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HOW TO MAKE THE RUSSIAN GRAIN MARKET MORE EFFECTIVE

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Summary

The Russian agribusiness has immense possibilities. At present it is vital to create such economic conditions under which the farming sector could develop dynamically. The increase in the grain production is of crucial importance for a take-off in all agricultural branches. In this respect, the grain sector is Russia's strategically significant economic segment.

This paper presents both potential possibilities and risk insurance in the Russian grain market. The purpose of the article is to outline an economic appraisal and a holistic analysis of this industrial sector along with elaboration of guidelines which are aimed at adjustment in this area, and commercial process optimization with the view to speeding up the grain production in the Russian Federation, which will enable to raise the export turnover. The practical importance of the paper is based on the fact that if the currently important problems are solved, there is a possibility of ensuring food security, stabilization, and sustainable development of the grain industry.

Key words: *grain market, grain export, agribusiness, risks of the farming sector, grain exchange, agro-industrial market efficiency.*

JEL: *Q13*

Introduction

The basic sector of both Russian and embracing agro-food market is the grain market. The condition of the market is an important quality indicator of a country's economic reforms, and of how efficiently the agro-industrial policy is being implemented. In practice, the grain market includes all the elements of exchange relations. The development of grain market involves not only a wide range of issues, related to the grain farm-out performance, but also a country's overall grain industry.

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The agricultural development with its most essential element, the grain production and its processing, will make it possible for the country to achieve a more stable economic and political position on the world stage as nowadays the grain industry influences the food processing industry to a large degree. In the long view, the same influence will concern the energy industry.

The fact is that without the existence of the highly-developed grain production, it is impossible to increase productivity in animal industries, livestock keeping, agro-industry and related fields. At the same time, owing to different factors in the world, there is a reduction in land and increase in its non-farm uses, which results in food deficit. Also, mining operations, such as oil extraction and natural gas production, are in full swing. Depletion of resources leads to their shortages, so bio-fuel crops can make good for this deficit.

With due regard to overall economy-related elements, the grain market can be considered a peculiar development model for agricultural, primary commodity and food markets. Along with this, the grain economy, being a complex multi-functional and dynamic system, with a wide array of activities, demands top-priority attention to its development from government. It implies that the Russian Federation might gain a foothold both in the grain and bio-energetic world markets, which requires solving a number of domestic problems that prevent the grain industry from sustainable development. Land dispute, low-level production and poor product quality, and export-related issues are the main stumbling blocks. Inappropriate grain sale, limited possibilities of risk insurance, and lack of a grain exchange reinforce doubts of positive agricultural evolution.

Research rationale

Grain farming, as the largest sector of the regional agribusiness, has traditionally been a basic building block of regional social-economic development. However, the slow pace of structural and technological modernization, as well as out-of-date capacity in the grain storage and processing, were distinctive features of this sector. Such factors as: shortcut agricultural methods, inaction in practical implementation of innovation production technology, omissions in grain processing and grain use, unbalanced disposition of sown area have resulted in a crop yield gap, i.e. a much lower level of crop yield in Russia than in agriculturally-developed countries. Currently, grain is by no means of high quality.

High product marketability and price maintenance for extended reproduction are key factors of grain production incentives. The state has been using one of practicable methods of grain market regulation: procurement and cash grain interventions that are powerful market regulation instruments. However, under current conditions in Russia, these instruments are not only inefficient but also cost demanding. As a result, it requires a transition to an integrated regulation of regional markets. Besides, the use of adaptable and timely market leverage is vital. Due to this fact, the elaboration of theoretical and methodological background and practical guidelines for the Russian grain market is of high priority.

Background of the problem

Such outstanding scientists as Abalkin, L., Atkinson, A., Barkem, A., Voelken, A., Jevons, W., Keynes, J., Kondratiev, N., Kotler, Ph., Porter, M., Samuelson, P., Smith, A., Tracy, M., Hayek, F., Schumpeter, J. and Schniper, R. were the first to contribute to scientific understanding of merchandise market grouping; research and forecasting effort of market conduct of manufacturers, sellers and buyers; and efficiency of their interaction in a competitive environment. Their scholarly works, dedicated to theoretical, methodological and systematic issues, are a scientific base for carrying out new research in the field of market economy development in the current economic environment.

Although economics writers dealt with many economic issues on grain market matters, theory, methodology and practice of grain market development were not properly considered. Similarly, there was a lack of attention to natural, economic, and geographical features of regions. Finally, state regulation of regions and methods of grain industry management were not a prime focus.

We have determined the theme of the paper for the following reasons:

- grain market as an entire integrated system with unsettled issues;
- grain market complexity and versatility;
- urgent need for a search for acceptable solutions to an array of problems.

Methods

Theoretical underpinning and methodological foundation of the research are based on fundamental works of Russian and foreign academic economists who have made a great contribution to the following problems: the evolution and regularity of development of market relations, strategic management of agricultural development, the agricultural market as a whole, and the grain market in particular. As a part of the study, the authors have used logical reasoning, economic-mathematical modeling, a constructive analysis, as well as statistical, descriptive, and comparative methods.

Hypothesis

Two years ago Russia pursued the policy of winning back the grain market as it had lost established customers in 2010, in the period of the exports ban. Since that time, the country has been trying to make its comeback.

According to statistics of the International Grains Council (IGC), Russia should step up grain exports to 20 million tons so that it may become a grain market leader.

Experts claim, demand for grain is increasingly rising throughout the world despite high prices. Top-ranking economists of the International Grains Council reckon we are in for a global economic rebound in 2013-2014. However, an insignificant rebounding of grain production is said to be absorbed by usage.

In accordance with the data from IGC, Russia's grain production in the 2012-2013 season amounted to 37.7 million tons, which was the lowest yield for the past decade. It resulted from bad weather conditions in 2003-2004 – on the one hand, on the other hand – from the grain export ban.

Therefore, we can hypothesize that if a number of issues in the Russian grain market are solved, there are all possibilities of a substantial increase in the grain production. It will allow raising exports, providing food security, and stabilizing the agricultural development.

Russia's grain market is still at the forming stage. At one extreme, it is characterized by irregular and unstable meeting demand for wheat throughout regions. At the other extreme, there is unregulated delivery of grain lots from grain-growing regions. Such factors as inadequate and insufficient submission of information to bodies of local executive power (which are responsible for predicting quantity demanded) generate lots of buzz. Logistics bottleneck at the regional market also triggers inadequate administrative action.

The first-level wholesale market (where farmers are main sellers of wheat) consists of a great number of backyarders or sole traders, whose relations between themselves – on the one hand, and wholesale intermediary firms – on the other hand, are characterized as highly-competitive.

As a rule, the geographical boundaries of such markets are the same as administrative border-lines. The first-level wholesale market is not highly-concentrated, and its entities' shares are balanced.

The second-level wholesale market (of wholesale intermediary firms) embraces the territory of the Russian Federation. The processing companies and other wholesale consumers are buyers, while wholesale intermediary firms are sellers. The market is moderately concentrated, and its entities' shares are balanced.

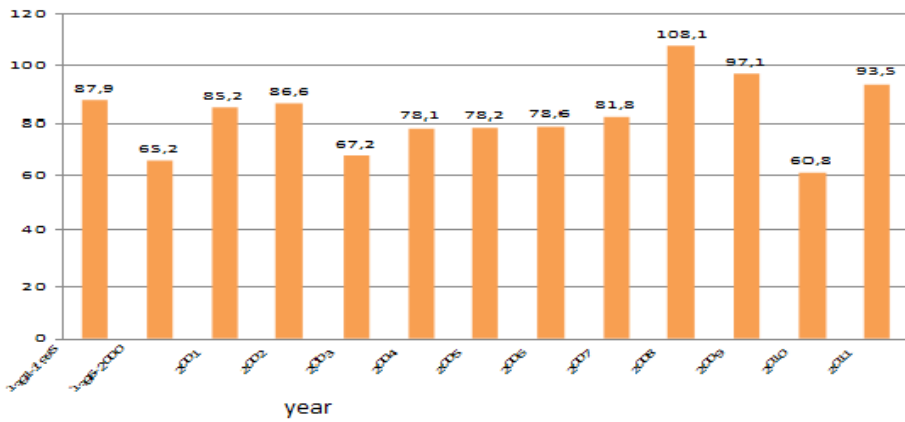
The state of the grain market is described in terms of planted acreage sizes, gross grain yield, and structural changes of certain farm produce. The Russian Federation possesses 115 million hectares of arable land and 78 million hectares of area under crops (Wegren, 2011).

Gross grain yield varies significantly from year to year, which occurs due to changes of climatic conditions. Last but not least, there are many blunders in material and technical resources supply, so farmers are not provided with everything they need, e.g. fertilizers.

On average, the gross grain / pulse yield in Russia amounted to 87.9 million tons from 1991 to 1995. However, in 1996-2000 it fell to 65.2 million tons, and in 2001- 2010 the average harvest amounted to 82.17 million tons. Due to droughts, the lowest volumes of grain production over the past decade were recorded in 2010, and the highest yield was in 2008. In 2011, yield amounted to 93.5 million t (Wegren, 2011; World Grain Statistics, annual).

On Chart 1 is presented the diagram of the dynamics of gross grain yield in all categories of farms of the Russian Federation from 1991 to 2011.

Chart 1. Dynamics of gross grain yield in all categories of farms of the Russian Federation from 1991 to 2011.



Source: Portal of the grain market; Site Institute for Agricultural Market conjuncture.

Under conditions of market relations transition (1996-2000), the decrease in gross yield of grain crops in the Russian Federation and the lack of provision of staple foods to the population, led to significant foreign purchases of food and fodder grain, as well as livestock products (Liefert, 2010).

Currently, the Russian Federation can be called a truly grain power. However, despite a gradual recovery of the market, there is a large number of recurring problems which complicate and sometimes deter the grain market from further development.

Under conditions of promotion of competition in the agribusiness and entrepreneurial activities, grain distribution channels have greatly changed. Before, agricultural products have been distributed centrally. New distribution channels have emerged, such as delivery of grain by means of tied credit, barter, exchange sale, auctions, and others.

One can claim that Russia’s grain sector has already gone through a sore trial: the most difficult years of transition from the planned economy to the market economy. So far, there has been a restoration of the country’s grain market, which helped to minimize the import of grain crops and establish robust exports.

Russian grain is a great success in the international arena, with the highest demand for it in the Arab countries (Liefert, 2010). The greatest progress in grain export occurred in the agricultural season of 2011-2012. It was the time of outlining a country’s steady aspiration to be a leader in grain deliveries to the world markets, which changed the correlation of forces among grain-exporting countries. The total export volume of Russian grain in that season was a record year and amounted to about 26.5 million tons, including 21.5 million tons of wheat and 4.7 million tons of barley (World Customs Organization, Annual report).

Within the Table 1 is shown the list of Russia's top ten grain-importing countries (according to the data for 2011-2012).

Presently, the world grain market is significantly reshaping, e.g. in 2011-2012, the USA, Russia and Australia became the largest exporters in the global grain market, while several years ago the market was under total control of five exporting countries: the USA, Canada, Australia, Argentina, and the EU.

The total export supply of grain from the top three exporters is over 70% of the total world trade volume. The key indicators determining the degree of impact of a country in the world market include: firstly, the share in the global trading; secondly, a ratio of a country's carry-over stocks to average annual domestic consumption. According to both indicators, the USA is today's leader. The main grain-consumers are still APAC countries, such as China, Japan, Korea, Indonesia, and the Philippines.

A steady specialization has come about in the world grain market: the grain production is localized mainly in developed countries, whereas many emerging economies are not able to solve their grain problems and are bound to import grain widely. Hence, the world grain trade is booming. In addition, experts from the Organization for Economic Cooperation and Development (OECD) make it clear that amid the world's sufficient grain production, the problem of grain deficit will be particularly focused on the poorest countries, which are unable to provide money for grain imports.

At the present point in time, there are great changes in the world grain market, implying the following: reduced crops plantings in the USA and Canada diminished carry-over in major exporting countries, and a steady rise in prices. Additionally, new exporting countries, such as Russia, Ukraine, Kazakhstan and Argentina have entered the market and are going to win it actively. Likewise, Argentina quickly responded to the favorable market opportunities and increased wheat plantings by 10%. Various factors influence the global grain market. There is not only a reduction in sown areas in developed countries but also soil erosion, in particular, in many Third World countries. The world population is growing, which results in an increase in grain consumption. The role of wheat as a food crop is rising in the Third World countries (the Middle East, Africa, Latin America); wheat consumption is growing in traditional rice-growing countries, such as China, due to urbanization and a significant shift to Western food.

In the past decade there was a process of intensification of grain production in the embracing market. With the reduction in cultivated areas by 5.5%, the gross grain yield increased by 2.4%. On average, grain yield increased by 9%. Both consumption growth and increase in the world grain trade (5% and 8% respectively) have triggered a step-up in production.

Table1. The largest countries, importing Russia's grain (2011-2012)

Country	Share
Egypt	25%
Turkey	13%
Saudi Arabia	7%
Israel	4%
Kenya	4%
Italy	4%
Yemen	3%
Spain	2%
Azerbaijan	2%
Tunisia	2%
Ethiopia	2%
Georgia	2%
Djibouti	2%
Jordan	2%
Lebanon	2%
Others	25%

Source: Portal of the grain market; World Customs Organization.

Thus, from 2002 to 2011 the world wheat market developed under the influence of the following factors:

- production decreased by 1%, or 11.2 million tons;
- total of world trade increased by 3.3%, or 3.4 million tons;
- at the year end, residues of wheat decreased by 17%, or 26.8 million tons (Site "Agro-industrial complex online"; Site about grain "pro zerno").

As wheat is a dominant crop in the world grain market, the reduction in wheat residues implies a reduction in the amount of grain of the total world grain market.

The main factor that influences the state of the world market balance is the increase in grain consumption by 2.1%, which leads to a significant reduction in grain residues under conditions of a decrease in the world production. In addition, the increase-decrease ratio has the greatest influence on price changes in the world grain market. The increase in residues leads to a decrease in prices, while their reduction results in price development.

In principle, price performance evolves under the influence of residues variations at the end of the agricultural year. All indicators make it possible to forecast the consolidation of global wheat prices. On the assumption of mathematical relationship, the growth in mid-year wheat prices is likely to reach 12-15%.

The world grain sector is of great interest to agricultural producers and investment funds. This is due to the prospects of food price advances in consequence of population growth and intense consumption-production balance of agricultural products. In New York, at the conference on Agro-Investments (May 2011), the world analysts and representatives of funds claimed that 25-30 billion USD would be injected in the agricultural sector of the global economy from pension (Site Institute for Agricultural Market conjuncture), health care and private funds on an annual basis. It would happen if only the agricultural sector was ready to accept those investments. For funds, such financial assets are considered to be a distribution of risks in the investment portfolio, in accordance with geography, cultural diversity, profitability, etc. There are the following regions worth investing in today: South America, Africa, and Australia. Russia is also attractive for investment, especially due to its land resources and technological breakthrough opportunities, despite the fact that it may seem to be obscure and unpredictable. At the same time, Russia has robust reasons for taking a leading position in the world grain market, though it is necessary to solve serious internal problems.

The land question

In the Russian Federation, farmers are constantly facing problems related to the management of agricultural land. First of all, the owner is not sure that his land title is protected. Unfortunately, the secondary agricultural land market has still not been built up. Less than 10% of agricultural land has certificates of ownership. Vast areas are not surveyed and have no cadastral numbers. The processes of primary clearance of land are going in accordance with vague and ambiguous legislation, and the use of schemes that can often be disputed. Completion of paperwork can take many years.

The term «Land under control» has been widely practiced. This is the land cultivated by farmers who have agreements with local authorities about the use of land, but by virtue of law, farmers have neither a right to own this land nor a land rental agreement. It concerns practically all farmers. However, some of them have not been assigned a plot of land at all.

«The land under control » carries great risks for the farmer, because it may be confiscated at any time. Besides, this land is not supposed to be mortgage-able at the bank.

The legislative amendments to farmland transaction rules came into force on July 1, 2011. Some problems concerning transfer of farmland have been solved. The legislative act leaves many questions for officials' final explanation, though. They are officials of different levels whose role is reinforced. Thus, there is room for corruption, raiding, and doubts on the part of investors. All of these obstacles do not contribute to the fact that the farming industry will have a great appeal for investors. Also, it is essential to understand that farmers are reluctant to invest heavily in maximum tillage. Instead, they minimize fertilizing, whereupon soil may be impoverished, which leads to a considerable diminution in yield.

It is required that amendments to legislative acts, regarding transfer of farmland, should be drafted in the shortest possible time, with the aim of simplifying land registration procedures alongside with rigid regulation of this process, and minimizing the role of officials.

Corn market and risk insurance issues

One of the main problems for Russian farmers is demand for their produce. In the grain industry, farmers face the problem of excess supply, which happens every year.

It is commonly known that the “grain year” begins on July 1st, which is the beginning of the grain harvest. From mid-September till mid-October the largest quantity of yield is delivered to the market, which ultimately causes the lowest prices for grain. Afterwards, prices begin to rise steadily, which continues to the end of the “grain year”.

Farms, which are not burdened with debts and with garners in possession, are able to resist price fluctuations. They affect the sale of grain as far as demand and supply stabilize (from winter to spring). The farms with debts and without garners have to sell grain at a very low price, which occasionally forces them into bankruptcy.

As a rule, sizable enterprises have marketing outlets, as well as possibilities of exporting and selling grain by the agency of their own mills and bakery plants, whereby making grain prices go up. Conversely, small-scale farming units need to seek help from middlemen. So, grain is sometimes sold under cost.

For the past decade, government has played a key role in rendering help to small farmers in the matter of grain procurement. Government intervention in the grain market has contributed to financial backing and fair grain pricing.

In case of grain intervention, private companies fixed their purchase prices, being guided by state purchase prices. It means that they fixed prices at a little bit higher rate. In this respect, if state purchase prices rose, it made market prices increase.

The state, with the help of interventions, solved the task of updating the state resources of grain food to ensure food security of the country.

However, this instrument of regulation of the market is rather limited and has some negative sides. So, in the high-yield years state-owned grain elevators were working at full capacity, with enormous costs for their maintenance and doubts about where to use the purchased grain in an appropriate way. It should also be considered that in the face of rising energy costs, the increase in purchase prices for grain leads to higher costs of flour and bakery products, which will have an adverse effect on the poor.

It is necessary to develop a mechanism for adjusting prices for raw materials and products in order to ensure producers’ profitability, which is necessary for its further reproduction. The establishment of an efficient grain exchange and auction sites is likely to play an undeniable role in the process of organizing sales of products both from large and small producers. So, there will be an opportunity for market participants to insure risks and take action against monopolism in the grain industry.

Problems of grain export

Another deterrent in the growth of the grain market in the Russian Federation is the insufficient level of infrastructure development aimed at grain exports, which causes a monopoly in the export grain market.

Expansion of grain exports is one of the conditions for sustainable development of the agrarian sector of the country. Indeed, in recent years, Russia has shown itself to be one of the most prominent players in the world grain market, expanding the volume and geography of deliveries. In consequence of the budget support, a number of new grain export terminals have been brought up to date, offering exporters a possibility of being actively involved in the preparation of exports.

For a dynamic increase in exports, it is necessary to push aside some obstacles, which will support internal prices and farmers' income. Therefore, it will give motivation to the expansion of grain production without large budget expenditures. The following measures will help establish and step up exports:

- Special attention should be paid to combating the practice of informal regulation of not only exports, but also of the market turnover of grain in some regions, which consistently manifests itself in the form of prohibitions on the export and extralegal collection requirements for different permits and certificates.
- There must be an increase in information transparency of the government in regards to the problems related to production, consumption, and regulation of the grain market. A lack of information creates a wide field for various speculative statements, and gives rise to rumors. As a consequence, it hinders farmers, exporters and other market participants from making rational decisions.
- Subsidy assistance is a very popular measure of export support, which is actively used by 35 member countries of the WTO. The use of various export subsidies will increase competitiveness and expand the export of Russian grain.
- While implementing export-related plans, it is suggested that the maximum amount of subsidy should come to 15-20 dollars per ton (Site Institute for Agricultural Market conjuncture). This being said, different directions of export subsidies must be taken into consideration: compensation of a part of expenses incurred by the exporter due to the underdeveloped infrastructure (collection of various documents in state bodies, transportation, transshipment, demurrage of vessel, and others); the provision of state guarantee and insurance support; loans with subsidized interest rate payments in advance purchases of grain from agricultural manufacturers, etc.

The quality of grain

A lot of attention should be paid to the quality of grain, as in recent years the requirements at the external markets have increased significantly. In a fierce competitive battle, only the producers, growing environmentally-friendly grain of high quality, will get the upper hand. The problem of quality of Russian grain is quite serious now, which mainly occurs due to lack of government control.

In accordance with the adoption of a number of Federal laws (№ 248-FA № 242-FA) in July 2011 in Russia, some innovations were introduced: the legal framework of the system of state supervision and control in the sphere of turnover of grain and products of its processing was liquidated; the unitary procedure of grain control (in such key grain industry infrastructure facilities as: elevators and grain warehouses) was discredited, and the state certificate of quality was abolished.

So far, the Russian Federation has turned out to be the only country, among the largest grain producers, that refused the state control over the quality of grain and products of its processing. This creates serious risks for the development of the domestic agribusiness and the economy of the country as a whole with the view to ensuring the food security of the Russian Federation and maintaining the status of our country as one of the main suppliers of grain in the world market. The idea of cancellation of grain quality control (with the aid of the administrative reform) was designed to get rid of a large number of control organizations, whose services are both expensive and time-consuming for market participants. However, such intentions can lead to negative consequences. At the time being, the lack of government control is likely to increase deliveries of substandard and hazardous grain on the part of dishonest exporters to foreign countries. For this reason, Russia may be driven out of the world grain market.

Bearing in mind the high social significance of ensuring food security of the country, the President and the Government of the Russian Federation gave a number of instructions to the Ministry of Agriculture, aimed at the revival of the system of public control over quality and safety of grain and products of its processing, preparation of legislative acts, including a new edition of the law «On grain».

To preserve the quality of grain products, as well as its increase in Russia, it is firstly significant to restore the state control over grain quality. Secondly, it is necessary to make use of new technologies at all stages of production. Thirdly, it is needed to introduce certifications according to international standards ISO.

Consequences of Russia's entry into the World Trade Organization

According to Aslund (2010), in the nearest time, Russian farmers may face new challenges associated with Russia's entry into the WTO. It will increase competition in the Russian food market; therefore, it may lead to a reduction in the demand for domestic agricultural products, which at present cannot fully compete with foreign ones.

The ambiguousness of WTO entry conditions affect market development adversely; or rather, it is a failure to understand the role of state backing towards farmers, which is more uncertain than the vagueness of the entry into the WTO. In principle, domestic food producers have a possibility of competing with foreign companies on equal terms: however, the lack of capabilities to predict market conditions for a 3-5-year period of time does not allow market participants to plan their activities in the mid-term period, which negatively affects the investment attractiveness of the industry.

According to the calculations of the Russian Agricultural Academy, the entry into the WTO, in terms of the current conditions, will lead to a reduction in Russia's share in the world exports from 1.3% to 1%, with a simultaneous increase in the share of imports from 1.9% to 2.3%. After entering the WTO, the total risk of a decline in competitiveness in the agricultural sector of the Russian Federation will amount to 4 billion USD (Aslund, 2010).

The experience of other countries shows that before entering the WTO any country needs to protect the agricultural market significantly, in order to avoid negative economic consequences after the entry. These effects are associated with the opening of the domestic market for imported products. Food markets of developed countries manifest a higher sustainability in comparison with the Russian market, as they are rigidly regulated and supported by the state. It is also important to mention that WTO member countries have gained considerable experience, and actively use it in applying protective measures in the framework of this international organization.

A generalized list of the main issues of Russia's grain market and the ways of solving them are given in Table 2.

Table 2. List of the basic problems of the grain market of the Russian Federation and ways of solving them.

Problem	Ways of solution
Land question	<ul style="list-style-type: none"> • Elaboration of amendments to the legislative acts regarding the land turnover with the purpose of simplifying procedures for the certification of land and strict regulation of this process; • Minimization of the role of officials in this process.
Problem of grain marketing and risk insurance	<ul style="list-style-type: none"> • Establishment of an efficient grain exchange and auction sites.
Export problems	<ul style="list-style-type: none"> • Reduction in political risks and increase in the transparency of the state; • Export operations registration based on the principle of «single window»; • Development of transport infrastructure; • Promotional subsidy.
Problems of WTO entry	<ul style="list-style-type: none"> • State support by means of subsidies for farmers in the Russian Federation.

Source: compiled by the authors

As one can see, there are many problems regarding the Russian grain market. However, there are no unsolvable tasks. It should be emphasized that the political will is the most crucial factor to solve many of these problems in the mid-term period. One of the urgent tasks should be the solution to marketing and risk insurance problems of domestic grain market participants. This is a burning question due to the fact that the above issues are of vital importance, especially for the country's farmers. After identifying the key problems of the grain market, we will move on to the estimation of capabilities. It is commonly known that the USSR used to be a grain importing country. For the recent years Russia has evolved into a grain exporting country, and in the 2011-2012 agricultural season it became the second largest exporting

country, falling behind the USA only. And even the drought in the 2010-2011 agricultural season did not prevent Russia from restoring its export position in the international grain market the next year, moreover – it enabled to reach new heights, despite the fact that the government had imposed a ban on grain exports (World Grain Statistics, annual).

Table 3 presents five major exporting countries with their projected grain export rates for the 2011-2012 agricultural season. Table 4 informs about five major exporting countries with the volume of grain export deliveries for the 2010-2011 agricultural season. Table 5 shows five largest exporting countries with the volume of grain export deliveries for the 2009-2010 agricultural season.

Table 3. Five major exporting countries with their projected exports of grain for the 2011-2012 agricultural season.

No.	Exporting country	Volume (in mil. t)
1	USA	74,0
2	Russia	26,5
3	Australia	20,4
4	Argentina	19,5
5	EU	16,0

Source: Wegren, 2011; World Customs Organization.

Table 4. Five major exporting countries with their volume of export deliveries of grain on the 2010-2011 agricultural season.

No.	Exporting country	Volume (in mil. t)
1	USA	83,6
2	EU	27,2
3	Argentina	25,4
4	Australia	20,4
5	Canada	20,0

Source: Wegren, 2011; Site about grain “pro zerno”.

Table 5. Five major exporting countries with their the volume of export deliveries of grain for the 2009-2010 agricultural season

No.	Exporting country	Volume (in mil. t)
1	USA	81,0
2	EU	24,0
3	Russia	21,2
4	Argentina	19,4
5	Australia	18,9

Source: Site about grain “pro zerno”; Site “Agro-industrial complex online”.

Export turnover of the grain market of the Russian Federation can be compared with the export turnover of Russian timber and arms. According to the results of the agricultural season of 2009-2010, which preceded the drought in 2010-2011, (when the export of grain was closed), Russian grain exporters' proceeds came to about \$5 billion 21.2 million tons of exported grain. Exports of timber totaled \$7.3 billion, and exports of arms totaled \$8 billion. Basing on the results of 2012-2013, it was planned to increase revenue for the exported grain by 15-20% (Portal of the grain market; Site Agro-site review).

There is a developed infrastructure for cultivation, transportation, and storage of grain. The infrastructure still grows and increases the production of crops. At the beginning of 2012, the total storage capacity of grain in the country exceeded 118 million tons. In 2011, the yield accounted for 93,5 million tons. 26.5 million tons were supposed to be exported, while 67 million tons of grain had to be used for domestic needs (Site Agro-site review; Site "Grain Portal Central Black Earth").

We have a completely different situation with the port infrastructure. The operational capacity limits the increase in the export potential. But that is where a positive dynamics is observed. In 2010, a major terminal for transshipment of grain was put into operation in the port of Tuapse. In 2011 – in the ports of Taman and Astrakhan region. A possibility of developing a port infrastructure in the Far East is being considered.

Russia's agricultural market has a significant growth potential as, judging by the level of per capita consumption of staple foods (excluding bread), Russia lags far behind the developed countries. Moreover, a stable rise in incomes of the population creates prerequisites for further expansion of the domestic agro-food market. The external grain market is very promising due to the increase in food prices on the grounds that the population is growing, and the consumption-production balance of agricultural produce is intense.

Russia has a great potential for the development of grain production, land resources and yield capacity, let alone technologies. It implies that 120 and 150 million tons of grain are far from being unrealistic, which makes it possible to export about 50 - 80 million tons of grain (Site "Agro-industrial complex online"). The fact is that grain producers should benefit from it. Besides, grain prices must cover the costs, risks, and technological development.

With respect to the availability of readily available infrastructure, we can say that within the shortest possible period of time, the production of grain crops in the Russian Federation is likely to increase by at least 25% (up to 120-135 million tons of grain per year), which will make it possible to boost exports of grain (while preserving the current volumes of internal consumption) at a rate of 50 - 65 million tons of grain per year (increasing it 2-2,5 times) (Site "Agro-industrial complex online"; Site Agro-site review).

However, it should be taken into account that the availability of infrastructure does not fully guarantee the grain market development. The main problems lie in the fact that the majority of producers cannot enter sales markets, which occasionally makes grain production economically irrational. In this connection, it is vital to develop market

based trading tools for grain (both exchange and off exchange), which virtually remain unused at present (Trading platform IDK).

The exchange is a special kind of an organized grain market, a sort of tool, which determines prices by means of exchange transactions. They contribute to the formation of civilized grain market, specify the level of market prices, promote transparency, link prices with grain quality and insure producers and consumers against price fluctuations. Therefore, specialized grain exchanges or commodity exchanges should certainly be on hand in the grain distribution system.

It is necessary to expand sales of grain by producers by means of exchanges to such an extent that enterprises of the grain processing industry, procurement and sales organizations could become regular customers, and commodity exchanges should be able to quote market prices. Only then will the open grain market actually participate in grain market pricing, while average prices will become guideposts for negotiating contracts.

Nowadays, grain trade on the exchange is an intrinsic market demand. For example, if an agricultural enterprise has been a blue-chip producing and exporting company in the region for the past decade, it should be able to influence the price at which it exports one or another kind of grain products. It should also provide affiliates with a more accurate price indicator for the planning of its economic activities, and, first of all, for operational costs planning. World commodity markets adhere to such principles.

The main problems that Russian grain market participants face, entering the stock exchange, is a lack of both right promotion of this market instrument and security of payment (payment on deals), and also guarantees of physical grain deliveries (in case they are required). If the exchange does not provide a guarantee of delivery of physical goods on open (expose) positions, the grain market operator supposes that there is no point in going to such an exchange. It is a well-known fact: so far, there is no exchange in Russia to furnish strict guarantees of such a delivery. As a matter of fact, the unavailability of supply guarantees on the part of agricultural producers stultified futures transactions. In this regard, it is necessary to adjust enforcement mechanisms of fulfillment of obligations on the deals.

The solution to the existing problems of exchange and off-exchange trading platforms, together with their promotion among grain market participants, will give the country an option of coping with the problems related to grain pricing, marketing, as well as risk insurance.

Conclusion

Grain production potential is huge, but for an inflow of investments into the development of technologies, enlargement and recultivation of land, there is a great need for confidence in the final commercially-viable grain sales. The same concerns a reasonable and intensive support from the government.

In this regard, the governmental influence on the grain market must be more active through the creation and implementation of a multidisciplinary state adjustment policy, interconnected

and coordinated system of economic, organizational, innovative, lawful and other kinds of activities, and creation of effective and transparent instruments for supporting and regulating the grain market.

In the sphere of the grain market development, emphasis is put on promoting the infrastructure development of market exchange and off-exchange trading and promotion; ensuring efficient foreign economic and foreign policy support towards exporters; state financing aimed at the modernization of the system of technical regulation of the grain production; simplifying the procedures of registration of export operations, based on the principle of «single window»; creating a perfect and stable legislative base for regulating the grain market; implementing the certification of grain in accordance with international requirements, and solving the land issue. In view of the problems regarding grain market sale, faced by many farmers, as well as the lack of effective levers of risk insurance in the grain industry, we can say that an effectively operating grain exchange should become one of the most important elements of transparent grain market.

The formation of the exchange and off-exchange (auction) trading is one of the current issues in the grain trade. Despite the fact that Russia has become one of the biggest players in the world grain market, trading grain instruments are very poorly developed. Their development is important for both producers and the state as a whole, as it will allow small grain producers to enter the market and implement deliverable transactions on agricultural output at market prices, rather than at understated prices fixed by resellers, as it happens now.

In the mid-term period, the creation of efficient work instruments in the form of commodity: grain exchanges, auctions, and also promotion, together with the development of infrastructure, will allow the Russian Federation to become a leader in terms of grain exports.

Results

The research reveals the following results:

Firstly, theoretical and methodological background to the grain market performance has been established. Its main difference is that the consideration of the problem of an increase in the grain quantity and the improvement of selected grain quality should be related to grain production/processing, whereas the cross-industry exchange of products inside/outside the grain industry should be related to the grain market.

Secondly, development strategy of the grain production/market has been substantiated, with due regard to regional food provision. The strategy includes objectives, tasks and development priorities aimed at the competitive growth in the grain production, accelerated implementation of resource-recovery technologies, and technical modernization. In addition, there should be appropriate conditions for an efficient system of agricultural marketing, a rational geographical distribution and specialization of the grain industry.

Thirdly, a grain market development mechanism has been elaborated on an organizational and economic basis. By this mechanism we imply action framework, i.e. a system of organizational, economic, social and legal measures basing on priority guidelines. These

top-priority goals are: arrangement of general operating procedures, maintenance of fiscal sustainability and economic stability in the grain economy, and increased sales, which allowed using the multipronged approach to the implementation of a special-purpose program of managing the grain industry.

Fourthly, methodological procedures, dealing with grain cluster generation, have been improved and amended. A grain cluster is a market institution for realizing the development strategy of the grain industry and the grain market with the view to:

- coordinating its participants' performance;
- enhancing their investment appeal;
- reducing transaction expenses;
- reaching a synergistic effect.

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