ENSURING SUSTAINABLE DEVELOPMENT IN THE COUNTRIES OF THE WORLD BASED ON ENVIRONMENTAL MARKETING

Purpose. The proposed article actualizes the expediency of developing a systematic approach to international marketing, pays attention to the concept of sustainable development. The purpose of the article is to form a systematic approach to the marketing of production based on the concept of sustainable development.

Methodology. The methods used involve the structural observation of the countries’ ratings on the key indicators level of the investigated distribution channels of products around the world. The method explains monitoring and evaluation of the policy of state support for environmentally friendly production; emphasizes distribution channels worldwide; obtains principles related to sustainable development and the global market place.

Findings. The results of the research represent the systematic approach to the strategic provision for sustainable development of the world market. The findings considered in accordance with the notion of the systematic approach aspects for the world market and, in the conclusion, their general implications are explored in relation to the notion of the sustainable development.

Originality. New strategic approaches to the formation of a marketing complex for sustainable development have been investigated and developed. The conceptual foundations for the sustainable development at the mega-level have been improved. Authors have created the systematic approach to the strategic provision for sustainable development by the international marketing at the mega-level.

Practical value. The results of the study can be used by companies and enterprises in different countries of the world. The obtained results could be taken into account by governments when developing and implementing new policy for transition economies considering the experience of countries with high indicators of sustainable development and distribution channels.

Keywords: global indexes, marketing infrastructure, certification, global development, green marketing

Introduction. At the present stage of the world economy and international economic relations, the sustainable development of different countries of the world becomes especially relevant. The concept of sustainable development has been recognized as the dominant ideology of the functioning of human civilization of the 21st century and offers a new approach to the problems of world order. The 2030 Agenda for Sustainable Development [1] stipulates the need for economical use of natural resources, the development of new environmental industries and activities, and the introduction of green technologies that will ensure harmonious reconciliation of economic, social and environmental development and will catalyze the growth of the global economy [2].

In this context, the socio-ecological and economic system is a key indicator of overall economic development, since it is based on a balanced structural transformation of the economic subsystem, social and technological progress, and the improvement of management, ensures the preservation and increase of production potential through the introduction of effective innovations, and the rational saving of resource use. There is considerable interest in the methods for promoting sustainable development and structural change to improve capacity for the population, for example, through the development of organic production in the agricultural business, promotion of exports, innovation and certification. The theoretical aspects of a systematic approach to the marketing of organic products based on the concept of sustainable development, economic, social and environmental aspects (UNSD – UN-GGIM) of international marketing are relevant.

The study also outlines the common problems of a systematic approach to the further research to evaluate the effectiveness of marketing activities. This is a matter of particular interest to the sustainable development economy.

Formation of a systematic approach to the marketing activity of eco-friendly production in the world market involves a conceptual scheme of the component structure in the form of elements set that are necessary to identify the features and trends of the quality and safety of the food market.

The principles of comprehensiveness and consistency provide the conducting of qualitative and quantitative analysis of the market, assess and forecast the market situation, certification systems.

Literature review. Investment in agriculture is crucial to maximizing agricultural productivity, and sustainable food systems are needed to overcome hunger in the report about the Sustainable Development Goals [3].

Steblianko I., Simakhova A., Doroshkevych V. explored aspects of security and sustainability in the article “Trends in economic and social security at national and European level: interrelationships, threats and opportunities” [4].

Logosha R. explored the theoretical aspects of systematic approach to methodology of agrarian market research in the article “A systematic approach in the methodology of Agricultural Market research” [5].

Bezus R. and Bilotkach I. have investigated the phenomenon of marketing cooperatives, such as international marketing cooperatives that promote access of farm products to international markets in the article “Development of Organic Farmers’ Cooperatives: the USA, the EU, and Ukraine” [6].

In modern scientific sources, a number of concepts and approaches are used to characterize the marketing of organic products within the concept of social and ethical marketing,
such as macro marketing, “green marketing”, “sustainable marketing”, “environmental marketing”, “environmentally friendly marketing”, “Ecommerce”, or a combination of them, as “sustainable green marketing”. “Green Marketing” – all kinds of human activities, aimed at a point of meeting the requests and needs of people through the exchange, and meeting these requests and needs occurs along with ecological impact on the environment; the purpose of the economic system should be not to satisfy the consumer merely but to improve the quality of life.

Kovalchuk S. and Zaburmeha Je. define sustainable marketing as respect for future generations, focusing on needs, not desires, and the possibility of new changes in existing social and economic systems in the article “Digital Marketing in Organic Consumer Research” [7].

Encyclopedia of Sustainability in Higher Education investigated marketing preconditions including concepts that allow the balancing of several controversial tasks, in order to minimize the negative impact of marketing on society [2].

Environment precondition reflects a violation of the equilibrium of the environment because of anthropogenic human activity. Economic conditions are the presence of economic conditions that ensure the efficiency of production of environmentally safe products. Technological preconditions are the presence and prompt development of technical and technological solutions that promote the introduction of environmentally oriented agricultural production. Social precondition is to increase the level of ecological culture and education, the availability of environmentally friendly products and the ecology of the economy [8].

Myers G. and Pettigrew S. investigate food and agriculture: the future of sustainability (Myers and Pettigrew, 2018) in the project “A strategic input to the Sustainable Development in the 21st Century (SD21)” [9].

The countries involved in organic production pay special attention not only to production itself, but also to its adaptation to the standards of international organizations and the needs of the population demand of such products. This situation is facilitated by appropriate infrastructure and 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: COROS (Common Objectives and Requirements of Organic Standards) [10] – common requirements for the certification bodies approved by IFOAM, controlling of organic production and processing [10].

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

International private or intergovernmental framework standards such as IFOAM International Basic Standards or the Codex Alimentarius 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) or the US National Organic Program; private standards of the eco-friendly production, such as Demeter, Naturland, Bioland, Ekowin and others [10].

The Global Report provides market and statistical data on the nine sectors as well as at-a-glance tables on products and standards by country. Access to natural resources will continue to be a major sustainable development challenge far in the future. Fortunately, many opportunities exist along with international supply chains to meet resource shortfalls. Voluntary sustainability standards (VSS) represent one of these opportunities (International Trade Centre). They are a way to adopt production and trade practices that have the potential to lead to social, environmental and economic sustainability [11].

With multiple agencies working to support farmers in providing marketing services to them and other stakeholders, there are duplications in efforts like capacity building of the stakeholders, group formation, establishment of market infrastructure and market facilitations.

However, despite the considerable number of research studies the issue of the systematic approach to the marketing activities based on the balanced growth concept remains understudied. The problems associated with green marketing in the world for sustainable development are far from being solved and require further theoretical and experimental efforts.

**Purpose.** The purpose of the article is to develop a systematic approach to the international marketing, taking into account the concept of sustainable development.

**Methods.** In the article, we have determined the global parameters of the eco-friendly productions on the global market for the sustainable development with a focus on the environmental marketing infrastructure.

The method used involves the observation of the current state of development in the countries of the world, estimated of the country’s rankings by key indicators, establishes the role of the food complex to economic growth. The method explains monitoring and evaluation of the policy of state support for environmentally oriented production; emphasizes distribution channels worldwide; obtains principles related for sustainable development and the global market place. In the article, we have created the systematic approach to the strategic provision for sustainable development by the international marketing at the mega-level. Methodologically, the method refines the principles associated with the environmentally friendly product market for sustainable development and the global market.

**Results.** The global market is characterized by a concentration of demand in developed countries, increasing demand in developing countries, market consolidation and the development of environmentally friendly products distribution. The interest in systematical approach to the green marketing for sustainable development has taken place due to the fact that the food sector offers key solutions for development, and it is the central one for hunger and poverty eradication [12].

**The current state of development of the environmental food sector in the countries of the world.** Countries pay great attention to the adaptation of the production process to the standards developed by international organizations and the needs of the population in such products. This aspect is supported by the APAM IFOAM standard; accreditation requirements for the certification bodies approved by IFOAM, controlling of organic production and processing [10].

According to official statistics, Ukraine ranks 11th among the European countries for the total area of agricultural lands certified as organic. However, at the same time, organic land occupies less than 1 % of the 42.7 million hectares of agricultural land in Ukraine [10].

Over the past five years, the export of organic products in 2017 in monetary terms exceeded $ 90 million. According to expert estimates, the rate of organic production in Ukraine is 5.3 times higher than in Europe and 4.9 times – than in the world.

According to the Swiss-Ukrainian project “Development of the organic market in Ukraine” (organic.com.ua) of the
According to the three main indicators taken into account by experts – availability, availability, as well as quality and safety of food, the state occupies respectively 51, 43 and 44 seats. Among the strengths of Ukraine in the area of providing their own population food products in the index are the following aspects: low malnutrition (5%); a small number of people below the poverty line (0.08%); food safety; the variability of the agricultural sector; adequacy of food supply; availability of social programs for ensuring food safety; farmers’ access to financing.

The role of the food complex in the national economy is growing and it is expedient to estimate it by the size of the share of the agrarian sector in creating GDP, the share of commodity products and participation in commodity circulation, on the factorial contribution of the food complex to economic growth.

Analysis of Voluntary Sustainability Standards (VSS), a recent survey among 14 standards (including organic), shows that strong growth continues and at least 14 million hectares is covered by selected crops and standards. All standards covered experienced growth in their areas science 2011 [10].

There is a practical application of a large number of approaches to assessing the level of state support for agriculture. It is quite common to analyze and compare the scope and forms of support for the domestic agricultural sector in a similar way to other countries around the world, based on the use of an accessible assessment of the methodology of the Organization for Economic Cooperation and Development (OECD) [17].

The volume of direct and indirect support to the agricultural sector from the government is presented by OESD specialists as an indicator of general support for the agricultural sector (Total Support Estimate, TSE), which is the sum of Producer Support Estimate (PSE), the support of the General Service Support Estimate (GSSE) and Consumer Support (Consumer Support Estimate (CSE)) [17]. The PSE indicator is the sum of a number of sub-indicators identifying support, the final beneficiary of which is the producer of agricultural products. Such sub-indicators also include the indicator of market price support (Market price support, MPS). Analysis of the indicators of the level of agricultural support in accordance with the OESD methodology indicates that the negative indicator for Ukraine is due to the large negative value of this particular indicator [18].

The main indicator for monitoring and evaluation of agrarian policy of state support for agriculture by this method is the level of total support of agriculture (Total support estimate – TSE) [17], which involves the support of producers, consumers and general services. This figure is the total amount of transfers received from taxpayers and consumers as a result of government policies that support agriculture. TSE measures the total agricultural support costs, which includes total PSE, GSSE, and transfers from taxpayers to consumers in CSE [18].

Among the major world producers of agricultural products, the largest state support is received by the agriculture of the EU and the USA.

In the top 300, based on the ratio of gross domestic product (GDP) to the population rating introduced this year, IFFCO from India takes first place [19].

Share of sales by distribution channels worldwide. Of the total volume of organic sales, 90% are for export and only 10% – for the domestic market (Table 3). In general, over 400 types of organic products are produced in Ukraine. They are mostly bought by the Netherlands, Germany and the UK, but in general, more than 40 countries are “taking” Ukrainian organic matter.
Therefore, the development of environmental production in the countries of the world should be based on the integrated development of its components through the introduction of a systematic approach.

Figure accommodates the interpretation of the results in order to provide a theoretical substantiation and development of practical recommendations for the formation of a systematic approach to marketing activities, based on the analysis of the countries’ resources and external competitive strength based on the sustainable development concept. The method illustrates that a rapidly changing market requirement offers an opportunity for investment for environmental production and resource gain.

The amount of interaction between innovating marketing entities is directly related to the rate at which the market changes. The method illustrates that a rapidly changing marketplace calls for greater interaction between companies, marketing infrastructure, system of financing, management, standards to ensure success.

Promotion of marketing for the formation of environmental sustainability can take place through the introduction of new marketing communications technologies such as Social Media Marketing, Green Business Party, Eco-PR, and others, the spread of environmental innovations and technologies of resource conservation, the formation of new relationships between the producer and the consumer.

Eco-friendly production has a potential to fulfill the food requirement of the world with sustainable resource utilization. Health and safety trends in food consumption as well as increased interest in the environment greatly stimulate this industry in the world.

Green marketing refers to environmental benefits. Countries that are committed to sustainable development and corporate social responsibility typically practice green marketing.

In total, eighteen accredited international certification bodies are included in the official list of approved organic products of certification bodies for Ukraine in accordance with Regulation 1235/2008 (as of 12.02.2019) [10]. Most organic operators in Ukraine have been certified according to the organic standard of the EU, that is, equivalent to EU Regulations No. 834/2007 and No.889/2008, which have used both for export and for the domestic market [22].

The results presented in this paper were expected and point to some useful principles for sustainable development and the global market place. The amount of interaction between innovating marketing entities is directly related to the rate at which the market changes. The investigated illustrates that a rapidly changing marketplace calls for greater interaction between companies, marketing infrastructure, system of financing, management, standards to ensure success.

### Table 3 Distribution channels of eco-friendly products around the world, 2016 [20, 21]

| Country | Share of sales by distribution channels, % |
|---------|------------------------------------------|
|         | Supermarkets | Organic markets | Organic shops | Product’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 |

Conclusion. The study identifies and substantiates the formation of recommendations for systematical approach based on the concept and the goals of the sustainable development [2] and marketing activities.

The theoretical and methodological foundations of the systematic approach for sustainable development to green marketing in the world are considered and key indicators of leading countries are analyzed; recommendations for sustainable development are based on the concept of green marketing in the world market.

Generalization of scientific approaches made it possible to reveal this content as an activity for the production, storage, processing, promotion and sale of eco-friendly products [23], in accordance with the ecological principles and the availability of certification.

The expediency of developing a model of forming sustainable development in the countries of the world on the basis of a systematic approach to realization of economic transformations on the innovative background is demonstrated. The scientific prediction of strategic priorities in the context of global challenges of sustainable development [2] and efficiency of its potential use in the countries of the world are investigated.

The results of the global market research outlined indicators; the level of potential in the context of countries of the world is estimated.

The sustainable development depends not only on the introduction of organizational, technical and technological innovations into the activities of the producers, but on marketing activities as well. Therefore, taking into account foreign experience, proposals are developed to ensure the formation of a systematic approach as one of the main elements for its effective sustainable progress.

Environmentally sound methods should be involved that comply with the principles of sustainable development.
In the course of the research, the purpose of the work is achieved, namely, a systematic approach to the marketing taking into account the concept of sustainable development.

The approaches of ecological marketing to adapt the economic activity of the producers to the concept of sustainable development [2] and taking into account foreign and domestic experience are observed. New strategic approaches to the formation of a marketing complex for sustainable development are investigated and developed.

The means of solving marketing problems that arise in connection with the emergence of new priorities are the strengthening of new strategic approaches to the formation of a marketing complex for sustainable development.

We think that it is expedient to allocate marketing of balanced development as a separate direction of marketing activity, which is based on the establishment of a clear interaction between consumers, the economy and the environment.

Today, the marketing of sustainable development is used actively by the G7 countries. Big companies embody the principles and standards of eco not so much to improve their image as make “sustainable” a significant component of their long-term strategy, considering this direction as a real source of competitive advantage.

Such methods include transformation of the company, evaluation of the effectiveness of management of marketing resources for the sustainable development in the countries of the world, taking into account foreign and domestic experience.

References.
1. Idowu, Samuel O., Schmidpeter, Rene, & Zu, Liangrong (Eds.) (2020). The Future of the UN Sustainable Development Goals. Springer Science and Business Media LLC.
2. Encyclopedia of Sustainability in Higher Education (2019). Springer Science and Business Media LLC.
3. The Sustainable Development Goals Report (2019). About the Sustainable Development Goals. Retrieved from https://unstats.un.org/sdgs/report/2019/The-Sustainable-Development-Goals-Report-2019.pdf.
4. Stukalo, N., Steblanko, I., Simakhova, A., & Doroshkevych, V. (2018). Trends in economic and social security at national and European level: interrelationships, threats and opportunities. Journal of Security and Sustainability Issues, 8(2), 199-208. https://doi.org/10.9770/jssi.2018.8.2(7).
5. Logosha, R. V. (2017). Systems approach in research methodology for the agricultural market. Infrastruktura rynku, 8, 43-48. Retrieved from http://www.market-infr.od.ua/journ­ als/2017/8/2017­ukr/jb­pdf.
6. Bezus, R., & Bilokchak, I. (2018). Development of Organic Farmers’ Cooperatives: the USA, the EU, and Ukraine. Baltic Journal of Economic Studies, 4(2), 24-31. http://dx.doi.org/10.30255/2726-0742/2018-4-2-24-31.
7. Koval’chuk, S. V., & Zubermeha, Je. M. (2017). Marketing digital technologies in studies on organic product consumers. Marketing t syfovi technolohii, 1(1), 34-51. https://doi.org/10.15276/mntd.1.1.2017.3.
8. Popkova, Elena G. (2019). Ubiquitous Computing and the Internet of Things: Prerequisites for the Development of ICT. Springer Science and Business Media LLC.
9. Myers, G., & Pettigrew, S. (2018). A qualitative exploration of the factors underlying seniors’ receptionness to entomophagy, Food Research International, 103, 163-169.
10. FiBL survey; FiBL & IFOAM – Organic International (2018): The World of Organic Agriculture. Frick and Bonn. (2018). The World of Organic Agriculture: Statistics and Emerging Trends 2018. Retrieved from https://shop.fibl.org/C/en/­mwdload­/download­/bk­id-10949­?ref=1.
11. Lernoud, J., Potts, J., Sampson, G., Schlatter, B., Huppe, G., Voora, V., ..., & Dang, D. (2018). The State of Sustainable Markets – Statistics and Emerging Trends 2018. ITC, Geneva. Retrieved from http://www.intracen.org/uploadedFiles/intracenorg/Content/Publications/Sustainability%202018%20layout-FIN-web-v1.pdf.
12. United Nations Asia-Pacific Regional Coordination Mechanism Terms of Reference (2016). Retrieved from http://www.unaprcm.org/sites/default/files/­Terms_of_Reference-TWG­­­Dis­aster_Risk_Reduction_and_Resilience.pdf.
13. FiBL-IFOAM (2017). Key indicators and leaders of agricultural sector 2017. In Svit organichnogo s`l`s`ko gospodarstva. Statystyka ta trendy 2017. Retrieved from https://shop.fibl.org/fileadmin/documents/shop/3503-organic-world-2017.pdf.
14. Global Food Security Index (2018). Building resilience in the face of rising food security risks. Retrieved from https://foodsecurityindex.eiu.com/.
15. Organic World. Global Organic Farming Statistics and News (2019). The World of Organic Agricultural Statistic and Emerging Trends 2018. Retrieved from https://www.org­anic­world.net/yearbook/yearbook–2018.html.
16. Verchovna Rada of Ukraine (2019). The strategy of agricultural sector development over the period till 2020. Retrieved from https://zakon.rada.gov.ua/laws/show/806­2013-%D1%80.
17. Analyzing policies to improve agricultural productivity growth, sustainably (2015). OECD. Retrieved from http://www.oecd.org/­agriculture/topics/agricultural-productivity-and-innovation/documents/analyzing-policies-to-improve-agricultural-productivity-growth-sustainably.pdf.
18. Vdovychenko, A. (2016). Government support for agricultural sector: discussions over estimation by OESR methods. Retrieved from http://npojir.org.ua/blog/­urядова­підтримка­сільського­господарства/.
19. International Co-operative Alliance (2019). World Co­operative Monitor 2018 Top 10. Retrieved from https://monitor.coon/en.
20. Gajdić, D., Petljak, K., & Mesić, Že. (2018). An exploration of distribution channels: Challenges and opportunities for organic food producers in Croatia, Ekonomika poljoprivrede, 1461-1469. https://doi.org/10.5937/ekopoJ1804461G.
21. Grigoruk, V. V., & Klimov, E. V. (2016). Development of organic agriculture in the world and in Kazakhstan. Retrieved from http://www.fao.org/3/a-15454r.pdf.
22. AgroPortal (2019). Organic Ukraine in infographics. Retrieved from http://agroportal.ua/ua/publishing/­infografika/­organicheska­y­u­v­infografike/.
23. Oshiro Reynaldo Gabriela, Paula M. Moraes, Skowronski Leandro, Herrera Gabriel, Rildo Vieira de Araújo, Michel Constantino, & Reginaldo Brito da Cost (2019). Organic production and its market support policies. African Journal of Agricultural Research, 14(26), 1081-1090.

Забезпечення сталого розвитку у країнах світу на основі екологічного маркетингу

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Мета. Запропонована стаття актуалізує доцільність розробки системного підходу до міжнародного маркетингу, звертає увагу на поняття сталого розвитку. Мета статті – сформувати системний підхід до збуту продукції на основі концепції сталого розвитку.

Методика. Зацентровані методи включають структурне спостереження за рейтинги країн за рівнем основних показників досліджуваних каналів розподілу продукції
Обеспечение устойчивого развития в странах мира на основе экологического маркетинга

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Цель. Предлагаемая статья актуализирует целесообразность разработки системного подхода к международному маркетингу, уделяет внимание концепции устойчивого развития. Целью статьи является формирование системного подхода к сбыту продукции на основе концепции устойчивого развития.

Методика. Использованные методы предполагают структурное наблюдение рейтингов стран по уровню ключевых показателей исследуемых каналов распространения продукции по всему миру. В методе появляется мониторинг и оценка политики государственной поддержки экологически чистого производства; выделенные каналы распространения по всему миру; полученные принципы, связанные с устойчивым развитием и глобальным рынком.

Результаты. Результаты исследования представляют системный подход к стратегическому обеспечению устойчивого развития мирового рынка. Выводы, рассматриваемые в соответствии с понятием аспектов системного подхода для мирового рынка, и, в заключение, их общие последствия изучаются в связи с понятием устойчивого развития.

Научная новизна. Исследованы и разработаны новые стратегические подходы к формированию маркетингового комплекса для устойчивого развития. Концептуальные основы устойчивого развития на мегауровне были улучшены. Авторы создали системный подход к стратегическому обеспечению устойчивого развития международного маркетинга на мегауровне.

Практическая значимость. Результаты исследования могут быть использованы компаниями и предприятиями разных стран мира. Полученные результаты могут быть учтены правительствами при разработке и реализации новой политики для стран с переходной экономикой с учетом опыта стран с высокими показателями устойчивого развития и каналов распределения.

Ключевые слова: глобальные индексы, маркетинговая инфраструктура, сертификация, глобальное развитие, зеленый маркетинг

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