (1994), L. Hamzaoui and M. Zahaf (2008; 2009), J. Holland et al. (2003), M. Malik and V. Pulim (2007), M. Malik et al. (2012), V. Valentinov and K. Larsen (2010), L. Zaburanna (2012), L. Zaburanna and A. Troyan (2013). However, despite the presence of substantial research, insufficiently substantiated remain the strategic importance and the conditions for diversification of rural economy basing on the experience of other countries, in particular, the European Union.

The research objective is to determine the promising fields for diversification of business activities in rural areas that would ensure sustainable development of agrarian sphere and competitiveness of Ukrainian agriculture.

Key research findings. Agricultural production and agricultural employment alone are not able to provide the appropriate level of income as a basis for quality living conditions of farmers, therefore, there exists an objective need for rural economy diversification through a new strategic direction – diversification of activities, which do not require significant investment (in particular, from the state), but guarantees positive results for the private sector of the economy and for society in general. Basing on thorough research of scientific papers on diversification process, we identified some differences in the definitions of "diversification" as such. In our view, diversification is an innovative strategy aimed at mitigating business risks and increasing reve-

nue by expanding business activities of an entity through reallocating the existing resources to other areas which are significantly different from the current ones.

Diversification of activities through innovations refers to small forms of agricultural production as well. They can help expand the scope of employment in rural areas. According to M.J. Malik and V.A. Pulim (2007), de-agrarization of rural economy (decrease of the share of agricultural production) is a significant step to effective rural development; it serves as a prerequisite for private initiative and entrepreneurship in rural areas.

A classic example of this can be agricultural tourism, which uses human, material, and land resources of farms or other private households, as well as produced goods for providing accommodation, board and other forms of services to tourists. It is not necessary for farms to provide the entire range of these services; they can specialize in one or several ones.

The Western part of Ukraine is currently at the forefront of rural tourism development. The most popular is the Carpathian areas: Ivano-Frankivsk region, Zakarpattia, Lviv and Chernivtsi regions. Main attractions include skiing and the opportunity to celebrate New Year and Christmas holidays in winter and beautiful landscapes, fresh air, mountain rivers.

The hypothesis of this study is that there are 3 types of rural tourism enterprises according to their income structure (sources of funds), including:

1. Enterprises with mixed structure of income for which tourism revenues were less important or even unimportant.
2. Enterprises with mixed structure of income for which tourism has become an important source of income.
3. Active, sustainable and dynamic rural agricultural tourism enterprises that raise revenues primarily from tourism.

Quantitative variables that describe the examined companies by their size, number of permanent members and employees, sources of income, amount of agricultural production and services provided in the field of tourism were used for creating typological classification based on clustering using k-averages.

There is no classification of small and medium-sized enterprises of rural tourism by their sources of income (share of income from agricultural and tourist activities). As a result of the study, we defined 17 key indicators (variables) for the classification of SMEs in rural tourism by their sources of income and, therefore, we divide them in 3 groups (Table 1):

- indicators that determine the level of income from both agricultural and tourist activities (ICP, ILP, RT, SIT);
- indicators that determine the level of income only from tourism (CL, CB, AL, NT, DTS, SI);
- other indicators that influence the level of income from both tourist and agricultural activities (TA, SAL, AAO, PA, PT, TLC, ET).

One of the most suitable methods for studying empirical data is the algorithm of fuzzy K-averages. It is important to analyse not only the absolute values of economic parameters of rural tourism enterprises, but also relative ones, such as the coefficients of economic efficiency of the use of resource potential within the investigated business field.

Table 1. Description of variables used for typological classification of enterprises of rural agricultural tourism, author's development

No.	Code of the indicator	Name of the indicator	Description of the indicator
1	TA	Total area	In ha
2	SAL	Share of agricultural land in the total area	% of the total area
3	AAO	Average age of company owners	In years
4	PA	Number of people engaged in agriculture (agricultural production)	Number of individuals
5	PT	Number of people engaged in tourism	Number of individuals
6	TLC	Total labour costs of the enterprise	Including labour costs both in agriculture and tourism for all employees, hours
7	SI	Sources of income	Total amount, units
8	AB	Amount of beds	Total number of beds at the enterprise, units
9	NT	Number of tourists	Total number of tourists per year, individuals
10	DTS	Duration of the average tourist season	Number of days with tourists per year
11	ET	Experience in the field of rural agricultural tourism	Number of years
12	CL	Cost of living	Average price of accommodation for 1 person per day, UAH
13	CB	Cost of board ¹⁾	Average price of board for 1 person per day, UAH
14	IT	Income from tourist activities	Total income from tourism, UAH
15	ICP	Income from crop production	Total income, UAH
16	ILP	Income from livestock production	Total income, UAH
17	SIT	Share of income from tourism in the total income	% in the total income

¹⁾The examined enterprises usually offered breakfast and dinner.

According to the research methodology, the abovementioned parameters were identified as of January 01, 2015 for 87 rural tourism enterprises in Western Ukraine, the level of diversification of income sources of which has substantial differences.

The results of the cluster analysis performed using "Statistica 8.0" are represented graphically (Figure 1), showing the average values of the formed cluster groups. Figure 1 shows typical profiles of rural tourism enterprises. Thus, we can identify the major differences in mechanisms of obtaining economic benefits from the available resources.

To determine the contribution of a certain classification feature in the distribution of observations we will summarize the results of the analysis of variance generated in "Statistica 8.0" (Table 1). It is established that for all of the suggested 17 indicators the intragroup variance is lower than the intergroup one, as the values in the last column of Table 3 are positive.

The results for the sample of rural tourism enterprises in accordance with the structure of their income are presented in Table 3. Almost half of the surveyed enterprises provide only tourist services, but a big share of companies (36.8%) has diversi-

fied revenue sources, combining agricultural production with tourist services. For a small number of surveyed enterprises agricultural production is of primary importance and tourist services are the secondary source of income.

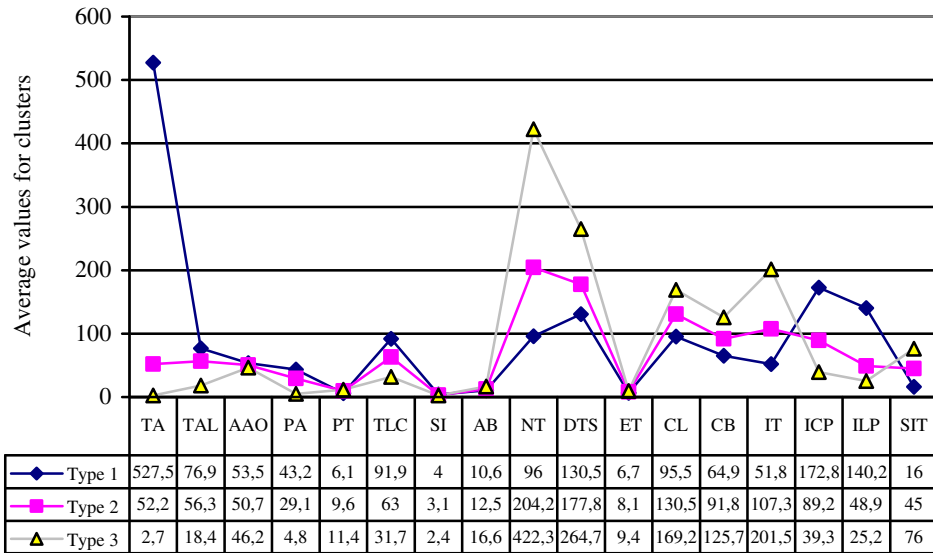


Figure 1. Diagram of average values of the clusters formed for the sample of enterprises in rural agricultural tourism, calculated by the author

The next step of the study based on typological classification of rural tourism enterprises is to analyse the most important factors influencing the efficient use of limited resources.

The basis for the study on the efficiency of rural tourism enterprises should consist of indicators that without any complications and conventions can be compared for entities different in size, structure, and location. These indicators include the share of agricultural land in the total area (SAL), the share of income from tourism in the total income (SIT), as well as:

- the share of personnel involved in agricultural production in the total number of employees (SPA);
- labour productivity at agricultural tourism enterprise defined as the total income of the company per employee (LP);
- labour productivity in agricultural production defined as income from crop and livestock production per employee in agricultural production (LPA);
- land resources efficiency, determined by dividing the total income by total area of the enterprise (LRE);
- turnover of beds, defined as the ratio between the number of tourists, who have visited the analysed enterprise during the year, and the number of beds created (TB);
- the average profitability of a bed per day – we believe that this indicator fully covers the level of fulfilment of tourism potential of an enterprise, the desired level of fulfilment of tourism potential, that is, PBD indicator.

Table 2. Analysis of variance of cluster distribution of the enterprises engaged rural agricultural tourism, calculated by the author

Variables (classification criteria)	Inter-group variance (between – SS)	Number of degrees of freedom df	Intra-group variance (within – SS)	Number of degrees of freedom df	F-criterion value	Level of significance of F-criterion (signif. – p)	Excess of inter-group variance compared to intra-group one
Total area (TA)	2670249.0	2.0	1357686.0	84.0	82.6	0.0	1312563.0
Share of agricultural land in the total area (SAL)	44916.3	2.0	10939.9	84.0	172.4	0.0	33976.3
Average age of company owners (AAO)	672.4	2.0	402.8	84.0	70.1	0.0	269.5
Number of people engaged in agricultural production (PA)	19038.5	2.0	3314.5	84.0	241.2	0.0	15724.0
Number of people engaged in tourism (PT)	284.1	2.0	204.7	84.0	58.3	0.0	79.5
Total labour costs of the enterprise (TLC)	40617.05	2.0	4859.91	84.0	351.0	0.0	35757.14
Sources of income (SI)	28.0	2.0	19.7	84.0	59.8	0.0	8.3
Amount of beds (AB)	499.3	2.0	167.1	84.0	125.5	0.0	332.2
Number of tourists (NT)	1440186.0	2.0	206402.2	84.0	293.1	0.0	1233783.8
Duration of the average tourist season (DTS)	230785.0	2.0	104807.0	84.0	92.5	0.0	125978.0
Experience in the field of rural agricultural tourism (ET)	74.9	2.0	36.5	84.0	86.2	0.0	38.4
Cost of living (CL)	61065.6	2.0	21367.8	84.0	120.0	0.0	39697.9
Cost of board (CB)	43066.9	2.0	12272.0	84.0	147.4	0.0	30794.9
Income from tourist activities (IT)	286406.8	2.0	78276.4	84.0	153.7	0.0	208130.4
Income from crop production (ICP)	174163.5	2.0	68301.0	84.0	107.1	0.0	105862.5
Income from livestock production (ILP)	124197.7	2.0	75209.7	84.0	69.4	0.0	48988.0
Share of income from tourism in the total income (SIT)	4.0	2.0	0.8	84.0	221.1	0.0	3.2

Figure 2 shows the average values of efficiency of rural tourism enterprises defined using typological classification of cluster groups.

According to Figure 2, enterprises whose income is dominated by revenues from agriculture, have the lowest efficiency both in terms of productivity of land resources – only 630 UAH per 1 ha of the total area – and fulfilment of tourism potential: a potential bed eventually brings income of 33.22 UAH per day. They also have low labour productivity level, especially when compared to the enterprises that receive most income from tourist services: 8,040 UAH per person per year as compared to 1,684 UAH per person per year. These enterprises are the leaders in workforce productivity and land resources efficiency – almost 126,000 UAH per 1 ha of the total

area. Although labour productivity of workers engaged in agricultural production is the lowest at these enterprises: only 5,770 UAH per person per year. In addition, companies specializing exclusively in tourism do not reach the maximum fulfilment of their tourist potential, because each potential bed allows obtaining the average income of 46.22 UAH per day. Turnover of beds at the enterprises of third type is the highest, as they have almost 26 guests per bed per year. Enterprises of the second type occupy medium position by all performance indicators except two. They show the lowest labour productivity of only 6,340 UAH per person per year and the highest level of fulfilment of tourism potential – each potential bed in 2014 brought the average income of 47.77 UAH per day. Efficiency indicators, averaged within each type of diversified enterprises (Figure 2) are recommended to be viewed as "control" numbers. This means that management of enterprises should be oriented at least the average values; in this case, it can be recognized as satisfactory.

Table 3. Results of typological classification of enterprises in rural agricultural tourism in Western economic region¹⁾, 2014, calculated by the author

No.	Type of an enterprise	General features of the enterprise type	Number of enterprises, units	Share, %
1.	Type I	Enterprises with mixed structure of income for which tourism revenues were less important or even unimportant	12	13.8
2.	Type II	Enterprises with mixed structure of income for which tourism activity has become an important source of income	32	36.8
3.	Type III	Active, sustainable and dynamic rural agricultural tourism enterprises that raise revenues primarily from tourism	43	49.4
4.	Total:	X	87	100

¹⁾ Zakarpattia, Lviv, Chernivtsi and Ivano-Frankivsk regions.

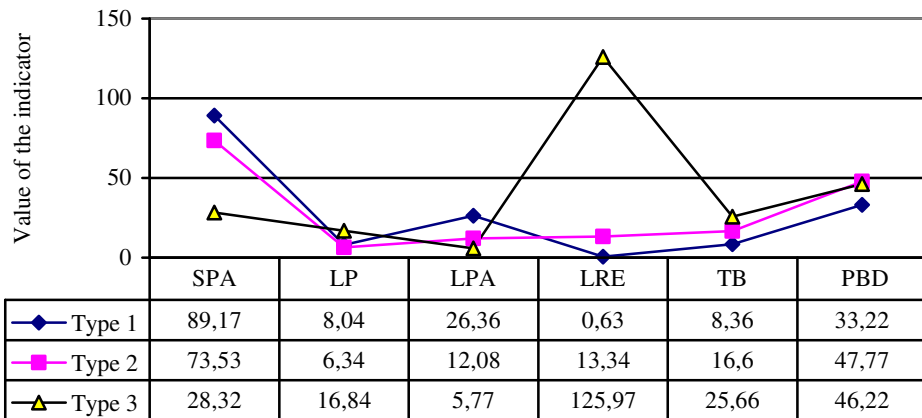


Figure 2. Performance profile formed in accordance with standard diversification strategies of rural tourism enterprises, calculated by the author

Taking all the indicators in consideration, we can state that the cluster of rural tourism enterprises with mixed income structure for which tourism activity has

become an important income source is more cost effective as compared to others, which proves our hypothesis about the economic justification of diversification in agriculture on the innovative basis, especially in the regions with difficult conditions for agricultural production.

An important area of rural economy diversification on the innovative basis aimed at achievement of its sustainable development is the use of organic farming that can adapt agricultural production to climate change and positively influence the socio-economic development of rural areas. Due to the fact that organic farming uses only organic materials (fertilizers, pesticides etc.), the amount of organic matter in the soil increases. As a result, soil contains much more moisture than when using traditional farming systems. Thus, the use of organic farming systems may to some extent neutralize the effect of environmental factors, most importantly in terms of global climate change. Another positive aspect of organic farming is that the prices for certified products are almost twice as high as those for conventional agricultural ones. This would allow farmers receive higher income and cover production costs even at low yields.

The priority of organic production development is declared by the State target program of the development of Ukrainian village until 2015, which substantiates the necessity for "reproduction of soil fertility and environmental conservation, rural development, improvement of agricultural production, providing consumer market with healthy quality products, strengthening export potential of the state, ensuring food security and improving the welfare of citizens" (State Target Program development of Ukrainian village until 2015, 2007). The trend of market growth is presented in all countries. And it should also be mentioned that the demand far exceeds the supply even at high prices (Table 4).

Table 4. Organic products market development of in European countries (Organic-World.net)

	Market volume					
	2006	2010	2011	2012	2013	2013 to 2006, %
	mln EUR					
Germany	4600	6050	6590	7040	7550	164.13
Sweden	605	860	885	905	1018	168.26
Estonia	3.2	12.1	18.7	20	22	687.50
Czech Republic	28.7	59	66,2	70	71.3	248.43
Latvia	1.1	3.6	4	4.7	5,3	481.82
Italy	970	1580	1720	1885	2020	208.25
UK	1240	1680	1882	1950	2065	166.53
Poland	58	111	120	127	138	237.93
Ukraine	0.5	2.5	5.1	9.3	12.0	2400.00
Russian Federation	56	109	115	120	123	219.64

Analysis of the development trends at the organic products market in European countries shows significant positive results. The largest share of this market belongs to Germany, the UK and Italy. The data also shows the growth of organic agriculture in Ukraine, but in comparison with other European countries it is only at the beginning of its development and, therefore, small business entities in rural areas may play an essential role in the development of this area of innovative agriculture.

Leaders in organic food consumption per capita are Germany and Sweden, where the average resident buys these products in the amount of 93 and 106 EUR per year respectively. In Ukraine, this figure is only 3 cents per capita per year (Figure 3).

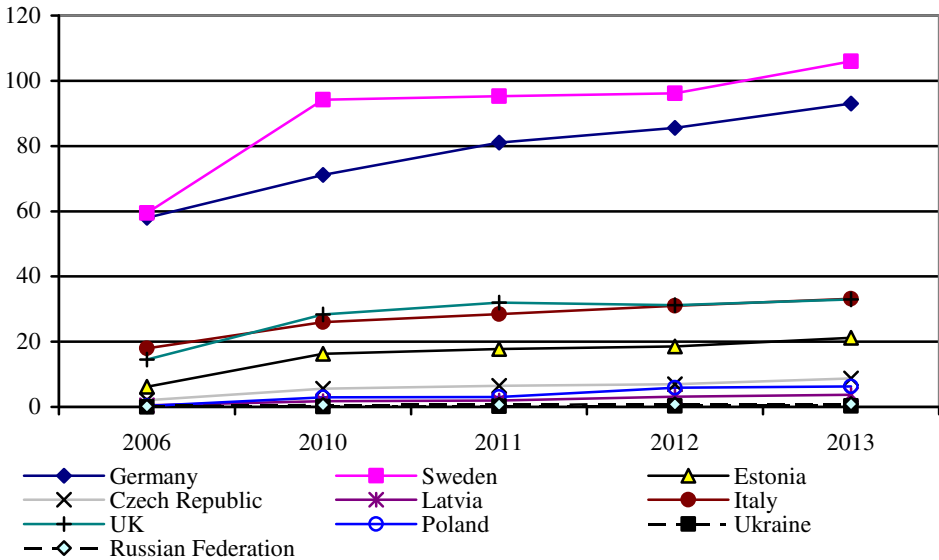


Figure 3. Consumption of organic products per capita, EUR (Organic-World.net)

Despite the rapid increase of the EU sales of organic products, there exist certain obstacles for their production, such as poor soil and massive intensification of agricultural production (Dimitri and Oberholtzer, 2009). Further growth of the organic products markets offers opportunities for new producers from developing countries, including Ukraine.

In addition, the feasibility of organic farming development in Ukraine is conditioned by the following factors:

- the need for reproduction of soil fertility and environmental protection;
- the need for rural development and raising the level of life for rural population;
- the need to increase the efficiency and profitability of agricultural production;
- the need to provide consumer market with healthy quality products;
- the need to strengthen the export potential;
- the need to improve the image of Ukraine as a manufacturer and exporter of healthy high-quality organic products;
- ensuring food security in Ukraine;
- improving the welfare of Ukrainian citizens.

Conclusions. A specific approach to the typology of rural tourism entrepreneurship based on different types of activity within a company is suggested here. There are 3 types of rural tourism enterprises according to their income structure: enterprises with mixed structure of income for which tourism revenues were less important or even unimportant; enterprises with mixed structure of income for which tourism has become an important income source; active, sustainable and dynamic rural agricultural tourism enterprises that raise revenues primarily from tourism.

As a result of this typology of rural tourism enterprises we have found the most important factors of efficient use of limited resources and leverage increased business activity of companies in this field. It is proved that for the generalized cluster of rural tourism enterprises, incorporating mixed-income structure for which tourism activity has become an important source of income is more cost-effective as compared to others. This proves our hypothesis about the economic justification of diversification in agriculture, especially in problematic for agricultural production regions.

Also, we researched the importance of organic production in rural areas. Organic farming can adapt agricultural production to climate change and positively influence the socioeconomic development of rural areas. Another positive aspect of organic farming is that prices for certified products are almost twice as high as those for conventional agricultural products. This, in turn, allows farmers receive higher income and cover production cost even at low yields.

References:

Про затвердження Державної цільової програми розвитку українського села на період до 2015 року: Постанова Кабінету Міністрів України від 19.09.2007 № 1158 // zakon.rada.gov.ua.

Забурання Л.В. Туристична підприємницька діяльність в аграрній сфері: теорія, організація: Монографія. – К.: ННЦ «Ін-т аграр. економіки», 2012. – 479 с.

Малік М.Й., Пулім П.А. Концептуальні засади розвитку сільських територій // Роль соціального капіталу та локальних ініціатив у забезпеченні сільського розвитку: Допов. міжнар. Симпозіуму (16–18 травня 2007 року). – Житомир: Державний агроекологічний університет, 2007. – С. 156–163.

Розвиток підприємництва, 2014 // Державний комітет статистики України // www.ukrstat.gov.ua.

Соціально-економічні засади розвитку сільських територій (економіка, підприємств і менеджмент): Монографія / М.Й. Малік, М.Ф. Кропивко, О.Г. Булавка та ін.; За ред. М.Й. Маліка. – К.: ННЦ ІАЕ, 2012. – 642 с.

Стратегічне управління у сільськогосподарських підприємствах: теорія та практична проблематика: Монографія / Т.І. Балановська, Л.В. Забування, О.П. Гоголя, О.В. Новак, Л.В. Буценко, Н.І. Драгнева, З.П. Борещка. – К.: РВЦ НУБіП України, 2014. – 367 с.

Balmann, A. (2014). 25 Years of Transition: The Structural Development of Eastern German and Eastern European Agriculture. In: Vortrag präsentiert auf Sino-Germany Academic Exchange Lecture Series, Chengdu/China, 11.11.2014–13.11.2014.

Bill, V. (2002). The Chains of Agriculture: Sustainability and the Restructuring of Agri-food Markets. In: IIED, Background Paper for the Preparatory Committee Meetings to the World Summit on Sustainable Development, Johannesburg, 26 August – 4 September 2002.

Dimitri, C., Oberholtzer, L. (2009). Expanding demand for organic foods brings changes in marketing. In: Markets and Trade, March, 3.

FAO (1995). Sustainability Issues in Agricultural and Rural Development Policies, Volume 2. Trainer's kit, Training Material for Agricultural Planning, 38/2, Rome Italy.

Gannon, A. (1994). Rural Tourism as a Factor in Rural Community Economic Development for Economies in Transition. Journal of Sustainable Tourism, 2(1&2): 51–60.

Gorenak, S., Bobek, V. (2010). Total responsibility management indicators and sustainable development. International Journal of Sustainable Society, 2(3): 248–264.

Hamzaoui, L., Zahaf, M. (2008). Decision Making Process Of Community Organic Food Consumers: An Exploratory Study. Journal of Consumer Marketing, 25(2): 95–104.

Hamzaoui, L., Zahaf, M. (2009). Clustering Organic Food Consumers Using Purchasing Patterns. European Journal of Management, 9(1): 202–211.

Holland, J., Burian, M., Dixey, L. (2003). Tourism in Poor rural Areas: Diversifying the product and expanding the benefits in rural Uganda and the Czech Republic // www.propoortourism.org.uk.

Lewis, N., Moran, W., Cocklin, C. (2002). Restructuring, regulation and sustainability. In: The Sustainability of Rural Systems: Geographical Interpretations (pp. 97–121). I. Bowler, C. Bryant and C. Cocklin (ed.). Kluwer Academic, Dordrecht.

Statistics // Organic-World.net // www.organic-world.net.

Tolon-Becerra, A., Lastra-Bravo, X., Galdeano-Gomez, E. (2010). Planning and neoendogenous model for sustainable development in Spanish rural areas. *International Journal of Sustainable Society*, 2(2): 156–176.

Valentinov, V., Larsen, K. (2010). Toward a Transaction Cost Economics of Rural Development. *Local Economy*, 25(1): 24–31.

Zaburanna, L., Troyan, A. (2013). Peculiarities and prerequisites of transition of Ukrainian agricultural sector to sustainable development. *EARTH Bioresources and Life Quality: International Scientific Electronic Journal*, Vol. 20 // gchera-ejournal.nubip.edu.ua.

Стаття надійшла до редакції 20.04.2015.