
Strategic Management of Sustainable Development of Agro – Industrial Complex with Economic Integration

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Abstract:

The purpose of the article is to develop a new approach to strategic management of sustainable development of agro-industrial complex under conditions of economic integration and to solve the problem of preservation of national agro-industrial complex under the condition of globalizing and integrative processes which take place in the global economy. In order to achieve this goal, the work uses methods of modeling, forecasting, scenario analysis, problem analysis, synthesis, deduction & induction, and conceptual provisions of systemic approach. Methodology of the research is based on the principles of integrity and differences, positive and normative economic analysis. The authors develop innovational approach to strategic management of sustainable development of agro-industrial complex under the conditions of economic integration and analyze possible scenarios of development of agro-industrial complex under the conditions of economic integration during use of various approaches to management. As a result of the research, the authors come to the conclusion that only independent development of national enterprises of agro-industrial complex can provide its sustainable development. Excessive state support can ruin stimuli for implementation of innovations, despite a lot of financial and investment resources for that. Without state regulation, national enterprises of this complex will not be able to compete with foreign rivals, which causes necessity for use of innovational approach to strategic management of sustainable development of agro-industrial complex under economic integration.

Key Words: *Strategic Management, Economic Integration, Sustainable Development, Agro-Industrial Complex, State Support in the Agricultural Sector*

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1. Introduction

Agro-industrial complex of most countries of the world is vulnerable for consequences of economic integration. Large dependence on unpredictable and uncontrollable geographical and climatic factors causes insufficient flexibility of enterprises of agro-industrial complex (Karpova *et al.*, 2014). They cannot easily adapt to new conditions of economy, which is a reason of instability of development of agro-industrial complex (Ovchinnikov *et al.*, 2014).

This complex is a basis of economic security of the state, so, to support it, the state actively uses all available tools (Kozenko *et al.*, (2014). Due to subsidizing type of development of agro-industrial complex, enterprises, which are its members, lose stimuli for development and stop implementing innovations into production, which leads to loss of their competitiveness (Anna *et al.*, 2015).

The article offers a hypothesis that incapability of national enterprises of agro-industrial complex to endure global competition and threat of complete disappearance of national agro-industrial production reflect failure of the policy of clean free-trade (Kabanov, 2014). Agro-industrial complex enterprises' getting used to state support, which leads to atrophy of their capabilities for independent existence, shows ineffectiveness of the policy of classic protectionism and state paternalism in this sphere (Goncharova & Sizeneva, 2014).

Inapplicability of stated approaches to management of development of agro-industrial complex causes necessity for development of a new approach to strategic management of sustainable development of agro-industrial complex under the conditions of economic integration. This article is devoted to creation of this approach and solving the problem of preservation of national agro-industrial complex under the conditions of globalizing and integrative processes which take place in the global economy.

2. Materials and Method

Analysis of theoretical concepts and approaches shows that issues of management of development of agro-industrial complex are paid close attention by modern scientists and specialists. Issues of management of sustainable development are studied in multiple works of such researchers as (Cobbinah *et al.*, 2015), (Müller *et al.*, 2015), (Voegtlin & Scherer, 2015), (Sobrinho, 2015), (Liberti, 2015), (Pattberg & Widerberg, 2015), which shows high level of actuality of this direction of research and high level of its scientific elaboration.

Issues of theoretical and methodological nature, related to study of foundation of strategic management are studied in works of ([Dudin & Frolova, 2015](#)), ([Sheng & Zhao, 2015](#)), ([Sushil, 2015](#)), ([Bakar et al., 2015](#)), ([Chang et al., 2015](#)) and others. Peculiarities of development of agro-industrial complex under the conditions of economic integration are studies by such authors as ([Bernardes, 2015](#)), ([Medernach & Burnod, 2013](#)), ([Grouiez, 2012](#)), ([Bazylyuk & Mynenko, 2010](#)).

Problem of economic integration is reflected in works of such scientists as ([Bergstrand et al., 2015](#)), ([Verstina et al., 2015](#)), ([Florensa et al., 2015](#)), ([Ward et al., 2015](#)), ([Ali & Imai, 2015](#)), ([Wirtz et al., 2015](#)). Despite large number of studies in the sphere of strategic management and sustainable development, there is still fragmentarily and insufficient elaboration in the issues of methodological nature of management of these processes as to agro-industrial complex.

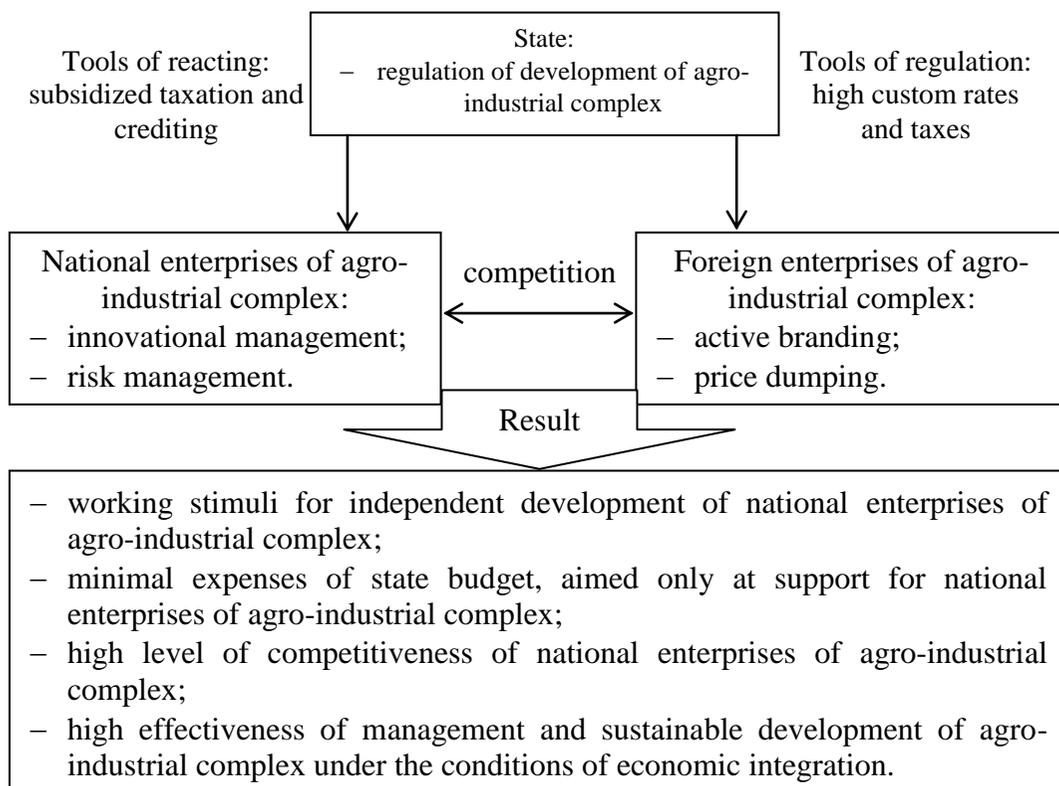
These problems could be solved separately. This causes the necessity for complex study of the problems of strategic management of sustainable development of agro-industrial complex under the conditions of economic integration and search for common solution for these problems.

Methodology of research is based on principles of integrity and difference, positive and normative economic analysis. Instrumentarium and methodological apparatus of the research use for solving the tasks, set in the work, includes a range of general scientific and special methods: modeling, forecasting, scenario analysis, problem analysis, synthesis, deductive and inductive methods of research, and conceptual provisions of systemic approach.

3. Results

This research offers to use the developed proprietary innovational approach to strategic management of sustainable development of agro-industrial complex under the conditions of economic integration (Fig. 1).

Figure 1. Innovational approach to strategic management of sustainable development of agro-industrial complex under the conditions of economic integration



As is seen from Fig. 1, innovational approach to strategic management of sustainable development of agro-industrial complex under the conditions of economic integration supposes state regulation of development of agro-industrial complex. In order to hinder price dumping from foreign enterprises with strong brands and balance possibilities of national enterprises of agro-industrial complex, the state imposes high custom rates and taxes on foreign enterprises.

In order to support national agricultural manufacturers, the state uses tools of preferential taxation and crediting instead of full financing of their activities, which is supposed within protectionist approach. As a result, there appear working stimuli for independent development of national enterprises of agro-industrial complex (Popova *et al.*, 2014).

Thus, minimal expenses of state budget, aimed only at support for national enterprises of agro-industrial complex provide high level of competitiveness of national enterprises of agro-industrial complex. As a result, there is high effectiveness of management and sustainable development of agro-industrial complex under the conditions of economic integration (Popkova *et al.*, 2015).

In order to determine effectiveness of the developed approach to strategic management of sustainable development of agro-industrial complex under the conditions of economic integration, let us conduct its comparative analysis with other approaches, using the instrumentation of scenario analysis (Table 1).

Table 1. Scenarios of development of agro-industrial complex under the conditions of economic integration with the use of various approaches to management

Approaches to management	Scenarios of development of agro-industrial complex			
	Expenses for management	Growth, % per year	Probability	Result
Free-trade approach	0	-1	0.3	-1*0.3+0* *0.4+1*0.3-0=0
		0	0.4	
		1	0.3	
Protectionist approach	3	2	0.3	(2*0.3+4*0.3- 3)+(6*0.3+8* *0.2-5)=-3.2
		4	0.2	
	5	6	0.3	
		8	0.2	
Innovational approach	2	3	0.3	3*0.3+5*0.5+7*0.2- 2=2.8
		5	0.5	
		7	0.2	

As is seen from Table 1, within each approach there could be several different scenarios of development of agro-industrial complex. Let us view them in detail. Free-trade approach supposes non-interference of state into market processes, which causes lack of expenses of state budget for management of development of agro-industrial complex.

Here, three variants of events development are possible. According to the first scenario, incapability of national enterprises of agro-industrial complex to independently compete with foreign enterprises without state support leads to them losing competitiveness and final bankruptcy. This is manifested in negative growth of national agro-industrial production (-1% per year).

According to the second scenario, national enterprises of agro-industrial complex will not face bankruptcy – but neither will they be able to develop, which will be reflected in zero growth (0% per year). According to the third scenario, national enterprises of agro-industrial complex will be able to endure foreign competition and will show small growth (1% per year). As a result, zero effect will be reached. Protectionist approach supposes significant state support for agro-industrial complex. This causes high expenses of state budget. Here two variants are possible: high expenses (3) and very high expenses (5), and four corresponding scenarios of development of national agro-industrial complex.

According to the first scenario, state support leads to small effect, manifested in slight growth (2%) with high expenses. The second scenario supposes achievement of better effect from state regulation of agro-industrial complex, expressed in substantial growth (4%) with high expenses.

According to the third scenario, expenses are very high and provide significant growth (6%). According to the fourth scenario, a very good effect and large growth (8%) are achieved. However, despite significant effect from state regulation, expressed in positive growth of national agro-industrial complex in all possible scenarios, expenses for achievement of this effect are too high. As a result, negative effect takes place (-3.2).

The offered innovational approach supposes state regulation of development of agro-industrial complex, but not to such extent as within protectionist scenario, which allows saving assets of state budget and creating stimuli for independent development of enterprises of this complex, which is something that free-trade scenario lacks.

Expenses are not that large (2), and there are three scenarios of events development. According to the first scenario, lack of financial resources for implementation of innovations causes slight growth of national agro-industrial complex (3% per year). According to the second scenario, there are enough resources for development, which leads to serious growth (5% per year).

According to the third scenario, state support gives an impetus to innovational development of national enterprises of agro-industrial complex, which leads to its significant growth (7% per year). This results in positive effect (2.8). Thus, with minimal expenses, maximal positive effect and general effectiveness are ensured. It is obvious that $2.8 > 0$ and, moreover, $2.8 > -3.2$, which vividly shows optimality of selection of innovational approach and its domination over two other approaches. This proved high effectiveness of the offered innovational approach to strategic management of sustainable development of agro-industrial complex under the

conditions of economic integration and expedience of its use for support for national enterprises of agro-industrial complex which are incapable to survive the global competition.

4. Conclusion

Thus, it can be concluded that only independent development of national enterprises of agro-industrial complex can ensure its sustainable development. Excessive state support can ruin stimuli for implementation of innovations, despite a lot of financial and investment resources for that.

Analysis of scenarios of development of agro-industrial complex under the conditions of economic integration with the use of various approaches to management showed that without state regulation, national enterprises of this complex won't be able to survive foreign competition.

This proves the offered hypothesis and confirms necessity for use of innovational approach to strategic management of sustainable development of agro-industrial complex under the condition of economic integration.

It can be concluded that the developed innovational approach to strategic management of sustainable development should be used only for management of agro-industrial complex and only under the conditions of economic integration, which is its limitation.

Therefore, a perspective direction of conduct of further research in this sphere is creation of universal approach to strategic management of sustainable development, applicable to various spheres of activities, regardless to the level of their integration into the global economy.

References

- Ali, A., Imai, K.S. (2015). Crises, economic integration and growth collapses in African countries. *Journal of African Economies*, 24 (4), 471-501.
- Anna A. Karpova, Tatyana N. Litvinova, Olga M. Zemskova. (2015). The influence of demographic transition as a consequence of qualitative transformations of the world economy on economic growth. *Actual problem of economic*, 5(1): 29-31.
- Bakar, H.A., Mahmood, R., Ismail, N.N.H. (2015). Effects of knowledge management and strategic improvisation on SME performance in Malaysia. *Asian Social Science*, 11 (9), 207-214.
- Bazylyuk, A.V., Mynenko, O.O. (2010). Economic consequences of international technical assistance in organization of agrobusiness in Ukraine. *Actual Problems of Economics*, (9), 24-33.

- Bergstrand, J.H., Larch, M., Yotov, Y.V. (2015). Economic integration agreements, border effects, and distance elasticities in the gravity equation. *European Economic Review*, 78, 307-327.
- Bernardes, J.A. (2015). Novas fronteiras do capital no Cerrado: Dinâmica e contradições da expansão do agronegócio na região centro-oeste, Brasil | [New frontiers of capital in the Brazilian Cerrado: The dynamics and contradictions of the expansion of agrobusiness in the central-west region]. *Scripta Nova*, 19.
- Chang, J.-N., Seetoo, D.-H., Yu, C.-M., Cheng, C.-Y. (2015). Relational Management Mechanisms for Strategic Alliances Among Nonprofit Organizations. *Voluntas*, 2(1), 295-299.
- Cobbinah, P.B., Erdiaw-Kwasie, M.O., Amoateng, P. (2015). Africa's urbanisation: Implications for sustainable development. *Cities*, 47, 62-72.
- Dudin, M.N., Frolova, E.E. (2015). The balanced scorecard as a basis for strategic company management in the context of the world economy transformation. *Asian Social Science*, 11 (3), 282-288.
- Florensa, L.M., Márquez-Ramos, L., Recalde, M.L. (2015). The effect of economic integration and institutional quality of trade agreements on trade margins: evidence for Latin America. *Review of World Economics*, 151 (2), 329-351.
- Goncharova, I. A., Sizeneva, L.A. (2014). Automation of control of microclimate in grain-collecting company. *American – Eurasian Journal of Sustainable Agriculture*, 8(9), 17-22.
- Grouiez, P. (2012). Des kolkhozes à l'agrobusiness en Russie. *Etudes Rurales*, 190 (2), 49-62
- Kabanov V.N. (2014). Formation of the strategy of urban economic development. XII Russian council on issues of management of RCIM-2014 Institute of management issued named after V.A. Trapeznikov RAS, 5743-5754.
- Karpova A.A., Goncharova I.A., Vashchenko A.N. (2014). Strategic controlling in agricultural entities. *Economics of agricultural and processing enterprises*, 2(1): 15-17.
- Kozenko Z.N., Peters I.A., Shmyreva I.A. (2014). Peculiarities of economic integration in agrarian sphere of Russia. *Economics of agricultural and processing enterprises*, 1(1): 45-47.
- Liberti, L. (2015). Optimization and sustainable development. *Computational Management Science*, 12 (3), 371-395.
- Medernach, K., Burnod, P. (2013). Recompositions inattendues d'un système agraire malgache par l'agrobusiness | [Unexpected changes in a madagascan land system through agribusiness]. *Etudes Rurales*, 191 (1), 63-76.
- Müller, A., Janetschek, H., Weigelt, J. (2015). Towards a governance heuristic for sustainable development. *Current Opinion in Environmental Sustainability*, 15, 542, 49-56.
- Ovchinnikov A.S., Balashova N.N., Ivanova N.V. (2014). Strategy of complex development of rural territories and effective functioning of agro-industrial complex of Volgograd Oblast in WTO. *Economics of agricultural and processing enterprises*, 1(1): 16-20.
- Pattberg, P., Widerberg, O. (2015). Transnational multistakeholder partnerships for sustainable development: Conditions for success. *Ambio*, 2(1), 254-259.
- Popkova, E.G., Abramov, S.A., Ermolina, L.V., Gandin, E.V. (2015). Strategic Effectiveness Evaluation as Integral Part of the Modern Enterprise Management. *Asian social science*, 11(20), 16-21.

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- Popova L.V., Karpova A.A., Korobeynikov D.A. (2014). Main directions of development of small business patterns in agrarian sector of Volgograd Oblast's economy. *Economics of agricultural and processing enterprises*, 1(1): 48-50.
- Sheng, L., Zhao, W. (2015). Strategic Destination Management in the Face of Foreign Competition: The Case of Macao Sar. *Journal of Travel and Tourism Marketing*, 2(1): 328-334.
- Sobrino, J. (2015). Sustainable development and competitive performance in Mexican cities: Economic and environmental accounts. *Cities and Partnerships for Sustainable Urban Development*, 143-158.
- Sushil, A.N. (2015). Strategic flexibility: The evolving paradigm of strategic management. *Global Journal of Flexible Systems Management*, 16 (2), 113-114.
- Verstina, N.G., Akimova, E.M., Kisel, T.N.,Taskaeva, N.N. (2015). Organizational and economic mechanism of integration restructuration of state-owned enterprises in Russia. *Asian Social Science*, 11 (14), 169-180.
- Voegtlin, C., Scherer, A.G. (2015). Responsible Innovation and the Innovation of Responsibility: Governing Sustainable Development in a Globalized World. *Journal of Business Ethics*, 2(1), 159-163.
- Ward, D., Kim, J.H.,Graham, M., Tavits, M. (2015). How Economic Integration Affects Party Issue Emphases. *Comparative Political Studies*, 48 (10), 1227-1259.
- Wirtz, J., Tuzovic, S.,Ehret, M. (2015). Global business services: Increasing specialization and integration of the world economy as drivers of economic growth. *Journal of Service Management*, 26(4), 565-587.