

Development of the Agrifood Market in Southern Siberia of The Russian Federation Based on Interregional Food Ties

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ABSTRACT

The research aims at the development of theoretical and methodological aspects and practical offers on validation of agrifood market growth areas in Siberian Federal District of the Russian Federation based on interregional food ties. Within the frame of the work theoretical aspects of agrifood market growth were specified, underlining internal and external factors peculiar for the modern stage of development. A methodological approach to the decomposition analysis of agrifood market development problems in the region was offered, the results of which made it possible to determine the main measures for adapting local agriculture to the new market conditions. By means of the method of mathematic economic modeling the authors suggested a scheme for applying the gravitation theory to interregional exchange of goods and set forth agrifood market growth areas on the basis of deepening interregional and international ties of Southern Siberia.

Key words: Agrifood market, interregional ties, Agricultural industry, Vectors of development, Siberian Federal District, the Russian Federation.

INTRODUCTION

Under present-day conditions of strengthening economic independence of the regions of the Russian Federation and structural changes of agriculture branches, development of the effective agrifood market becomes one of the most important economic growth lines in the agribusiness. For the last 20 years the agrifood market in the Russian Federation has developed in several stages: from the unregulated market to the state-controlled regional integrated structures.

The development of the agrifood market on the basis of interregional ties as a condition for balanced development of the regional

agribusiness and the reduction of dependency on external negative factors and complex realization of its commercial potential are seen as very important. Irrespective of business forms, level of social and economic development, each region of the RF is badly in need of effective commercial activity with those regions, the potential possibilities of which make it possible to carry out more rational and mutually beneficial exchange of agricultural products and food. It is an apparent and distinctive advantage of each regional agrifood market in the age of world commerce globalization. Moreover, the development of interregional trade plays an important role in the cross-sector and interregional exchange and establishment of ties between regional agribusinesses.

Thus, taking into account all the above-mentioned, it seems relevant to validate vectors of agrifood market development, both scientifically and practically, based on the interregional and international food ties in the case of the key macroregion – south of Siberian Federal District. It includes the following subjects of the Russian Federation: Novosibirsk, Omsk and Kemerovo oblasts; Altai, Buryatia and Tyva Republics; and Altai Krai.

Theory and methodology of this research are based upon basic works of local and foreign academic economists with regard to evolution and laws of development of the agrifood market, territorial division of labor in the agribusiness, interregional food ties, etc. The following scientists contributed to the major effect to the science advancement within the research topic detailing development of the agrifood market: N.D. Avarskiy, A.I. Altukhov, I.N. Buzdalov, K.G. Borodin, K.P. Glushchenko, A.G. Zeldner, V.A. Klyukach, E.N. Krylatykh, V.I. Nazarenko, I.A. Romanenko, A.F. Serkov, S.O. Siptits, I.G. Ushachev, O.G. Charykova, and others [1-16].

A.G. Granberg, V.I. Suslov, S. Marshalova, N.M. Pozanova, A.S. Novoselov, R.I. Shniper, S.A. Shelkovnikov and others contributed sufficiently to solution of the market development problem on the regional level in their research works [17-23]. At the same time, one should note that many theoretical and methodological aspects of formation and functioning of regional agrifood markets have not been studied enough yet and need follow-up study and understanding.

METHODS

Object of the research: Economic and organizational-managerial relations, interregional ties established in sales of agricultural raw materials and food. Subject of the research: Principles, factors and tendencies of agrifood market development in Russia with an allowance for interregional food ties. Target of the research: Agrifood markets and interregional ties of Southern Siberia.

Methods of the research

Monographic method was used while

studying state-of-the-art and efficiency of state control of the agrifood market in separate regions and Russia in whole. It enabled to systematize existing theories in the national and foreign science, as well as practical experience in organizing effective functioning of the agrifood market; to determine key factors influencing this market in Siberian Federal District of the RF.

“Problem chart” method means breakdown of a problem set, associated with each type of problems, to subsets, that is, decomposition of problems by their types. Use of this method while analyzing development problems of the agrifood sector enabled to determine sectoral problems of its development. Drawing of a food sub-complex “problem chart” enabled to set forth institutional (organizational), economical and innovative problems, which determine efficiency of development of the agribusiness and the agrifood market in the region.

Method of mathematic economic modeling was used by us while establishing and validating practicability of application of the gravitation theory to an interregional good exchange chart. Gravitation model of interregional ties enabled to determine their possible use for assessment of influence of economical and political factors (global crisis, formation of international integration blocks) on agrifood flows dynamics.

RESULTS

1. Following the comprehensive analysis the authors identified and classified factors, the influence of which determines the necessity in improving the agrifood market management mechanism on the basis of interregional food ties due to the criteria below: source of influence (external and internal), character of influence (positive and negative). The factors identified have a great influence on development or restraint of integration ties of regional agribusinesses. Key principles of interregional and international food ties in the current context were determined as follows: priority development; economic integration establishments; complementarity

- (interconnection); polarization of vectors of economic ties.
2. The authors suggested a methodological approach to the decomposition analysis of agrifood market development problems. Its point is in drawing “a problem chart” of the food sub-complex of the agribusiness that enabled to set forth institutional (organizational), economical and innovative problems, which determine efficiency of development of the agribusiness and the agrifood market in the region. Based on the results of the food sub-complex problem analysis “a target chart” was drawn, where the general target means necessity in increasing social and economic efficiency of the agribusiness and the agrifood market with regard to extension of interregional food ties.
 3. There was developed “a work flow chart” of activities to adapt local agriculture to new conditions, which aims at increase of competitiveness of local products on the domestic food market by applying measures including two groups: general – oriented to agriculture in whole, and specific – focused on separate agricultural branches. It will enable to develop a potential of agribusinesses and agrifood markets in Siberian regions of the Russian Federation more effectively.
 4. The authors validated vectors of development of the agrifood market on the basis of extension of interregional and international food ties in Southern Siberia. A scheme of interregional and international bartered ties in the regions of Southern Siberia was made by means of the economic mathematic modeling and gravitation theory. The researchers determined problems and drawbacks in development of interregional cooperation with adjacent (neighboring) regions. There were formed new vectors of development of interregional food ties based on identification of relative advantages of the regions of Southern Siberia and adjacent countries in manufacture of some agricultural products.

DISCUSSIONS

Identification of theoretical aspects of development of the agrifood market on the basis of extension of interregional and international food ties specifying internal and external factors of influence in modern times

Evolution of the market notion starts from the narrow view of the market as a place for sale of goods and services to the wide view of the market as economic relations between business entities in the process of organization and performance of exchange of goods resulting in formation of supply and demand, and price. Macroeconomic level of these relations enables to present the market as a social form of economy organization and functioning ensuring interaction between production and consumption. Classification of the markets in terms of their territories is as follows: world, zone, regional and country, and as for each country – internal and external.

Analysis of notions, carried out by A.Y. Grenlund, shows that other markets “differ from the agrifood one in that the latter includes processes, at which agricultural products, manufactured in the agrarian field, after all stages of distribution and exchange, transportation, storage and processing are finally sold and consumed as food. All agricultural stages are not isolated from each other and make integral parts of a whole process, united by direct and return links. Both raw materials and finished products may be presented as the goods on the agrifood market” [24].

In modern times functioning of the agrifood market in Russia is specified by insufficient coordination of member activities in terms of cooperation on general directions of manufacturers and consumers. The Russian Federation, having vast territories, is characterized by varied economic, cultural, administrative relations between its regions – republics, districts and oblasts. Food ties, which mean export and import of foodstuff and raw materials for its production from one region to another, are of great importance in interregional economic relations. For Russia such ties are more important than for some other countries. This is due

to well-marked territorial differences of natural and economic conditions, which quantify opportunities of the regions to ensure food for local consumption and supply it to the domestic market of the country.

Structure and methods of food production, sales geography, alignment of national food market forces have changed for the last 20 years. Besides, current conditions and factors influence these tendencies. Thus, majority of regional agribusinesses are in need of food policy reformation, search of new mechanisms in order to ensure and support their food safety. Growth of meat consumption is one of the most important aspects of agrifood market transformation.

For example, Siberian region with its sufficient agricultural potential is the biggest producer of the grain supply. Its share in grain production in the Russian Federation amounts to 16.6%. Grain production in Siberia takes the leading position and makes the basis for providing food in the region and strengthening the economy of agricultural producers. With due account for the diversity of environmental and economic conditions, they have rather distinct and stable territorial division of labor with regard to production and supply of definite types of grain and some cereal products in Siberia. It is characterized, on the one hand, by the division of the regions into producing and consuming ones, on the other hand, by specialization in production of some types of grain as a basis for assortment exchange to be exported. Altai and Krasnoyarsk Krai, Novosibirsk and Omsk oblasts are the main districts of concentration of grain commercial production in Siberia with share in the general production volume 9.2 mln tons (70.9%). They cover their grain requirements completely and have reserves for interregional exchange of goods amounting to 3.1-3.5 mln tons. At the same time, Kemerovo, Tomsk and Irkutsk oblasts; Zabaykalsky Krai; Altai, Buryatia, Tyva and Khakassia Republics are badly in need of commercial grain supply.

Agrifood market maturity greatly depends on intraregional and interterritorial economic relations. The basis of intraregional exchange of goods is formed by agricultural raw materials and products ready for sale and consumption, as well

as foodstuff and other goods transported from the big markets of the cities. A model of intraregional agrifood market growth is to include formation of agricultural cooperative markets in compliance with environmental and economic conditions of the region.

By forming a realistic and at the same time practical approach to extension and improvement of product distribution, one should proceed on the basis that the agrifood market is to be supported by the firm foundation of infrastructure and without its development it would be unwise to notify its positive influence on the level and quality of life of consumers.

Nowadays, the economy of the agribusiness is characterized by strengthening of integration and globalization processes both at the interregional and international levels having significant influence on agrifood markets development. That's why further development of the agrifood market in the current context is possible on the basis of extension of interregional and international food ties.

Differences in the degree of entry into integration processes (the Customs Union, EurAsEC) are kept and enhanced between the regions, and this is reflected in significant differentiation of use of internal and external factors with the purpose of reproduction of food supplies by regional agribusinesses. The research showed that the agrifood market of Russia as a whole and its separate regions is not an isolated self-controlled system and is influenced by different factors (Table 1).

Peculiarity of factors influencing interregional and international food ties provides for new principles: priority development; economic integration establishments; complementarity (interconnection); polarization of vectors of economic ties.

Participation of the RF in interregional integration projects creates opportunities for fuller cooperation with the world economy and involvement into the international trade on the rules that are to be set collectively based on consensus.

Methodological approaches to the decomposition analysis of agrifood market development problems

Transformation of the agrifood sector of Russia has formed a deficiency of industrial, organizational, financial and innovative resources in the food sub-complex that sufficiently restricted possibilities to increase efficient production of quality and competitive marketable products.

Southern Siberia is the most important region participating in the food exchange system. In our research we have studied seven regions located in the south of Siberian Federal District of Russia. They are: Altai and Zabaykalsky Krai; Tyva, Buryatia and Altai Republics; Omsk, Kemerovo and Novosibirsk oblasts.

In the course of our work we have studied the results of investigations by the leading agricultural economists with regard to the influence of scientific and technical progress on agricultural production, which enabled to find and classify key problems of food industry development.

Agrifood sector development problems have been analyzed based on “the problem chart” method that afforded to determine branch problems. Drawing of “the problem chart” means breakdown of a problem set, associated with each type of problems, to subsets, that is, decomposition of problems by their types (Figure 1).

Drawing of “the problem chart” for the food sub-complex enabled to classify problems by their

Table 1: Agri food market development factors on the basis of inter regional and international food ties in the modern period.

Groups of Positive factors	Negative
<p>External</p> <ul style="list-style-type: none"> •New markets for agricultural raw materials and food; •Access to new technologies and agricultural equipment; •Entry of local manufacturers into the international division of labour; •Increase of competition on the national and international level; •Change of the agriculture state support system in compliance with WTO rules and standards <p>Internal</p> <ul style="list-style-type: none"> •Increase of competitiveness of agricultural manufacturers and food quality; •Optimization of location and specialization of agricultural industry; •Development of marketing and sales cooperation; •Decrease of agri food price volatility; •Improvement of agri business management or organizational structures, increase of their effectiveness 	<ul style="list-style-type: none"> •Food stuff import growth; •Incompliance of agri food market regulation mechanism in the RF and competitive countries; •Different approaches to agriculture support and raise of competitiveness; •Lack of state support of agricultural raw materials and food export •Lack of strategy and consequence of processes focused on regional agri business adaptation to the new business environment •Different environmental conditions; •Insufficiently developed market infrastructure; •Biased and irregular information on situation on the regional agri food markets; •High differentiation in terms of both agri business resources provision and agri food market development level; •Different distance to the markets

types and identify institutional (organizational), economic and innovative problems, which determine efficiency of development of the agribusiness and agrifood market in the region.

sanctions applied to the RF; in conformity of priorities between regional agribusinesses, as well as institutional uncertainty of the agribusiness control system under conditions of globalization and regional integration EurAsEC.

In the institutional sphere the most significant problems are as follows: supranational restrictions in terms of state support and protection of the domestic market due to WTO conditions and

Some factors weaken immaturity of the market industrial and economic, organizational and institutional infrastructure of the agribusiness, they

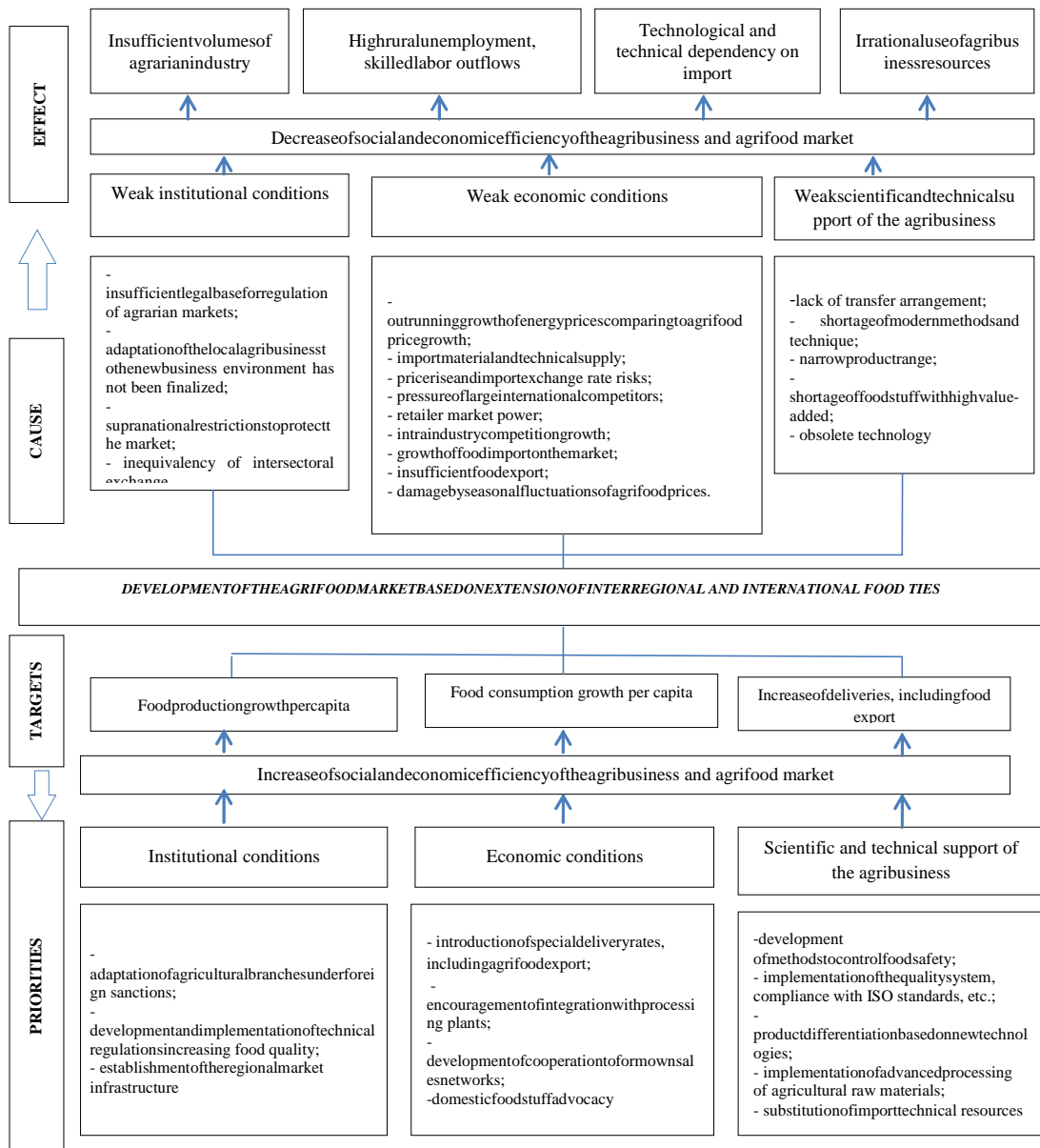


Fig. 1: The problem and target chart to develop the agrifood market based on extension of interregional and international food ties

are: competitiveness of some foodstuff (poultry and pig products); insufficiency and incompliance with the international standards of the complex regulatory system (standards, technical regulations); weak cooperation between agricultural producers and agribusiness.

Product cost growth is determined by critical import dependency with regard to material and technical supply of the agricultural complex, growth of energy and other utilities rates. Import exchange rate risks threaten stability of the branch.

Results of decomposition of the scientific and technical factor, carried out in the course of work, provide strong evidence of the primary role of interregional and international food ties

development in improvement of economic efficiency of the agrifood market.

Deficiency of product and technological innovations, technological safety, development of interregional ties – these are blocks of problems that are distinguished at the problem-oriented analysis of a role of the scientific and technical factor in production efficiency increase.

Lack of product innovations is determined by the poor product range of the agricultural complex as compared to developed countries, especially in terms of advanced processing products. Thus, for example, in developed countries egg industry processing amounts to 30-40%, while we have the same index amounting to 6%. Under

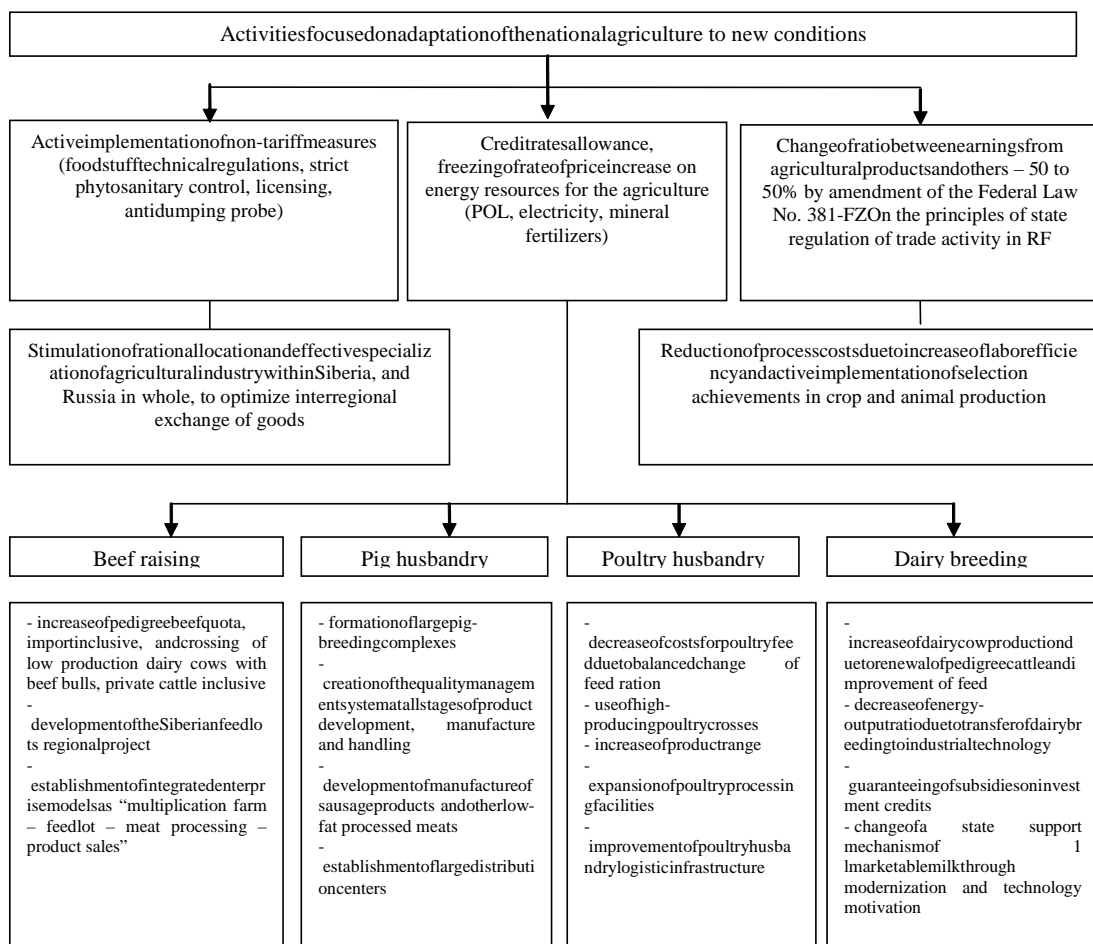


Fig. 2: The work flow chart” focused on activities to adapt the national agriculture

current economic conditions (unavailable long-term credit resources) much of the agricultural business is not interested in establishment and increase of processing facilities.

Most reasons of low economic efficiency of the agrifood market refer to the scientific and technological factor and its elements. The analysis results prove that a significant part of reasons-elements from the scientific and technical block by means of the cause and effect system has a direct influence on the elements belonging to the organizational and economic mechanism of development of the agrifood market and interregional food ties.

Experience of the leading agrarian countries and RF regions shows that activation of the scientific and technical progress and implementation of its results in production promotes increase of food production efficiency, and has plenty of positive effects on economic and institutional conditions of functioning.

Activities focused on adapting the agriculture in Russia to new conditions as a key factor of agrifood market development in Southern Siberia

When processes of globalization and international integration are active, one can notice strengthening of the tendency for importing foreign institutes regulating the agrarian branch in the

national institutional system. It should be noted that due to the formation of the Customs Union and transfer of foreign trade regulation issues to the supranational level bulk of issues referring to, for example, the customs-fee policy is within the competence of the Eurasian Economic Commission.

Development of the agrifood market under new conditions requires new approaches to the improvement of state regulation and support of the national agriculture.

Based on the conducted research we offer "the work flow chart" that includes activities focused on adaptation of the national agriculture (Figure 2). Efficiency of activities, in turn, depends on the cooperation of the state and market institutes regulating economic relations in the Russian agribusiness.

Implementation of these activities is to be a priority for the agribusiness regulatory bodies both at the federal and regional level. Efficiency of the state influence activities in agriculture provides for a balance of state regulators and economic activities focused on increasing agricultural industry competitiveness at the level of economic entity.

Thus, the offered activities are oriented to, on the one part, decrease of negative influence

Table 2 : Perspectives for interregional and international food ties of Southern Siberia

Products	Supplying regions	Consuming countries, RF regions
Grain and cereal products	Altai Krai, Omsk and Novosibirsk oblasts	Leningrad, Kemerovo, Tomsk, Sverdlovsk, Chelyabinsk, Sakhalinsk, Moscow, Amur, Magadan oblasts; Khabarovsk, Perm, Primorsky Krai; Republics: Buryatia, Tyva, Khakassia, Altai, Sakha (Yakutia); Turkmenistan, the Kyrgyz Republic, Uzbekistan, Mongolia, the Islamic Republic of Afghanistan, the Republic of Indonesia, the Republic of Moldova, DPRK
Milk and dairy products	Altai Krai, Omsk and Novosibirsk oblasts	Kemerovo, Tomsk, Amur, Chelyabinsk oblasts; Republics: Buryatia, Tyva, Khakassia, Sakha (Yakutia); Zabaykalsky, Khabarovsk, Primorsky Krai; Moscow; the Republic of Kazakhstan, Mongolia, the Kyrgyz Republic
Meat and meat products	Altai Krai, Omsk and Novosibirsk oblasts, Buryatia and Tyva Republics	Kemerovo, Tomsk, Sverdlovsk, Chelyabinsk, Magadan oblasts; Kamchatka Krai; Republics: Buryatia, Sakha (Yakutia); the Republic of Kazakhstan, Mongolia, the Kyrgyz Republic

from interregional integration, and on the other part, increase of competitiveness and adaptation of the national agriculture to modern conditions.

Vectors of development of interregional and international food ties in Southern Siberia, RF

Concentration and specialization of agricultural production, which are able to initiate a chain of interrelated structural changes oriented to the increase of economy efficiency in the regions, rank high among the priorities of interregional and international food ties development. Particularly, it refers to the regions with existing specialization. In Siberian Federal District, primarily, this is the case of Altai Krai, Novosibirsk and Omsk oblasts with regard to the production of food grain and dairy products, having huge natural resources and material and technical facilities to process and manufacture finished products (grain and cereal products, milk and dairy products). That's why these regions can supply grain and animal products outside their territories. The authors' calculations proved that these regions can supply 3.6-3.7 mln tons grain to outer markets yearly.

To ensure stable efficient exchange of goods in the regions with traditional raw material specialization it is very important to perform interregional end product exchange depending on demands with ample opportunities to vary line and range of produced goods. Food grain production figures in Altai Krai provide clear evidence hereof. In 2013 it produced flour amounting to 1.5 mln tons (61.5% Siberia volume), pasta and cereals – 110.2 thousand tons (70.7%) and 239.8 (81.5%), respectively. Up to 80% of wheat production is processed in the Krai. So, Altai Krai has vast interregional and international ties with the majority of regions of the country and near-abroad and far-abroad states.

Besides, Altai Krai and Omsk oblast with significant primary resources of milk and meat can supply 604 and 100 thousand tons products, respectively, to the other regions of Siberia and Far East based on interregional food ties. At the same time: Buryatia and Tyva Republics with huge feed supplies are able to increase animal products, especially lamb. At present, their share in total sheep stock and lamb produced in Siberia is 68%

and 54%, respectively, that enables to cover meat requirements of local population and to supply products to many regions of the country and abroad based on interregional ties as evidenced by the perspectives for interregional and international food ties of Siberian regions, presented in Table 2.

If across Siberia dependency of meat consumption on deliveries from the outside amounts to 19%, by regions, such as Irkutsk, Kemerovo, Tyumen oblasts and Zabaykalsky Krai it amounts to 45-55% of own production, that is, these regions are most dependent in their development on products delivered from the other regions of the country. Thus, Siberia is in close economic integration with many regions of the country.

Development of foreign economic relations, first of all with the Pacific Rim, is a priority for Siberian regions. The reason is its geopolitical location – Siberia is the bridge between the East and the West. It creates opportunities for economic integration with European countries and the Pacific Rim.

Involving method of mathematic economic modeling, we have offered a scheme of applying the gravitation theory to interregional exchange of goods.

The gravitation model of interregional ties enables to determine their possible use for assessing impact of economic and political factors (global crisis, international integration blocks) on agrifood flow dynamics.

Having statistical data on interregional exchange of goods (U_{actual}), volumes of the main foodstuffs in Southern Siberian Federal District, RF, (m_1) and other regions of neighboring states (m_i), as well as taking into account distance between selling regions (r), the following system of equations has been set up and solved

$$U_{\text{potential}} = Y_x m_1 m_i / r \sum U_{\text{actual } i} - \sum U_{\text{potential } i} = 0 \quad \dots(1)$$

The offered system of equations is a key to determine potential exchange of goods between two selling regions. It makes possible to apply the gravitation theory practically that, in turn, is developed on the basis of the LS method. In this

case the unknown coefficient Y_{δ} is determined due to the condition:

...(2)

We have set 0 as *min*, that is, equality " $U_{actual\ i} = U_{potential\ i}$ ". So, it refers to the optimization of interregional food flows with regard to the economic development of selling regions and their geographical distance. We think that such approach is fully justified. At the same time, this approach provides just for necessity to rearrange interregional food flows without prejudice to their volumes and structure. Each pair of regions needs to have calculated its own coefficient Y_{δ} , which must be relatively stable during transfer from one pair of regions to another. That's why we introduce an extra condition " $U_{actual\ i} = U_{potential\ i}$ ". Based on the LS method one can calculate Y_{δ} , ensuring the mentioned equality. $Y_{\delta} = 19.4$.

For the certainty we have analyzed aggregate interregional food ties of southern Siberian Federal District (SFD) with federal subjects of Russia and regions of neighboring countries. Calculations showed that there is a potential for further strengthening of interregional cooperation between subjects of southern SFD and North-Kazakhstan, Pavlodar oblasts, Xinjiang Uygur Autonomous Region. Actual interregional exchange of goods between subjects of southern SFD and mentioned regions – subjects of the RF and neighboring countries does not correspond to high level of their economic development, in spite of geographic proximity of these regions.

In particular, potential for increasing mutual trade cooperation between RF subjects – southern SFD and Altai Krai amounts to app. 33% of actual turnover, Kemerovo oblast – 28%, the Altai Republic – 9%, Xinjiang Uygur Autonomous Region – 97%.

In future Altai Krai, Omsk and Novosibirsk oblasts can supply grain within the frame of interregional exchange of goods. Altai Krai, Omsk and Novosibirsk oblasts can also supply dairy products at their shortage in the majority of other SFD regions. Omsk and Novosibirsk oblasts, Altai Krai and the Altai Republic can supply meat products on the basis of interregional ties.

Food ties of Siberia show possibilities of the regions to strengthen interregional cooperation.

Thus, strengthening of interregional and international food ties gives ample opportunities to develop the agricultural industry. For those Siberian regions, which have no conditions to produce vegetables, food grain, some dairy products, etc., it's highly important to ensure regular yearly supplies of these goods for population. Interregional exchange of goods will have a positive influence on the development of the agrifood market of Siberia.

CONCLUSION

1. Offered verification of theoretic aspects for agrifood market development on the basis of strengthening interregional and international food ties with identification of internal and external factors in the current context enables to solve problems more efficiently referring to both validation of strategic and achievement of existing social and economic goals on different levels of regional economy management. The conducted research showed that the difference in involvement to integration processes (the Customs Union, EurAsEC) remains and increases between the regions. That is expressed in significant differentiation of use of internal and external factors with the purpose of reproduction of food resources by regional agribusinesses.
2. It was determined that the concentration and specialization of agricultural production, which are able to initiate a chain of interrelated structural changes oriented to the increase of economy efficiency in the regions, rank high among priorities of interregional and international food ties development. Particularly, it refers to the regions with existing specialization. Primarily, this is the case of Altai Krai, Novosibirsk and Omsk oblasts with regard to the production of food grain and dairy products, having huge natural resources and material and technical facilities to process and manufacture finished products (grain and cereal products, milk and dairy products). That's why these regions

- can supply grain and animal products outside their territories.
3. Calculations showed that in order to ensure stable efficient exchange of goods in the regions with traditional raw material specialization it is very important to perform interregional end product exchange depending on demands with ample opportunities to vary line and range of produced goods. Food grain production figures in Altai Krai provide clear evidence hereof. In 2013 it produced flour amounting to 1.5 mln tons (61.5% Siberia volume), pasta and cereals – 110.2 thousand tons (70.7%) and 239.8 (81.5%), respectively. Up to 80% of wheat production is processed in the Krai in whole. So, Altai Krai has vast interregional and international ties with the majority of regions of the country and near-abroad and far-abroad states. Besides, Altai Krai and Omsk oblast with significant primary resources of milk and meat can supply 604 and 100 thousand tons products, respectively, to the other regions of Siberia and Far East based on interregional food ties. At the same time: Buryatia and Tyva Republics with huge feed supplies are able to increase animal products, especially lamb, that enables to cover meat requirements of local population and to supply products to many regions of the country and abroad based on interregional ties.
 4. The analysis showed that interregional food flows of Southern Siberia can be characterized as relatively balanced. The research has proved that there is a potential for further strengthening of interregional cooperation between subjects of Southern Siberia and North-Kazakhstan, Pavlodar oblasts, Xinjiang Uygur Autonomous Region. Actual interregional exchange of goods between subjects of Southern Siberia and mentioned regions – subjects of the RF and neighboring countries does not correspond to high level of their economic development, in spite of geographic proximity of these regions. In particular, potential for increasing mutual trade cooperation between RF subjects – Southern SFD and Altai Krai amounts to app. 33% of actual turnover, Kemerovo oblast – 28%, the Altai Republic – 9%, Xinjiang Uygur Autonomous Region – 97%.
 5. Forecast of agrifood market development on the basis of interregional and international ties of Southern Siberia is based upon world food market tendencies: grain, milk and meat production and consumption growth, enlargement of share of developed countries in the world food trade structure, implementation of new technologies to the agribusiness. Regional asymmetry in the world at the same time is a positive factor defining possibilities for further division of labor in the agribusiness, establishment of complementary economic structures using comparative advantages of different countries. Siberia is able to expand traditional markets and diversify, for example, grain supply channels to Southeast Asia with potential consumption volume more than 20 mln tons.

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