System approach to organic producers' marketing activities based on the sustainable development concept

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Abstract

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The theoretical aspects of forming the system approach to organic producers' marketing activities based on the sustainable development concept are developed and substantiated in the article. The economic, social and environmental aspects of agricultural marketing were described. The world experience of organic production certification is considered. The elements of the system approach to the evaluation of organic producers' marketing efficiency in sustainable development concept are determined.

As a result, the authors have identified the factors of economic transformations under the sustainable development concept. The article has presented the mechanism of a system approach to marketing activities of organic farmers, based on the analysis of the farm's resources, outer competitive strength, and external opportunities.

This study contributed to investigating the economic, social and environmental aspects of agrarian marketing. As a result, the development of organic agricultural production will improve the economic, social and ecological situation in Ukraine, rural development, and could become one of the factors increasing the competitiveness of Ukraine's economy.

Keywords: system approach; marketing action; market of organic products; social, environmental and economic systems; certification; agricultural marketing; marketing of relations; holistic marketing; ecologically stable marketing; balanced growth

Introduction

Social and environmental issues in Ukraine highlight the importance of balanced economic growth and require the study of forming the system approach to organic producers' marketing activities based on the sustainable development concept (Tischuk, 2001).

Forming the system approach to organic producers' marketing activities based on the sustainable development concept provides conceptual scheme structure as a set of elements, required for: identifying trends of organic products market; qualitative and quantitative analysis of the organic products market; organic products market assessment, forecasting and certification systems, including the principles of complexity and systematicity.

Such Ukrainian and foreign scientists made very important scientific contribution to the research of the system approach to marketing, as Kotler & Armstrong (2010); Balabanova et al. (2012); Doyle (2010); Kotler (2003); Moiseeva & Konysheva (2002); Tolma (2011); Patrusheva (2002); Shapovalov (2008); Schultz & Schultz (1998); Afanasyeva (2014); Logosha (2017); Misyuk & Luchyk (2013) etc.

Afanasyeva (2014) studied theoretical aspects of marketing researches of the regional commodity markets and proposed the system approach to marketing research of the regional raw meat and meat products markets. Logosha (2017) explored the theoretical aspects of system approach to methodology of agrarian market research.

M. Misyuk studied market trends of cattle production, the determinants of meat and dairy market development, the role of interfarm marketing cooperatives in rural areas, in particular, creating technologically equipped small farms producing milk for industrial processing on the basis of cooperation and joint ventures; development of new export markets, promotion of dairy cattle breeding products in foreign markets. In addition, the integrated approach aspects to study of organizational and economic principles of regional cattle products market were studied by M. Misyuk (Misyuk & Luchyk, 2013). Zaichuk (2017) is thoroughly studying the consumer segment of environmentally friendly products).

Solomoniv (2006) reasoned the system approach applying to marketing management presentation as the main component of the contemporary strategic management concept (Akopova, 2010).

However, despite the considerable number of studies the issue of the system approach to organic producers' marketing activities based on the sustainable development concept remains understudied.

Materials and Methods

Generally, the analysis of development conditions of organic products market by national scientists showed a lack of a comprehensive system approach to marketing aspects. The social and economic conditions of the organic agrarian market remain insufficiently studied. The authors also did not highlight marketing aspects and their growing importance in the sustainable development of the sector.

This study was conducted to identify and substantiate the forming of the system approach to organic producers' marketing activities based on the sustainable development concept. Authors used a complex approach to the study combining theoretical and statistical methods.

Results and Discussion

The substantiation of appropriate management decisions in the agricultural production requires an integrated approach to innovative development that will allow improving farm management and marketing, taking into account social factors of its functioning. Features of innovation in agricultural production, conceptual basis of the agricultural sector, their institutional provision should take into account the peculiarities of the innovation process in the industry, that to some extent related to new or substantially improved products. The most significant of product innovations that in recent years have become widespread in Ukrainian agribusiness are related to organic production (Yaciv, 2012).

Organic products significantly differ from the traditional ones, so it can be assumed that organic products promotion marketing will differ from usual one for the consumer market.

Council Regulation (EU) No 834/2007 of 28 June 2007 on organic production and labelling of organic products determinates that organic production is an overall system of farm management and food production that combines best environmental practices, a high level of biodiversity, the preservation of natural resources, the application of high animal welfare standards and a production method in line with the preference of certain consumers for products produced using natural substances and processes. The organic production method thus plays a dual societal role, where it, on the one hand, provides for a specific market responding to consumer demand for organic products, and on the other hand delivers public goods contributing to the protection of the environment and animal welfare, as well as to rural development (EU Council, 2007).

According to the definition of the International Federation of Organic Agriculture Movements (IFOAM, 2013), organic agriculture is a production system that sustains the health of soils, ecosystems and people. A certificate, issued by the accredited competent organ of organic certification, that is, confirms the organic origin of the product. The organic products are products obtained because of certified organic production (Berzina et al., 2016). These definitions are not opposed to each other, because they complement each other.

Marketing involves a system approach to management activities, a clearly set goal, an elaborate system of measures to achieve this goal and appropriate organizational and technical, commercial and financial support for its implementation.

The sense of marketing activity is to analyse the market, to report on its state, to create new strategies and tactics, to develop and implement of marketing plans and programs, to meet the target customers' needs at the top level in comparison with competitors (Rudenko, 2011).

The system approach to marketing activity has such components as a marketing information system; management of marketing resources; realization of management functions; application of marketing tools (Morohova & Solovej, 2013).

Component structure of system approach to organic producers' marketing activities should contain the following elements (Figure 1): research subject - process of elaboration and justification of the organic products market's development through the introduction of certification system as part of an integrated system approach to marketing activities of organic producers to expand the market of organic products at the micro-, meso-, macro- and mega-levels, and a set of factors that affect it; the object of analysis - the organic market, product, consumers, government regulation, manufacturers and other market actors that promote the goods; study principles, directions of research; research procedure; information, communication channels; resource; methods, sources, tools of receptions and tools for collecting, processing and analysing information; indices system of marketing activity of organic products market; development of a marketing complex and its economic reasoning; implementation of solutions to meet the consumers' needs based on environmentally sustainable marketing; certification and quality control system.

The main trend of the world market was the increasing of organic products' demand in most countries. Official IFOAM statistical surveys claim that the global turnover of organic products has significantly changed over the last decade. In 1999 it was \$ 15 billion, in 2007 – more than \$ 30 billion, it exceeded \$ 80 billion in 2014. The bulk of the products implement in high-income countries. Thus, 77% of the total consumption of organic production is in Western Europe and North America (Shuvar, 2016) (Figure 2).

According to FiBL-IFOAM, the world leaders by organic agricultural area are Australia (22.7 million ha), Argentina (3.1 million ha) and the US (2 million ha). The largest shares of organic agricultural land are in Liechtenstein (30.2%), Austria (21.3%) and Sweden (16.9%). The leading countries for the number of organic producers are India (585200), Ethiopia (203602) and Mexico (200039). The organic market of the United States had turnover \$ 39.7 billion (\in 35.8 billion), Germany – \$ 9.5 billion (\notin 8.6 billion), France – \$ 6.1 billion (\notin 5.5 billion).

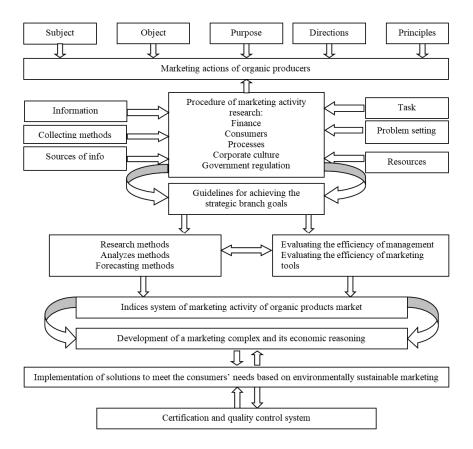
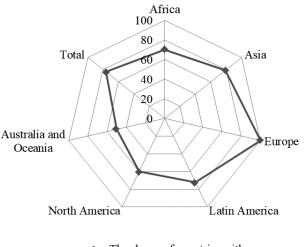


Fig. 1. Component structure of system approach to organic producers' marketing activities



The shares of countries with organic agriculture, %

Fig. 2. The shares of countries with organic agriculture in total and by continents in 2014, % (created by authors using (Grigoruk & Klimov, 2016)

In terms of consumption of organic products per capita, the leading countries in the world are Switzerland - \$ 291 (€ 262), Denmark - \$ 212 (€ 191) and Sweden - \$ 196 (€ 177) (FiBL-IFOAM, 2017) (Figure 3).

As of 01.01.2016, the domestic consumer market of organic products in Ukraine was more than € 17.5 million. The main types of organic products producing and consuming in Ukraine are fruits, vegetables; cereal crops; meat and dairy products; groats and bakery products; baby food.

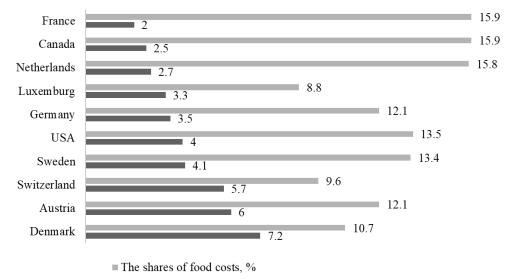
Exports of organic products from Ukraine implemented in EU countries including Germany, Austria, Poland, Italy, France, Netherlands, Denmark and Switzerland, the USA, Canada. The most of Ukrainian organic farms located in Vinnytsia, Zhytomyr, Zakarpattya, L'viv, Poltava, Ternopil', Odesa and Kherson regions. However, as of 01.01.2016 Ukraine had 16 non-resident certification companies carry out certification of organic agricultural products in accordance with the EU Regulation No. 834/2007 (EU Council, 2007).

Official IFOAM statistic data surveys confirm that in 2002, 31 Ukrainian farms received "organic" status, in 2016, there were already 360 certified organic farms and the total area of certified organic agricultural land in Ukraine was 411200 ha. According to survey of Ukrainian IFOAM office, 550000 ha of wild collection land were certified in Ukraine (as of December 31, 2016) (The Federation of Organic Movement in Ukraine, 2017).

The dynamics of organic agricultural area and organic farms in Ukraine in 2006-2016 is shown in Figure 4.

The development of organic market in Ukraine is in a growth phase of the life cycle, which requires significant investments for future growth.

In Ukraine, there is low competition among producers especially in some product lines. This fact, together with a narrow range of organic products, regional dispersal of or-



■ The share of sales of organic products in the turnover of food, %

Fig. 3. The share of food costs in the world's top organic consuming countries, % (created by authors using (Grigoruk & Klimov, 2016)

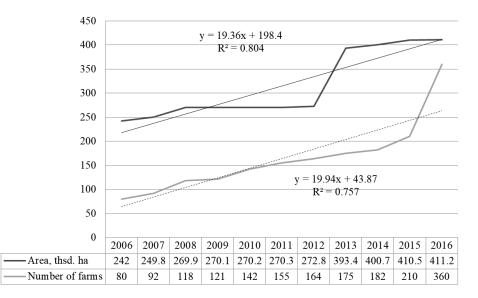


Fig. 4. Dynamics of organic agricultural area and organic farms in Ukraine in 2006-2016 (created by authors using (Grigoruk & Klimov, 2016)

ganic producers and growing demand results that Ukrainian organic market is a seller's market. The countries involved in organic production pay special attention to not only production itself, but also to its adaptation to the standards of international organizations and the population demand of such products. This situation is facilitated by appropriate infrastructure certification and the ability to sell products in the domestic and foreign markets.

In European countries, where organic products consumption is increasing annually by 10-15%, norms and standards of

the European Union and the International Federation of Organic Agriculture Movements (IFOAM) are operating. IFOAM regulatory requirements of organic production systems include three documents: Common objectives and requirements of organic standards COROS – common requirements IFOAM; IFOAM standard of the organic production and processing system; accreditation requirements for the certification bodies approved by IFOAM, controlling organic production and processing.

The IFOAM General Assembly in Basel, Switzerland, approved the basic standards of organic production and pro-

Country	Competent authority	Accreditation body	Regulatory authorities - certification bodies	
USA	United States Department of Agriculture, USDA	USDA Agricultural Market- ing Service	100 certification bodies (56 - in the USA, 44 - abroad)	
Canada	Canadian Food Inspection Agency, CFIA	Canadian Food Inspection Agency, CFIA	Conformity Verification Bodies, CVBs: Certified Organic Associations of British Columbia, COABC Committee on Accreditation for Evaluation of Quality, CAEQ; International Organic Accreditation service, IOAS; Standards Council of Canada, SCC; 20 certification bodies	
EU	16 competent authority of Bundeslands	Die Deutsche Akkreditierung- stelle GmbH (DAkks), Sta- atliche Akkreditierungstelle Hannover, AKS Hannover	23 regulatory and certification bodies	
France	Institut national de l'origine et dela qualité	Comité français d'accrédi- tation	Ecocert France; Agrocert; Certipaq; Qualite France; SGS-ICS; Certisud	
Poland	Ministry of Agriculture and Rural Development of Poland	Polish Accreditation Centre	Agricultural Food Quality Inspection; 10 regulatory and certification bodies: Ecogwarancja PTRE code PL-EKO-1 - PNG, code PL-EKO-2; Cobiko code PL- EKO; Bioekspert code PL-EKO-4; Biocert Malopolska etc.	

Table 1. Organic production regulation around the world (created by authors using (Grigoruk & Klimov, 2016)

cessing in September in 2000. Regulatory component of organic production system is represented by public and private standards that can reach the micro-, meso- (private standard Demeter), macro- (Organic Valley) and mega-level.

Organic production regulation around the world is presented in Table 1.

International private or intergovernmental framework standards such as IFOAM International Basic Standards or the Codex Alimentary Commission; the main operating Standards or Directives, such as the European Union Directives No. 2092/91 (since January 1st, 2009 the changes to the EU Organic Decrees No. 834/2007 and No.889/2008 came into force) or the US National Organic Program; private standards of organic production, such as Demeter, Naturland, Bioland, Ecowin etc.

The motivation of organic products consumption is their environmental safety, high quality, natural taste and the absence of GMOs. Potential buyers of organic products are residents of cities with high-income focused on high quality food diet (Shuvar, 2016).

One of the most important distribution and promotion channels of organic products in Ukraine are special small stores in the cities (chain stores of natural and organic products "Natur Boutique", "Trade House Organic Era", LLC, chain stores of organic products "Eco-Chic" etc.). Supermarkets are the most powerful organic produce distribution channel (Table 2).

In 2011 the supermarket chain "Silpo" declared organic products as its main trend. Supermarket "Good Wine" sells domestic and imported organic food products, combining them in the "Good Food" section. In 2012 supermarket chain, "Megamarket" presented to consumers the separate organics sections. Such supermarkets as "Auchan", "Milky Way", "Delight", "Billa", "Cocktail", and "Novus" give more and more shelves to organic products. Consumer demand and the emergence of organic food in supermarkets led to significant sales growth.

Although less than 1% of products on the shelves are organic, this niche is very promising and requires significant investment. Since 2008, Research Institute of Organic Agriculture (FiBL, Switzerland) together with Ukrainian partners promotes organic products. There is also an organic catering service (outbound restaurant service) in Ukraine, it is offered by "Organic Era", "Natur Boutique", "Eco-Chic", and "Glossary". Eco-hotels chain "Maison Blanche" was the first one to offer the greatest possible (range of organic products is not yet complete) organic menu. Also in 2013, a lot of HoReCa (hotels, restaurants, cafes) showed an interest in organic products. This was significant for Ukrainian organic business.

Such Ukrainian organizations as Association of bio producers BIOLan Ukraine, certification body "Organic Standard", Federation of Organic Movement of Ukraine, Union certified organic producers "Organic Ukraine", Association organic products producers "Clean Flora", informational centre "Green Dossier", Association of Organic Farming and Gardening, L'viv City NGO "Ekoterra", Retail Academy, Coop Academy have strong internal capacity for developing organic market in Ukraine (FiBL-Ukraine, 2013).

Development of the economic environment in the agricultural sector is characterized by a variety of agribusiness forms, including such form as cooperative. The most common forms of agricultural cooperatives are agricultural service cooperatives, namely, purchasing and sales (marketing) cooperatives. Purchasing cooperatives provide its members with the necessary farming materials seeds, fertilizers, fuel, machinery etc. Farmers create marketing cooperatives for the processing, packaging, and marketing of agricultural products (crop and livestock production). In addition, farmers around the world widely using credit cooperatives as a source of financing to increase working capital and capital investment (Coop Academy, 2018).

It is to be underlined the definition of "cooperative" in EU Council Regulation №1435/2003 of 22.07.2003 of the Statute of the European Cooperative Society (EU Council, 2013). According to this document, cooperatives are groups of persons or entities with specific principles of operation that distinguishes them from other.

Table 2. Distribution channels of organic products around the world (created by authors using (Grigoruk & Klimov,2016)

	Share of sales by distribution channel, %							
Country	Supermarkets	Organic markets	Organic shops	Producer's sales	Other (bakeries, meet shops, public catering, Internet)			
Denmark	90	-	4	6	_			
France	45	26	12	12	-			
Italy	86.5	-	13.5	-	-			
UK	72.3	-	15	2.8	9.9			
USA	54	39		7				

	Businesses						
Country		Inventory and logis-					
	Dairy	Meet	Vegetable	Cereal	tics management		
USA	86	-	20	40	11-45		
Canada	59	20-54	7-25	54	15-40		
Sweden	99	79-81	60	75	75		
Netherlands	82	35	70-96	_	40-50		
Germany	55-60	30	60	-	50-60		

Table 3. Shares of cooperatives in agribusiness of developed countries, % (Zinovchuk, 2002)

In today's world, cooperative movement actively influences the economic, social and political processes of social development. There are more than 600 million cooperatives in the world. Most of them are united to the International Cooperative Alliance including 170 national unions from over 70 countries. Almost 100% of farmers of Northern Europe, the Netherlands, Ireland, and Japan participate in cooperatives.

In Nordic countries, cooperatives sell up to 85% of agricultural products and supply up to 60% of capital goods to farmers. In developed countries, the most widespread cooperative form is sales cooperative. International farmers' experience shows that cooperatives play a major role in dairy, meat and vegetables promotion and sales (Table 3) (Irtyshheva et al., 2012).

Cooperative as distribution channel of organic products provides: easy access to the market; extension of processed product's range; access to advanced technology through the experience sharing with other producers; avoidance of intermediaries; simplification of certification procedure; ability to sell branded products that will increase production's competitiveness and profitability.

Depending on the management level, customer-differentiated marketing has such marketing activities channels, combined interaction marketing and marketing management: Customer Relations Management; Human Resources Management; Partner Relationship Management; Stakeholder Relationship Management; Social Media Marketing. Marketing promotion of environmental sustainability can take place by introducing new marketing communications technologies, such as Social Media Marketing, Green Business Party, Eco-PR, etc., the dissemination of environmental innovations and resource conservation technologies, forming a new relationship between producer and consumer – relationship marketing.

Environmentally sustainable marketing is respect for future generations, emphasizing on the needs, not on the desires, and the possibility of new changes in the existing social and economic systems (Kovalchuk & Zaburmeha, 2017).

In our opinion, Certification Marketing (Certified Marketing) should also be added to the marketing activi-

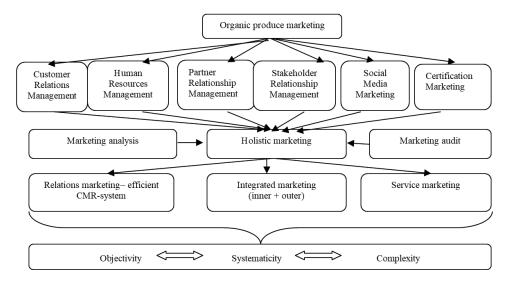


Fig. 5. Conceptual scheme of a system approach to organic producers' marketing activities (by authors)

ties as part of the marketing of confidence in current conditions. Holistic marketing is an approach, which attempts to recognize and balance the various competencies and complexity of marketing activity (Figure 5).

In our opinion, organic producers should follow the approach of holistic marketing in order to achieve the principles of objectivity, complexity and systematicity.

Conclusions and Directions for Further Research

The theoretical aspects of forming the system approach to organic producers' marketing activities based on the sustainable development concept are developed and substantiated in the article. The economic, social and environmental aspects of agricultural marketing were described. It was substantiated that development of organic agricultural production will improve the economic, social and environmental situation in Ukraine, will support integrated rural development, improve health and become one of the factors increasing the competitiveness of Ukraine's economy.

Organic production certification increases the responsibility of the food safety system (its social, environmental, and economic elements). While key actors during the market development are and should be its participants, the state can play an important role in organic agriculture development by establishing national legal and regulatory framework that will contribute to the development of this economy sector.

Other measures of supply and demand stimulating may include subsidies for production, processing, investments or control measures, as well as activities promoting the export of organic products and popularization of organic farming.

Directions for further research include identification of organic products consumption influence to sustainable development's indicators based on the complex marketing research results.

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