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Competitiveness of agriculture enterprises as the main factor of sustainable development in agricultural sphere

Abstract. Introduction. The problem of economic mechanisms formation for the sustainable development of the agricultural sector in the context of rational use and restoration of natural resources takes an important place in agricultural economic studies. **Purpose.** To define the essence of sustainable development in the agricultural sector and justify its interim mechanisms. **Results.** The agrarian enterprises' sustainable development has been grounded through the mobilisation of their internal resources to create a rational structure of production. The mentioned structure would mitigate adverse impacts and obtain minimal deviations from the current trends of development. The interrelation between the sustainable development of the agricultural sector and the competitiveness of enterprises has been set. The basic criteria and a structural model of the agricultural sector sustainable development have been formed. It includes such an innovation as *corporate social responsibility of agricultural enterprises* aimed at safe operation and competitiveness. **Conclusions.** The interrelation between the sustainable development of the agricultural sector and the competitiveness of agricultural enterprises is the main factor of sustainable development which may improve sustainability of the environment. It provides a system of food quality standards creation. Thus, enterprises producing uncompetitive products by using outdated processes will not succeed in the long run perspective.

Keywords: Agrarian Sphere; Agricultural Enterprises; Sustainable Development; Corporate Social Responsibility; Competitiveness

JEL Classification: F14; O33

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Конкурентоспроможність сільськогосподарських підприємств як основний важіль сталого розвитку аграрної сфери

Анотація. У статті обґрунтовано сутність сталого розвитку підприємств аграрної сфери як їх спроможність за рахунок мобілізації своїх внутрішніх резервів створити таку раціональну структуру виробництва, яка б при прояві негативних зовнішніх впливів допомагала пом'якшенню несприятливих наслідків для бізнесу. Встановлено взаємозв'язок між сталим розвитком аграрної сфери та конкурентоспроможністю сільськогосподарських підприємств. Визначено основні критерії і структурну модель сталого розвитку аграрного сектора економіки та його забезпечувальних механізмів, серед яких корпоративна соціальна відповідальність сільськогосподарських підприємств стосовно безпечної життєдіяльності та конкурентоспроможності.

Ключові слова: аграрна сфера; сільськогосподарські підприємства; сталий розвиток; конкурентоспроможність.

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Конкурентоспособность сельскохозяйственных предприятий как основной рычаг устойчивого развития аграрной сферы

Аннотация. В статье обоснована сущность устойчивого развития предприятий аграрной сферы как их возможность за счет мобилизации своих внутренних резервов создать такую рациональную структуру производства, которая бы при проявлении негативных внешних влияний способствовала смягчению неблагоприятных последствий для бизнеса. Установлена взаимосвязь между устойчивым развитием аграрной сферы и конкурентоспособностью сельскохозяйственных предприятий. Определены основные критерии и структурная модель устойчивого развития аграрного сектора экономики, среди которых корпоративная социальная ответственность сельскохозяйственных предприятий относительно безопасной жизнедеятельности и конкурентоспособности.

Ключевые слова: аграрная сфера; сельскохозяйственные предприятия; устойчивое развитие; конкурентоспособность.

1. Introduction. The problem of economic mechanisms formation for the sustainable development of the agricultural sector of the national economy in the context of rational use and restoration of natural resources in agricultural sector takes an important place in agricultural economic science. The elements of such mechanisms enable a deeper understanding of its nature.

The period of systemic social transformation of the agricultural sector in Ukraine should lay the foundation for sustainable integrated development of businesses, industries and the state as a whole. The problem of agricultural enterprises' sustainable development and the mechanisms of its provision plays an important role in this process. The main tools to achieve this goal are the interim mechanisms of social and economic growth and environmental development.

The defined negative tendencies and problems of agricultural enterprises' development, which exacerbated in the transformation period including the deepening of economic, social, demographic and ecological imbalances, require a comprehensive study and a solution to ensure balanced development based on long-term growth when negotiating national and business interests.

In modern conditions, the prior quality characteristics of production is the level of interdependence of economic dynamics, social and environmental progress, which reflects the policy of sustainable enterprise development. Systematic formation of long-term growth principles of agricultural enterprises and a new quality of life in Ukraine requires in-depth theoretical development of modern conceptual approaches and mechanisms. These tools will enable the realisation of sustainable development as part of the national economic strategy.

Thus, the formation of agricultural enterprises' competitiveness based on sustainable development determines the urgency and importance of the researched problem.

2. Brief Literature Review. The issues of interaction between economy and ecology, formation of the scientific basis for sustainable development are reflected in the works of such prominent scientists and economists as S. O. Bila (2011) [1], B. V. Burkinskiy, V. N. Stepanov, S. K. Kharichkov (2007) [2], V. A. Ivanov, A. S. Ponomareva (2013) [3], N. A. Mikula, S. I. Shakhraiuk-Onofrei (2015) [5], O. L. Popova (2011) [7], O. V. Shubravskaya (2007) [8], J. F. Moore (2006) [12], J. Paull (2011) [13], H. Willer (2009) [14].

Approaches to increase competitiveness based at sustainable development in agriculture researched members of the European Association of Agricultural Economists, for example, Orsolya Toth (2012) [15] and European Regional Science Association, as well as Russian researchers, namely M. N. Dudin, N. V. Lyasnikov, V. N. Sidorenko, L. S. Leont'va and K. Ju. Reshetov (2015) in the work on business-model canvas management concept application for agro-enterprises [16] and Romanian ones A. Turek Rahoveanu and M. M. Turek Rahoveanu (2013) in the case study on production structures' performance evaluation in agricultural holdings [17].

However, overcoming the consequences of the global financial crisis and in the context of sustainable development and the improvement of the mechanism of natural resources rational use in agriculture of Ukraine in particular require a further study.

3. Purpose of the article is to define the gist of the agricultural sector sustainable development as the basis for the competitiveness of agricultural enterprises and justify its mechanisms.

4. Results. The concept of sustainable development, which has become the macro aim of the world economic system, first appeared in 1987 in the Bruntland Report of the UN International Commission on Environment and Development. Sustainable development is the development, when addressing the vital needs of modern humanity and future generations is achieved (The outcome document of the UN Conference on Sustainable Development «Rio + 20» «The future we want», 2014) [4].

The concept of sustainable development implies certain limitations in the exploitation of natural resources, but these limits are not absolute; they are relative and related to the current level of technology and social organization, and the ability of the biosphere to cope with the effects of human activity. It should be emphasised that the choice of the term «development» rather than «growth» is not random. The term «growth» is often associated with the concept of economic growth, which comes to a total in-

crease of national income per capita, while the term «development» covers such elements as the quality of the environment, the level of health, education and life, the quality of work, social stability, etc. (Burkinskiy, Stepanov, Kharichkov, 2007) [2].

The sustainable development of the agrarian sphere is the process related to optimisation of the level of agricultural production, preservation and restoration of the quality parameters of the agricultural environment and improvement of social status indicators of the rural population in conditions of strengthening the state's food and environmental security. There is a relationship between the sustainable development of the agricultural sector and the competitiveness of agricultural enterprises. In the agricultural sector, any new products, technologies, methods and mechanisms that are necessary to the industry and its entities are real means of increasing the ecological sustainability of the environment (Willer, 2009) [14].

Therefore, the sustainable development of the agricultural sector is an ability of the agricultural sector and its economic entities to create such a rational structure of production which could mitigate the adverse impacts and obtain minimal deviations from the established trends of development.

The main question in the system of sustainable development of the agricultural sector and agricultural enterprises is the rational use of natural resources, which is provided by using organisational and managerial, technical, technological and financial and economic mechanisms.

In the definitions of sustainable development in the context of agricultural development contained in the materials of the session of the Food and Agriculture Organization (FAO) in Rome in 1996, it was stated that the main objective of the program of sustainable agriculture and rural development is to increase food production and food security. To solve this problem it is necessary to support educational initiatives to encourage the use of economic innovation and promote the development of new technologies; to ensure a stable access to food according to the human needs of nutrients; to provide access for poor groups of population to such food; to develop commodity production; to reduce unemployment and increase income in order to combat poverty; to manage natural resources and the environment protection (Paull, 2011) [13].

Ukrainian scientist O. Popova considers sustainable development in the context of agrosphere development and defines it as a system oriented to the interests and potential of man and society generally adaptive by its nature and quality. According to its essence, we should target changes following an increase in environmental and economic efficiency, social and economic progressiveness and environmental sustainability with regard to the previous invariant conditions and achievement of rational models of sustainability at different stages of evolution (Popova, 2011) [7].

The above material lets us conclude that the sustainable development of the agricultural sector should be considered as an ability of businesses to maintain a ratio between the factors of production and the necessary rate of its development in terms of uncertainty and variability of the environment in order to meet the needs of the population in food and goods. It should be provided taking into account the need to create proper social conditions and prevent pollution (Ivanov, Ponomarev, 2013) [3].

Taking into consideration the diversity of interpretation of the concept of sustainable development of the agricultural sector, its essence can be seen through the prism of complex generalisation of its components such as: sustainable economic development, sustainable environmental development and sustainable social development. The concept of sustainable development of the agricultural sector as a whole is inextricably linked with the growth of such factors as food production, efficient use of economic and intellectual resources, improvement of the quality of life of the rural population, sustainable use of natural resources (Shubravskaya, 2007) [8].

The main criterion for sustainable development is the growth in production of safe food to meet the needs of the population, provision of economic efficiency, which will promote expanded reproduction. The social component of sustainable development includes the improvement of living standards and life quality of the rural population, stabilization of demographic and migration processes.

Effectiveness of the mechanisms of natural resources functioning is determined by a system of criteria and indicators for each target subsystem. Functional subsystems, or the mechanism elements implement economic methods of management, the use of which contributes to the achievement of goals. Planning, forecasting, regulation, pricing, investment, financing, taxation, insurance, and accounting analysis are their components. These elements were presented in the system of economic management under conditions of a planned economy, but now the nature of their mechanisms should be rethought. It is necessary to use a system of evaluating indicators, as well as legal, regulatory and information services criteria in the structure of interim subsystem mechanisms (Mikula, Shakhraiuk-Onofrei, 2015) [5].

In order to use security mechanisms for sustainable development it is necessary to assess the impact of environmental factors. It is also necessary to consider environmental factors at an early stage of economic decision-making with the aim of minimising its harmful impacts on environment components. In modern conditions, such an assessment is a form of environmental protection and environmental management and the procedure is a tool to prevent possible negative impacts on environmental components at the planning stage of activity, which is used not only for production activities, but also for new substances, materials, etc. which can be used in production and be environmentally hazardous. The essence of the term «influence» means «any effects of the proposed activity on the environment, including health and safety, flora, fauna, soil, air, water, climate, landscape» (Burkinskiy, Stepanov, Kharichkov, 2007) [2]. We formed structural model of sustainable development of the agricultural sector and its interim mechanisms (Figure 1).

As it is shown in Figure 1, the sustainable development of the agricultural sector based on economic, environmental and social development is provided by appropriate mechanisms. The main components of economic development mechanisms are: following economic laws of development; balanced development of productive capacity; optimisation of production and distribution relationships. Mechanisms of environmental development include: compliance with the laws of nature, the use of resource-saving technologies, provision of waste-free production. Mechanisms of social development include: the full development of human capital, the full employment and solidarity, a high level of well-being and quality of life (Ajupov, Kurilova, Anisimova, 2015) [9].

Thus, to ensure sustainable development of the agricultural sector based on three components (economic, environmental and social), we need to achieve a balance between social and environmental costs in economically profitable activity. In particular, social expenditures are aimed at achieving certain tangible and intangible benefits. Environmental costs are intended to prevent pollution and promote the transition from non-renewable to renewable resources, implementing processes that would have minimal environmental impact (Anisimova, 2009) [10].

Realisation of deep transformations of agrarian sphere was caused by the necessity of expansion of production and improvement of branch balance. At the same time, the modern practice of functioning of the agrarian sphere of Ukraine is perceived and estimated ambiguously enough (Mityay, Gryshova, Kryukova, 2015) [11]. That confirms the complexity of transformations in the agrarian sphere and various vectors of their development. On the one hand, in the conditions of crisis agriculture came forward as the only segment of the economy (the volumes of production in 2014 showed 104 billion UAH, which is 0.1 percent more than in 2013), that supported the development of the national economy in the period of 2013 – 2014. The positive dynamics of agriculture in 2014 was observed mainly due to the increase in the production of meat. The volumes of stock-raising for that year grew by 4.2%, mainly due to the increase of pig stock and poultry. Thus, there is a decreasing trend in livestock, in particular cows. Plant-growers restrained the dynamics of development of industry (the volumes of production for that year went down on 2.4%). Despite the fact that 46 million tons of grain crops were gathered in 2014, it is less than in 2013 (53.3 million tons). Nevertheless, such indicators are viewed as successful. Among the leading factors that contributed to the increase in rates of production of agricultural goods, we can mention an expectation of the state support, the decision taken by banks to extend the credits taken by agricultural enterprises and grant of new credits. However, the volumes of crediting of agricultural enterprises in 2014 were reduced if compared with the year 2013. In 2014, the volume of credits for the agricultural enterprises was only 5.8 billion of UAH, which is almost 3.5 times less than it was in 2013.

At the same time, it has not been possible to solve the problems of steady development of the agrarian sphere and rural territories were not able in the agricultural sector in the last few years. For the past 18 years, the commissions of hospitals reduced by almost 16 times, the commissions of the outpatient facilities reduced by 23 times, and the commissions of educational institutions dropped by 12 times. All the above entailed a high level of migration of the rural population to big cities. The production of basic agricultural goods of both vegetable and animal origin has decreased for today homesteads produce about 90% of fruits, vegetables and potatoes, 43% of eggs, 49% of meat, 79% of wool and 82% of milk. In connection with the out-of-control application of organic and mineral fertilisers and chemicals to protect plants, the overload of territories by domestic animals and poultry, the failure to observe of sanitary and hygienic requirements of rural settlements, the failure to control the ecological state of rural territories, the absence of knowledge and lack of awareness of the rural population of the ecological problems, drinking water and agricultural produce grown on such territories do not answer the standards of quality. Also there is a contamination of soils by pathogenic microorganisms and helminths, which in combination with chemical pollutants, undoubtedly strengthens the negative influence on the state of health of rural population.

It is set that the quality of the agricultural produce grown in homesteads does not answer the sanitary and hygienic require-

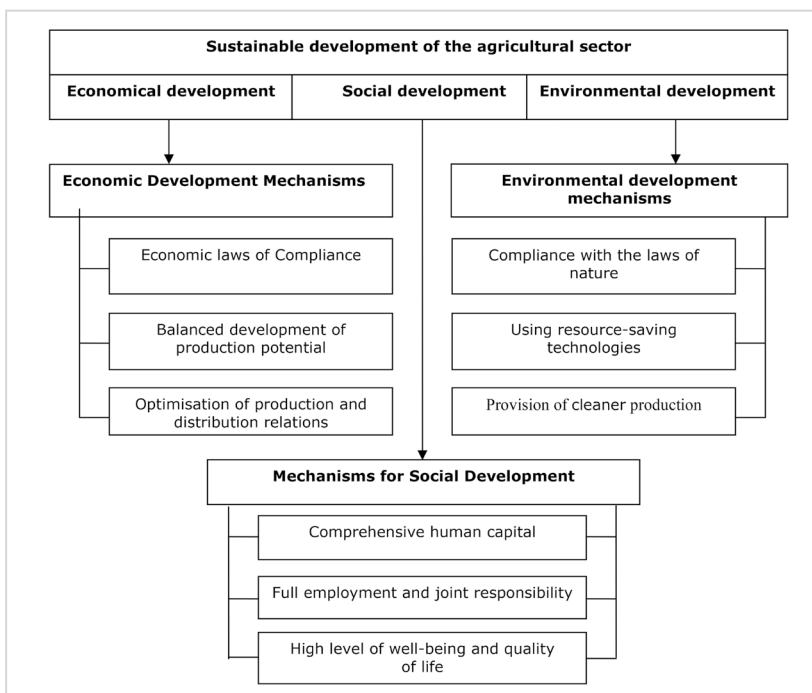


Fig. 1: Structure of interim mechanisms for entities' sustainable development in the agricultural sector
Source: Compiled by the authors

ments with regard to its contamination with nitrates and heavy metals. 78% of all the analysed vegetable products contain nitrates. This regards vegetables that form the diet of the rural population up to 30% foremost. Vegetable products are contaminated most in Mykolaiv region (78%). A lower percentage of contamination is found in Kyiv, Odesa (61%) and Chernihiv (50%) regions. The least contaminated are vegetables grown in Zhytomyr (35%), Vinnytsia (33%), Poltava (31%) and Sumy (26%) regions.

The rising death rate is the consequence of socio-economic confusions above a birth rate. As a result, we are observing the disappearance of the whole villages, which is confirmed by statistical data: in Ukraine, there were 28,804 settlements with a population of 16,969,300 people, as of 01/01/1990; and there were only 28,504 rural settlements with a population of 14,631,772 people, as of 01/01/2013. 300 rural settlements have disappeared within the period of the past 18 years, while the population has decreased by 2,337,528 people. There is a negative trend in reduction of healthy people with regard to the general number of population: in 1990 the percentage of healthy people in Ukraine was 62.6%, whereas in 2007 their number decreased by 24.3%.

The basic negative consequences lead to an extensive lack of land tenure in Ukraine, which is conditioned by the reduction of croplands; erosion of soils (54.2% of croplands is contaminated, and 32.8% are wind-eroded); degradation of basic components of the agricultural domain; impoverishment of the landscape and biological variety of agrolandscapes; deflation of soils, their physical and chemical degradation (41.9 % of soil is contaminated with alkalis and salts) and decline of fertility; contamination of agricultural lands; exhaustion of the landed resources, etc. Key factor of agricultural lands productivity decline is degradation of agrolandscapes, which is violation of the natural (rational) balance worsening the ecology.

References

1. Bila, S. O. (2011). Institutional provision of social and economic development of problem areas (world experience). *Stratehichni pryorityty (Strategic Priorities)*, 3(12), 172-183 (in Ukr.).
2. Burkinskiy, B.V., Stepanov, V. N., & Kharchikov, S. K. (2007). *Economic and ecological bases of regional nature management and development*. Odesa: Feniks (in Russ.).
3. Ivanov, V. A., & Ponomareva, A. S. (2013). Methodological bases of sustainable development of the agrarian sector. *Ekonomicheskyye i sotsialnyye peremeny: fakty, tendentsii, prognoz, issue (Economic and social changes: facts, trends, forecast)*, 4(16), 109-121 (in Russ.).
4. *The outcome document of the UN Conference on Sustainable Development «Rio + 20» «The future we want»* (2012). Retrieved from: <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N11/476/12/PDF/N1147612.pdf?OpenElement>
5. Mikula, N. A., & Shakhraiuk-Onofrei, S. I. (2015). Factors influence on the sustainable development of rural territories of the border regions. *Naukovyi visnyk Bukovynskoho derzhavnogo finansovo-ekonomichnoho universytetu. Ekonomichni nauky (Scientific Journal BSUFE, Economics)*, 1, 237-246 (in Ukr.).
6. *Our Common Future: Report of International Commission for Environment and Development (ICED)* (1989). Moscow: Progress (in Russ.).
7. Popova, O. L. (2011). *Sustainable development of the agrosphere of Ukraine: policy and mechanisms*. Kyiv: NAN Ukraine; In-t ekon. ta prohnouzuvannya (in Ukr.).
8. Shubravskya, O. V. (2007). Factors and indicators of sustainable development of agrosphere. *Ekonomika APK (Economics of AIC)*, 12, 15-20.
9. Ajupov, A. A., Kurilova, A. A., & Anisimova Yu. A. (2015). Energy Roadmap: Techno-Economic Content and Implementation issues. *Mediterranean Journal of Social Sciences*, 6(1), 30-34.
10. Anisimova, Yu. (2009). The application of financial instruments in the conditions of liberalization of the Russian market of electric energy and power. *Bulletin of Samara State University of Transport*, 5(2), 117-121.
11. Mitiai, O., & Gryshova, I., & Kriukova, I. (2015). Ukraine's positions in international ratings evaluation as a factor of its competitiveness. *Ekonomichnij Casopis-XXI (Economic Annals-XXI)*, 5-6, 24-27 (in Ukr.). Retrieved from http://soskin.info/en/ea/2015/5-6/contents_6.html
12. Moore, J. F. (2006). *The Death of Competition*. New York: Harper Business.
13. Paull, J. (2011). Biodynamic agriculture: The Journey from Koberwitz to the World, 1924-1938. *Journal of Organic Systems*, 6(1), 27-41.
14. Willer, H. (2009). *The World of Organic Agriculture. Statistics and Emerging Trends 2009*. Retrieved from <http://www.organic-world.net/fileadmin/documents/yearbook/2009/world-oforganic-agriculture-2009-small-2009-02-15.pdf>
15. Toth, O. (2012, October 10). *Farm structure and competitiveness in Agriculture*. A paper from the 132nd Seminar of the European Association of Agricultural Economists, October 25-27, 2012, Skopje, Republic of Macedonia. Retrieved from <http://purl.umn.edu/139504>
16. Dudin, M. N., Lyasnikov, N. V., Sidorenko, V. N., Leont'va, L. S., & Reshetov, K. Ju. (2015, April). Business Model Canvas as a Basis for the Competitive Advantage of Enterprise structures in the Industrial Agriculture. *Biosciences Biotechnology Research Asia*, 12(1), 887-894. Retrieved from <http://w82.ranepa.ru/mp/ppaper/d151e.pdf> DOI: <http://dx.doi.org/10.13005/bbra/1736>
17. Turek Rahoveanu, A., & Turek Rahoveanu, M. M. (2013, October 21). *Performance evaluation of production structures in agricultural holdings – case study*. Retrieved from https://mpr.ub.uni-muenchen.de/55003/1/MPRA_paper_55003.pdf

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References (in language original)

1. Біла С. О. Інституційне забезпечення соціально-економічного розвитку проблемних територій (світовий досвід) / С. О. Біла // Стратегічні пріоритети. – №3 (12). – 2011. – С. 172–183.
2. Буркинський Б. В. Економіко-екологічні основи регіонального природопольовання і розвитку / Б. В. Буркинський, В. Н. Степанов, С. К. Харичков, ИПРЭЗИ НАН України. – Оdesa : Фенікс. – 2007. – 575 с.
3. Иванов В. А. Методологические основы устойчивого развития аграрного сектора / В. А. Иванов, А. С. Пономарева // Экономические и социальные перемены : факты, тенденции, прогноз. – 2013. – Вып. 4 (16) – С. 109–121.
4. Итоговый документ Конференции ООН по устойчивому развитию «Рио+20» «Будущее, которого мы хотим», 2012 [Электронный ресурс]. – Режим доступа : <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N11/476/12/PDF/N1147612.pdf?OpenElement>
5. Мікула Н. А. Фактори впливу на сталій розвиток сільських територій прикордонних регіонів / Н. А. Мікула, С. І. Шахраюк-Онофрей // Науковий вісник Буковинського державного фінансово-економічного університету. Економічні науки. – 2013. – Вип. 1. – С. 237–246.
6. Наше общее будущее: Доклад Международной комиссии по окружающей среде и развитию (МКОСР) : пер. с англ. – М. : Прогресс, 1989. – 376 с.
7. Попова О. Л. Сталій розвиток агросфери України: політика і механізми / О. Л. Попова // НАН України ; Ін-т екон. та прогностує. НАН України. – К. – 2009. – 352 с.
8. Шубравська О. В. Чинники та індикатори сталого розвитку агросфери / О. В. Шубравська // Економіка АПК. – 2005. – № 12. – С. 15–20.
9. Ajupov, A. A., Kurilova, A. A., Anisimova Yu. A. Energy Roadmap: Techno-Economic Content and Implementation issues / A. A. Ajupov, A. A. Kurilova, Yu. A. Anisimova // Mediterranean Journal of Social Sciences. – 2015. – Vol. 6. – No 1. – P. 30–34.
10. Anisimova Yu. The application of financial instruments in the conditions of liberalization of the Russian market of electric energy and power / Y. Anisimova // Bulletin of Samara State University of Transport. – 2009. – No 5–2. – P. 117–121.
11. Mitiai O. Ukraine's positions in international ratings evaluation as a factor of its competitiveness / I. Gryshova, I. Kriukova, O. Mitiai // Economic Annals-XXI. – 2015. – № 5–6. – С. 24–27.
12. Moore J. F. The Death of Competition / J. F. Moore. – N. Y. : Harper Business, 2006.
13. Paull, J. Biodynamic agriculture: The Journey from Koberwitz to the World, 1924-1938 [Text] / J. Paull // Journal of Organic Systems. – 2011. – No 6 (1). – P. 27–41.
14. Willer, H. The World of Organic Agriculture. Statistics and Emerging Trends 2009 [Electronic resource]. – Access mode : <http://www.organic-world.net/fileadmin/documents/yearbook/2009/world-oforganic-agriculture-2009-small-2009-02-15.pdf>
15. Toth Orsolya. Farm structure and competitiveness in Agriculture / Orsolya Toth. – A paper from the 132nd Seminar of the European Association of Agricultural Economists, October 25-27, 2012, Skopje, Republic of Macedonia [Electronic resource]. – Access mode : <http://purl.umn.edu/139504>
16. Dudin M. N. Business Model Canvas as a Basis for the Competitive Advantage of Enterprise structures in the Industrial Agriculture / M. N. Dudin, N. V. Lyasnikov, V. N. Sidorenko, L. S. Leont'va, K. Ju. Reshetov // Biosciences Biotechnology Research Asia. – 2015. – Vol. 12(1), P. 887-894 [Electronic resource]. – Access mode : <http://w82.ranepa.ru/mp/ppaper/d151e.pdf>
17. Turek Rahoveanu A., Turek Rahoveanu M. M. Performance evaluation of production structures in agricultural holdings – case study. – 2013. – [Electronic resource]. – Access mode : https://mpr.ub.uni-muenchen.de/55003/1/MPRA_paper_55003.pdf

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