The key factors for development of Russian agricultural enterprises of various business patterns

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Abstract. The current Russian agro-industrial complex is marked by the complexity of business structures, differentiation of regions according to the definitive aspects of development of the enterprises of various business patterns and the efficiency of their economic activity. The essential direction of farming industry efficiency increase is the development of organizational and economic tools and framework, along with the corresponding institutional environment, which provide positive results of operation of agricultural enterprises of various business patterns in the country's economy. In this context, there is an objective necessity for in-depth studies to research the most significant factors influencing the activity of national agricultural enterprises. The given paper is dedicated to discussion of the results of such research. The core results of study aimed to clarify and complete the key factors for the development of economic entities of Russian agricultural sector are presented in the paper. These key factors are divided into five groups according to the area of occurrence: political and administrative, economic, technical and technological, natural environmental, socio-demographic. Each group of factors is considered in summary and the basic sources of occurrence along with the influence of each group of factors are identified.

1 Introduction

The development of the agrarian sector of Russian agro-industrial complex takes place in complicated and contradictory conditions, characterized by instability of the foreign policy situation, prolongation of the policy of sanctions and response measures, loss of value of the national currency and so forth. At the present time, the national agro-industrial complex faces critical issues of food security governance, development of competitive agricultural production, increase of export potential, promotion of investment activity in agricul-

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tural sector, sustainable development of rural territories, ensuring of the decent standard of living for the rural population, construction of infrastructure in rural areas, etc. The important way to solve these problems consists in improvement of the existing and formation of the innovative organizational and economic conditions and framework for the development of various business patterns in the agricultural sector intending to increase economic potential of agricultural enterprises. However, the detailed study of the key factors which influence the operation of national agricultural structures in contemporary economic conditions is required in order to develop and form such framework for agricultural business entities development [1]. According to the results of studies it is possible to assume that analysis and research of general and particular, objective and subjective factors allows to compare the role of each specific factor and direction of its development, and also to identify relationships that explain the character of the phenomenon, and relationship forms in the external environment.

The studies conducted in 2014-2018 allow us to define the category "factor" as a set of reasons which determine operation and development trends of agricultural producing companies of various business patterns [2].

The research of these issues is carried out by scientists of All-Russian Research Institute of Economics and Standards, the branch of the Federal State Budget Scientific Institution "The Federal agrarian scientific centre of Rostov", (VNIIEiN - the branch of the FGBNU FRANTS) in accordance with the state assignment for 2019 as part of the project 0710-2019-0040 01 "Working out the organizational and economic framework for the development of agricultural enterprises of various business patterns" [3].

2 Research methodology

The research methodology is based on the system of general scientific and local methods and techniques, system approach with application of abstract-logical method, method of monographic research, intuitive modeling, econometric tools, institutional analysis, monitoring method.

3 Results

According to the studies, various factors affect all lines of business, regardless of ownership and pattern. However, the influence of these factors on agricultural sector is more complicated in view of its specific nature, that consists in the direct dependence of agricultural production on the natural and climatic aspects of the territory, close connection with biological processes, production lead time and seasonality, inelasticity of product demand, and so forth. The riskiness of the agricultural sector and less-developed market environment, in which agricultural structures operate, determine the continuous presence of existing negative factors and act as a source of new ones. Additionally, the constant transformation of factors affecting the development of various business patterns is observed in agricultural sector, including the change of the factor influence degree.

The classification of factors according to the area of occurrence is developed as a result of the analysis of scientific literature (Otinova, Savchenko, Gavrilova & Ryzhkov, 2019; Miroshnichenko, 2013; Kharitonov, Bondarev & Kosinsky, 2016; Vashanov & Maslova, 2015) and according to the results of research conducted by the scientists of VNIIEiN, the branch of the FGBNU FRANTS, including studies conducted by the authors of the given paper (Kuznetsov and colleagues, 2015; Kuznetsov, 2018; Tarasov and colleagues, 2019; Tarasov and colleagues, 2016; Soldatova, 2016) [4]. The classification defines five groups of the factors: political and administrative, economic, technical and technological, natural

environmental, socio-demographic (Figure 1). It should be noted that the developed classification, as much as any other systematization, is conditional to some extent. In practical terms, the place, role and scope of specific factors and problems do not remain unchanged. The new factors with much wider context can rise in case of the change of socio-economic conditions of business [5, 6]. An additional point is that the factors are closely related to each other and can influence each other in certain circumstances, strengthening or weakening the impact.

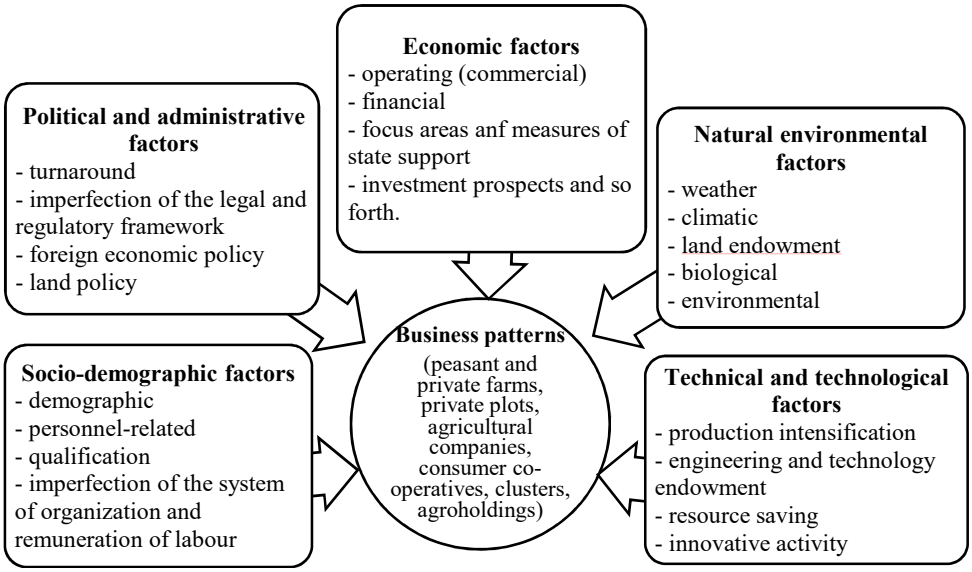

Fig. 1. The classification of the factors, affecting development of agricultural enterprises of various business patterns (according to the area of occurrence) (*The source:* original development based on the research findings).

Let us consider each group of factors in details.

Accepting the view of some economists, it is possible to consider the *economic group of factors* as the core one, providing the efficiency of not only agricultural sector, but also country's economy as a whole [7]. The following factors can be included in this group: focus areas and measures of state support, commercial / operating issues, financial conditions of enterprises operation, investment prospects of the sector, etc. The influence degree of this group of factors is defined by the lack of stability of state support concerning measures, directions, level, categories of recipients, etc.; less-developed system of the commodity-distribution network (that is particularly relevant for small businesses); the lack of infrastructure for farm products primary processing, storage and transportation; the presence of numerous intermediaries artificially lowering the final results of farmers work; financial instability caused by devaluation of the national currency, activating consumer lines price escalation, and, as a consequence, development of inflation; ineffective credit system disregarding the agriculture specifics (that leads to unavailability of credit resources due to unjustifiably high interest rates, or neutralizing the positive result of agricultural business state support system in the form of soft-window facility by means of price distortions of agricultural and industrial products, as well as administrative delays of process of soft loan raising); increase of the tax burden of agricultural businesses, related to the increase of tax rates and excise duties; low investment attractiveness of agricultural sector as the component of the country's economy investment environment, providing open access to technical and technological innovations, etc. [8, 9, 10].

The political and administrative group includes such factors, as the turnaround risk, imperfection of the regulatory and legislative environment of agricultural business operation, development of land policy, instability of contemporary foreign economic policy, etc. The impact on the development of various business patterns in the agricultural sector consists in establishment and practical application of the current legal and regulatory framework disclosing the inconsistency of legal regulations for different categories of enterprises and changes of business function conditions, which create poor environment for agricultural producing companies; provision of property rights, including land title; political instability related to the changes in government and legislation, leading to changes in socio-economic processes in the country, adjustment of tax rates, introduction of additional forced charges, changes of measures, focus areas and level of agricultural business state support, alienation of property and finances for political reasons; instability of foreign economic policy, expressed in the implementation of sanctions policy, Russia's membership in various international organizations, etc. [11, 12].

The natural environmental group of factors include the weather and climate of the region where the agricultural companies operate, land endowment and soil status, biological factors, ecologization of the sector, etc. The impact of these factors is driven by weather fluctuations that significantly influence on quantitative and qualitative characteristics of the agricultural business production results, which in a way define the pricing policy in the agricultural market; changing climatic conditions, including the changes of temperature conditions, precipitation structure and amount, reduction of water resources and climate aridity of specific regions, increased number of natural disasters; the mass spread of plant and animal diseases, weeds and blasts; withdrawal of land as a result of its pollution, erosional feature, deterioration of agroecosystems, soil depreciation and reduction of natural fertility due to the violation of the procedure of use of pesticides, agrochemicals, fertilizers, soil compaction; biodiversity reduction; non-observance of farming rotation and imperfection of agrotechnics of crops cultivation; non-compliance with ecologization of agricultural production, etc. It is worth noting that the impact of natural environmental factors on the functioning of agricultural sector, which characterize the riskiness of agriculture, considerably reduces its investment prospects [13, 14, 15].

The group of socio-demographic factors includes: the demographic situation in the country, human resources, skills of the workforce, imperfection of labour organization and remuneration, which affects the eventual outcomes of the productive process [16]. The influence of socio-demographic factors is marked by the cause consequence correspondence between the socio-economic and demographic development of society, implemented in the form of proportions between the population size of different age classes and socio-economic variables; population ageing caused by birth death, resulting in the decrease of the share of the able-bodied population; the employment of the active population and the efficient personnel use, including material incentives, which can reduce unemployment level in the agricultural sector; the development of labor potential in the agricultural sector of the agro-industrial complex, narrowing of the deficit of the workforce qualification quality for high-tech agricultural production and high level of agricultural sector development, and, as a result, the institutional parameters of the current agricultural business, etc. [17, 18].

The technical and technological group consists of such factors, as the production intensification, the endowment of high-capacity equipment and technologies, the innovative activity of business entities and resource saving [19]. The factors of this group are expressed in the increase of the level of agricultural production technological infrastructure; the improvement of the structure of fixed-capital assets; technical re-equipping of agro-industrial complex sectors; application of new generation equipment and technologies providing increased labor productivity, reduction in consumption of materials and energy

consumption of products; use of resource-saving technologies adjusted to specific natural and climatic conditions, considering biological characteristics of zoned high-yielding variety of intensive type, using integrated pest suppression, which will increase soil fertility; increase of the innovative activity of the agricultural sector, which requires elaboration of implemental mechanisms, development of innovations, systems of scientific and engineering information, testing of efficient patterns of interaction of scientific institutions with production structures, which in the long run can provide the production of high-quality and competitive products, and so forth [20].

4 Conclusion

The research of the above-mentioned factors, affecting the development of various business patterns in the agricultural sector of the economy, makes possible to conclude that the state of current national agro-industrial complex is determined by a whole complex of twisted problems, the solution of which requires the elaboration of measures for protection of national interests and food security of the country by the government bodies. One of these focus areas may include working out of Organizational and economic framework for the development of various business patterns in the agricultural sector of the agro-industrial complex of Russia, providing basic directions and system of measures which ensure the efficient development of various business entities in contemporary socio-economic conditions of the agricultural sector operation. The adoption of efficient government decisions can contribute to the flexible response of multi-structured agricultural industry to the influence of different factors.

References

1. A. Battalova, Procedia Economics and Finance **27**, 235-239 (2015)
2. O.V. Kirsanova, Science review **4**, 260-266 (2015)
3. O.V. Isaeva, Regional agrosystems: economics and sociology **2**, 67-76 (2019)
4. M.E. Otinova, M.E. Savchenko, Z.V. Gavrilova, S.A. Ryzhkova, *The concept of state regulation of the agricultural entrepreneurship socio-economic development* (FGBNU NIIEOAPK CCHR Rossii, Voronezh, 2019)
5. S.K. Wegren, Journal of Eurasian Studies **3(2)**, 193-202 (2012) doi.org/10.1016/j.euras.2012.03.010
6. G. Grigoreva, M. Kabanenko, N. Andreeva, IOP Conf. Series: Earth and Environmental Science **274**, 012074 (2019) doi:10.1088/1755-1315/274/1/012074
7. G.N. Ryazanova, IFAC-PapersOnLine **52(25)**, 225-230 (2019) doi.org/10.1016/j.ifacol.2019.12.477
8. I.Y. Soldatova, *Russia: trends and prospects of development* (RAN. INION, Moscow, 2016)
9. P.O. Skobelev, E.V. Simonova, S.V. Smirnov, D.S. Budaev, G.Yu. Voshchuk, A.L. Morokov, Procedia Computer Science **150**, 154-161 (2019) doi.org/10.1016/j.procs.2019.02.029
10. A. Chernaya, M. Kabanenko, S. Ugrimova, Conf. Series: Earth and Environmental Science **274**, 012073 (2019) doi:10.1088/1755-1315/274/1/012073
11. D. Medvedev, Russian Journal of Economics **1(2)**, 109-129 (2015) doi.org/10.1016/j.ruje.2015.11.004
12. A.V. Kharitonov, N.S. Bondarev, N.S. Kosinskiy, AIC: Economics, Management **12**,

74-80 (2016)

13. V.A. Vashanov, V.V. Maslova, AIC: Economics, Management **6**, 13-22 (2015)
14. V.V. Kuznetsov, A.N. Tarasov, N.F. Gayvoronskaya, O.V. Egorova, G.V. Grirorieva, A.S. Bachmut, *The methods of agricultural sectors development management: theory, methodology, practice* (OOO "AzovPechat", Rostov-on-Don, 2015)
15. A. Kudrin, E. Gurvich, Russian Journal of Economics **1(1)**, 30-54 (2015) doi.org/10.1016/j.ruje.2015.05.002
16. D. Pletnev, V. Barkhatov, Procedia - Social and Behavioral Sciences **2217**, 185-193 (2016) doi.org/10.1016/j.sbspro.2016.05.105
17. E. Nikolaeva, Procedia - Social and Behavioral Sciences **238**, 364-373 (2018) doi.org/10.1016/j.sbspro.2018.04.013
18. S. Malle, Journal of Eurasian Studies **4(1)**, 78-99 (2013) doi.org/10.1016/j.euras.2012.07.004
19. Y. Murashov, T. Ratnikova, Russian Journal of Economics **2(1)**, 56-85 (2016)
20. L. Chernykh, Journal of Corporate Finance **17(5)**, 1237-1253 (2011) doi.org/10.1016/j.jcorpfin.2011.06.009