








Problems of State Regulation of Intra-industry Integration of Business Structures of the Primorsky Region

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Abstract. The article provides the results of perennial studies of the authors of the intra-industry integration of entrepreneurial structures of the agro-industrial complex (AIC). The basis for the generalization of the theoretical ideas of foreign and Russian scientists on the economic essence of this process, as well as a multifactor assessment of the trends in the cost of food, especially in the Far Eastern Federal District was based.

Keywords: Intra-industry integration · Business structures · Regions · Agricultural products · Agricultural enterprises · Integration processes · Fish flour · State regulation · Primorsky Territory · Fishing companies

1 Introduction

The world community, like Russia, is carrying out large-scale work in 2020–21 to overcome the consequences of the coronavirus pandemic, the main of which is to significantly reduce the pace of economic growth while increasing food prices [1].

The priority direction of solving this problem, many scientists and specialists consider improving the efficiency of agricultural production by reducing the cost of obtaining the final product [2–4]. Special relevance to the implementation of this area acquires for the regions of the Russian Far East, where the cost of most basic foods exceeds the average Russian level, reducing the already poor quality of the population, increases its outflow in the Western regions of the country.

Among the many components of the formation of a pricing system for agricultural products in the Far East, a high role belongs to the intra-industry integration of agricultural enterprises, including agricultural and fish industrial structures, which are carried out by the Ministry of Agriculture within the framework of relevant strategies and programs of prospective development. It should be added that in the socialist period of business, it is such integration that ensured the high efficiency of using raw water resources of the secondary order in reducing the cost and improving the quality of agricultural products, primarily in animal and poultry farming and pig breeding.

According to scientists, the integration of business structures of the agro-industrial complex helps to obtain economic benefits [5, 6].

In a number of scientific publications, it is noted that intra-industry interaction is activated by innovative and investment activity, and has a positive impact on the development of a competitive environment [7–10].

At the same time, O. Yu. Frolova, L. V. Fomina and Zh. N. Shmeleva believe that the market mechanism is not able to resolve the confrontation of production forces and relations and focus on vertically integrated interaction between business entities and state management bodies [11].

It is important to note that world and domestic experience shows the need to use various models and tools for state regulation of agricultural production processes in the market economy [12, 13].

In particular, this is confirmed by the practice of the intra-industry interaction of APK enterprises in a recent period of planned socialist economic management.

Taking into account the current requirements for the development of national agricultural production, as well as the theory and practice of its organization in Russia and other countries, the President of the Russian Federation in March 2021 instructed the government and the leadership of the Far Eastern region to analyze the level and dynamics of prices for the main types of agricultural products and food products and take measures aimed at reducing them. The meaning of this decision is extremely important for preserving and increasing the potential of the Russian Far East.

2 Materials and Methods

The purpose of the study is to substantiate the need for state regulation of intra-industry integration between agricultural and fishing enterprises of the agro-industrial complex in the regions of the Russian Far East, as a basis for reducing prices for agricultural products.

The methodological basis of the research is a systematic and comprehensive analysis of the problem under consideration using general economic and economic-statistical methods, as well as publications of Russian and foreign scientists.

Information base of research - materials of the Federal State Statistics Service (Rossstat) of the Russian Federation, regulatory documents regulating the functioning of agricultural enterprises, analytical reports of agricultural and fish industrial enterprises APK, the results of the expert survey of managers and specialists.

3 Results

In recent years, the Far East has been a challenge of globalization much sharper than the central regions, due to the tasks of its accelerated development [14]. Such a reaction is due to the National Program of Socio-Economic Development of the Far East approved in 2020 for the period up to 2024 and for the future until 2035 of this strategic important region for Russia.

Realizing the urgent need for its successful implementation, the President of the Russian Federation instructed the government and leaders of the Far Eastern regions, to

analyze the level and dynamics of prices for the main types of agricultural products and food products in the Far Eastern Federal District and take measures aimed at reducing them to the average Russian Federation.

To aware of the scale and complexity of this problem, the authors made a comparative analysis of the value of the main agricultural products in all Far Eastern regions compared to the general Russian level. The data of this analysis in the Primorsky Territory and in general, the Far East of the Russian Federation, according to the results of 2020, are shown in Table 1.

Table 1. The cost of basic foods in the Russian Federation, Far Eastern Federal District and Primorye Territory as of December 31, 2020, Rub.

	Beef (except for boneless meat), kg	Pork (except for boneless meat), kg	Chickens, kg	Milk, l	Butter creamy, kg	Sunflower oil, l	Bread and bakery products, kg	Vegetables, kg	Eggs, 10 pieces	Fish and fish products, kg
Russian Federation	516.6	269.1	153.9	59.0	645.2	125.0	85.1	112.5	77.1	209.4
Far Eastern Federal District	576.5	333.5	208.4	82.4	881.7	143.1	134.9	149.5	90.6	138.9
Primorye Territory	629.3	330.6	182.2	87.6	843.2	137.4	107,3	148.4	89.0	137.4
Food value index in DFOs to the level in the Russian Federation, %	111.6	123.9	135.4	139.7	136.7	114.5	158.5	132.8	116.7	66.3
Food value index in the Primorsky Territory to the level in the Russian Federation, %	121.8	122.9	118.5	148.5	130.1	109.9	126.1	131.9	115.6	65.6

These data allow us to conclude that there is a significant excess of food prices in the regions of the Far East in comparison with the all-Russian ones. So in the Primorsky Territory, the prices of bread and bakery products increased by 58.5%.

Unfortunately, the analysis carried out by the authors revealed a steady trend of increasing the gap between these prices (Far Eastern and average Russian) in the last 5 years.

The indicated trend according to the study was due, first of all, an annual increase in prices for fuel and energy resources, agricultural equipment, fertilizers, as well as related to the fall of the national currency, an increase in the value of imported food from the PRC, Republic of Korea, Vietnam and other countries.

It is especially important to note the imperfection of the state support of agricultural enterprises of the Far Eastern regions, including the processes of their integration with fishing enterprises, which are now the lion's share of waste processing products export abroad and sell to Siberian regions of the country.

State regulation worldwide is one of the key factors for the development of agriculture. In the Russian Federation, it is carried out on the basis of FZ No. 264 of December 29, 2006. "On the development of agriculture in the Russian Federation" and the state program for the development of agriculture and regulating the markets for agricultural products, raw materials and food for 2020–2027. The main goal is to form a competitive and stable agro-industrial production and based on this provision of improving the standard of living of the population.

Table 2. List of subprogrammes of the State Program of the Primorsky Territory "Development of agriculture and regulation of markets for agricultural products, raw materials and food" at 2020–2027 and their financing, in %.

Name of the event	2020	
	plan	fact
Subprogramme 1. Technical and technological upgrades of the agro-industrial complex	13.73	9.58
Subprogram number 2. Increased financial stability, of which:	50.99	57.58
– stimulation of investment activity in the agro-industrial complex (subsidies for compensation of part of the cost of interest and for reimbursement of a part of interest rates on investment loans (loans) in the APC)	50.69	57.30
– Reducing risks in agricultural production (payment of the insurance premium accrued under the Treaty of SK Insurance)	0.20	0.28
Subprograms 3. Development under the branch of crop production, processing and sale of crop production	9.16	5.38
Subprogramme 4. Development of extension of animal husbandry, processing and sale of livestock production	18.61	17.93
Subprogramme 5. Development of the food and processing industry	3.77	2.81
Subprogramme 6. Development of agricultural cooperation and small forms of management	1.24	1.17
Subroutine 7. Development of agricultural land reclamation	0.76	0.53
Subprogramme 8. ensuring the functions of managing the implementation of the state program	0.17	0.16

(continued)

Table 2. (continued)

Name of the event	2020	
	plan	fact
Subroutine 9. Export of products of the agro-industrial complex	1.35	4.61
Subprogramme 10. Creating a farmers support system and the development of rural cooperation	0.15	0.13
Subprogramme 11. Complex Development of Rural Territories	0.04	0.18
State program, total	100	100

The state program of the Primorsky Territory “Development of agriculture and regulation of markets for agricultural products, raw materials and food” was developed and operated in Primorsky Territory, 2020-20-20, which includes subprogrammes aimed at food provision of residents of the edge of high-quality and environmentally friendly products, and creating conditions for the effective development of agricultural production. Financing of activities of this program is carried out at the expense of the federal budget and budgets of the subjects of the Russian Federation (Table 2).

From the data of the table, it follows that more than 50% of budgetary funds are aimed at increasing financial stability, most of which have to pay interest on investment loans and loans, on the development of crop 9.16% and animal husbandry 18.16%, the amount of state support for technical and technological upgrades amounted to 13.73%. Agricultural enterprises in the absence of the necessary state support do not receive profits for their development, and this is one of the reasons for the intra-industry integration of the business structures of the agro-industrial complex, which increases the efficiency of agricultural production by reducing the cost of the final product.

During the planned economy, intra-industry integration processes had their own specifics, which were carried out vertically between fishing and agricultural enterprises and were regulated by higher administrative bodies, so horizontal ties with other enterprises were weak. Enterprises of the fishing industry of the Primorsky Territory supplied small fish and fish meal for fattening poultry and livestock to livestock farms and animal farms, the entire process was regulated by the regional authorities. During the transition to market relations, the state planning system was destroyed, the previously existing economic ties were lost and at the moment have not been restored.

Currently, a large “Russian Fishing company” engaged in fish production in the Far East produces 16.7 thousand tons of fish meal, which is supplied to the foreign market in China, Vietnam (90%), to the domestic market in Novosibirsk, Krasnoyarsk and local markets (10%).

Based on statistical data on the number of livestock’s grown livestock in the Primorsky Territory and their average daily needs, the authors are estimated the potential need for the fish flour of agricultural producers of the region, which is about 10 thousand tons per year.

Due to the expert survey of the leaders of the agrofirms of the Primorsky Territory, enterprises were identified that use fish flour in the production of livestock production:

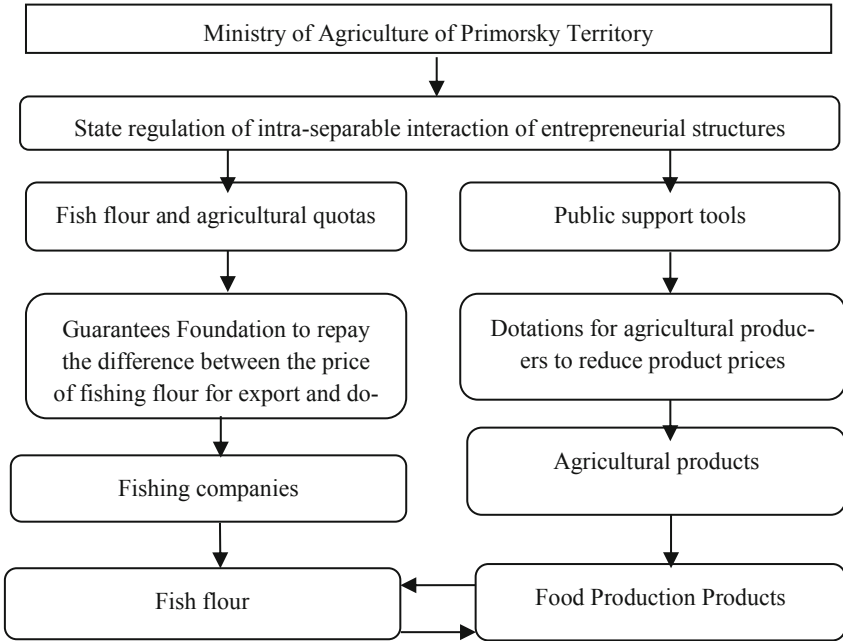


Fig. 1. Diagram of the intra-industry integration of entrepreneurial structures in the agriculture of Primorsky Territory.

LLC “Poultry Farm” Ussuriyskaya will feed the chickens before slaughter, IP (KFH) Ryachenkov R.Yu.- Cords of the calves, AgroFond P LLC acquired On the trial for fattening pigs.

These data allow us to conclude that it is necessary to develop intra-industry cooperation between agricultural enterprises, which is not yet included in the existing state programs and subprograms for the development of agriculture in the Primorsky Territory. Schematically, the process of intra-industry integration of entrepreneurial structures of the agro-industrial complex of the Primorsky Territory is shown Fig. 1.

4 Discussion

This paper examines the problems of state regulation of intra-industry integration of agricultural enterprises, as one of the important components of reducing prices for agricultural products in the Far Eastern region. This experience of the socialist period of economic activity was used as the main prerequisites for solving this problem, when fishing enterprises supplied producers of agricultural products, this process was regulated by state bodies, as well as the established practice of supplying these products from the Far Eastern basin to the regions of Siberia and abroad.

The expert survey of managers and specialists of agricultural enterprises of the Primorsky Territory conducted by the authors confirmed the need for the entire agricultural sector of the Far East economy to develop intra-industry integration, starting with the use of fish meal and other types of unused products of fishing companies as feed.

In our opinion, the organization of this process is possible if the existing system of state regulation of intra-industry integration of agricultural enterprises is changed in a single Ministry of Agriculture of Russia and the Primorsky Territory.

Of course, this is not limited to a fairly wide range of possible forms and types of intra-industry integration, which, in our opinion, should be the subject of further research.

The effect of intra-industry cooperation will be expressed in obtaining a significant economic effect due to the combination and cooperation of fishing and agricultural enterprises of the Primorsky Territory, rational use of resources, and solving the problem of rising food prices in the region.

5 Conclusion

Summing up the results of the study, it is important to note the revealed negative trend of annual increase in the cost of agricultural products in the regions of the Russian Far East, at a rate significantly higher than the national level of inflation, while reducing the average income of the population. This trend leads to an increase in the gap between the Far Eastern and average Russian food prices, which lead to a reduction in the demographic potential of the region that is strategically important for Russia.

Thus, the commissioning of the President of the Russian Federation should be considered extremely relevant to the end of 2021 years of food prices in the Far Eastern Federal District until the average Russian level.

References

1. Polbin, A.V., Sinelnikov-Murylev, S.G., Trunin, P.V.: The economic crisis of 2020: reasons, policies to deal with and further development of the Russian economy. *Voprosy Ekonomiki* **6**, 5–21 (2020). <https://doi.org/10.32609/0042-8736-2020-6-5-21>
2. Borisov, A.I., Danilova, S.S.: Current Russian agricultural development trends. *IOP Conf. Ser. Earth Environ. Sci.* **548**, 022031 (2020). <https://doi.org/10.1088/1755-1315/548/2/022031>
3. Zhupley, I.V., Potenko, T.A., Gubarkov, S.V., Tretyak, N.A., Grafov, R.A.: Structural shifts and reform of the agrarian sector of the Russian economy under the conditions of the import substitution. *Policy Space Cult. India* **6**(4), 25–35 (2018). <https://doi.org/10.20896/saci.v6i4.385>
4. Yakovlev, V.A., Stepanova, A.N.: Analysis and prospects for the development of agribusiness: regional aspect. *IOP Conf. Ser. Earth Environ. Sci.* **548**, 022034 (2020). <https://doi.org/10.1088/1755-1315/548/2/022034>
5. Krasnova, T.G., Plotnikova, T.N., Dulesov, A.S., Karandeev, D.J.: Agro-industrial integration in modern conditions. *IOP Conf. Ser. Earth Environ. Sci.* **548**, 022014 (2020). <https://doi.org/10.1088/1755-1315/548/2/022014>
6. Huseynov, E.N., Semenov, V.S., Zhantemirov, S.A.: Some challenges development of agro-based integration of the cluster approach. *RUDN J. Agro Anim. Ind.* **4**, 12–20 (2013). <https://doi.org/10.22363/2312-797X-2013-4-12-20>
7. Simachev, Y., Kuzyk, M.G., Fedyunina, A.A., Zaytsev, A.A., Yurevich, M.A.: Labor productivity in the non-resource sectors of the Russian economy: what determines firm-level growth? *Vopr. Ekon.* **3**, 31–67 (2021). <https://doi.org/10.32609/0042-8736-2021-3-31-67>

8. Fojtikova, L., Stanickova, M., Vahalik, B.: Economic integration impact on the EU trade structure. *Act Probl. Econ.* **182**(8), 41–50 (2016)
9. Tekeeva, F.: State regulation in the APK. *Trends Dev. Sci. Educ.* **13–2**, 38–39 (2016). <https://doi.org/10.18411/LJ2016-4-38>
10. Chebokchinova, H.M., Kapsargina, C.A.: Some aspects of national experience of the cluster approach in agro-industrial complex. *IOP Conf. Ser. Earth Environ. Sci.* **548**, 022048 (2020)
11. Frolova, O.Y., Fomina, L.V., Shmeleva, Z.: The importance of the agrarian sector in the socio-economic systems development: methodological aspect. *IOP Conf. Ser. Earth Environ. Sci.* **548**, 022023 (2020). <https://doi.org/10.1088/1755-1315/548/2/022023>
12. Aksyutina, S.V., Mironenko, N.V.: Current issues of the agricultural sector state regulation. *Ekonomicheskie otnosheniya* **10**(4), 1469–1490 (2020). <https://doi.org/10.18334/eo.10.4.111047>
13. Potenko, T.A., Zhupley, I.V., Schmidt, Y.I., Kvashko, L.P.: Agricultural policy and import substitution opportunities for the Russian Far East. *IOP Conf. Ser. Earth Environ. Sci.* **548**, 022011 (2020). <https://doi.org/10.1088/17551315/548/2/022011>
14. Latkin, A.P., Kharchenkova, E.V.: Russian Far East: prospects for innovation breakthrough, The Territory of New Opportunities. *Herald Vladivostok State Univ. Econ. Serv.* **11**(1), 6–16 (2019). <https://doi.org/10.24866/VVSU/2073-3984/2019-1/006-016>