

# FOOD SAFETY IN THE RUSSIAN FEDERATION, ITS PROBLEMS WITH THE SOLUTIONS

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## ABSTRACT

*Currently Russian economics is experienced considerable economic pressure from foreign countries, which applied sanctions against businesses including total ban on high-tech technologies. However, taking response measures by restricts on food imports has allowed to reduce the level of competition in the agrarian market. In the mid-term the additional level of budget financing together with the Customs, tariff and non-tariff regulations, infrastructure development, stable effective domestic and foreign demand on the agricultural products will promote the growth dynamics for the agro industrial sphere, implement the industry potential and intensify the import substitution process.*

**Keywords:** Import-Dependence, Food Security, Sanctions, Food Industry, Agriculture.

## INTRODUCTION

The recent state policy in the development of the agro industrial sector creates the favorable conditions promoting the growth in agriculture and food industry. Indeed, in the 90s the dependence on import reached 70% for some food. Today the situation has significantly changed. 2010 saw a doctrine of food security defining the key spheres and objectives in agriculture development in Russia. The experts figure out that in 2010 the import of the food from the countries threatening to introduce the sanctions was 13% only, that is, \$43.1 bln.

## METHODS

With the reduction in the overall rate of the country's economic growth and the world political tension due to the events in Ukraine and the integration of Crimea into Russia the agro industrial sector illustrates a stable growth dynamics. The Ministry of Economic Development and Trade of Russia estimates that in 2014 the production index of agricultural products is 103.5% the production index of food industry is 103.5 per cent. In 2015-2017 production growth rate is was 3.5-4.5% in agriculture, while in the food industry it is predicted to be 3.5-4 %.

However, one should not be satisfied with the figures, the experts believe that food security requires one to produce more meat, fish and fish products, dairy produce on the total

sum of about \$7 bln. And the same amount of money can be spent on the World Football Championship organization in 2018 as on the restoration of 40 mln ha of useless land with its return to the crop rotation.

The volume of the budget financing allocated on the support and probably on the development of the agriculture as well is RU 147.2 bln in 2014 (RU 218.5 bln in 2017). In 2018 the federal budget allocates RU 288.2 bln, in 2016 it is RU 143.2 bln; in 2017 it will be RU 168.2 bln (within the State Program). The Ministry of Agriculture of Russia figures out that the calculated additional need in the subsidies with regard to the intensive expansion of domestic production up till 2010 is more than RU 580 bln.

The potential re-export from the Customs Union member-states and CIS member-states which practice free trade with Russia is one of the additional risks associated with embargo introduction. What is more, there is the unreasonable price rise on the sanctioned list of goods from the friendly countries Russia is negotiating with to increase the delivery volume.

The consequences from the sanctions imposed against the Russian banks (more expensive borrowings, obstacles to obtain them) can become negatives factors for the investors and thus can prolong the periods to implement the plans in modernization and in production increase (Boldyreva, 2017).

The depreciation of the ruble didn't turn out to be an expected gain for some manufacturers of the agricultural raw materials since many participants of the market experience some difficulty in import resource delivery-seeds, agricultural machines, equipment and agricultural livestock.

Recently the agro food sector in Russia is clearly characterized by the main segments with the vivid advantages in the foreign and domestic markets. Comparative advantage index of Russia in a number of exported agro food products shows that wheat, sunflower seeds, sunflower oil, pastas and confectionery products are Russian competitive goods on the world market. The meat of cattle, milk produce is rather weak on the market with relatively low dependence on import. The country can improve the situation and reduce the level of import dependence with rice, potato, oil seed rape, poultry in the world system.

Up till now the promotion of the products in the world markets is constrained by the non-implemented advantages from the participation in WTO and the Customs Union, these advantages are low competitiveness level of the products in the context of the limited state support for the agriculture and non-tariff barriers in domestic goods delivery in foreign countries. Along with that, in the nearest future due to the political tension the negotiations about the Russian product delivery in the UN member-states are highly unlikely to occur (Novák, 2014).

Positive trends in crop farming will further be connected with the efficient land use including the application of the modern soil protecting and resource saving technologies. The measures within the Federal Special Purpose Program "*Development of agricultural land amelioration in Russia in 2014-2020*" will introduce the modified land into usage due to the reconstruction, technical re-equipment and the construction of new amelioration systems, will protect the land from the water and wind erosion, will increase the capacity of the existing and new agricultural land and other measures (Zhuravlev et al., 2015).

The development of the corn market will require to continue the state support aimed at the upgrade of the domestic and export infrastructure including the one within the state program, such as the construction of the corn terminal in the Far East Federal District, the approval of the Federal Law "*On the corn product public warehouses*" presupposing the improvement of the legislation on the corn usage as security in giving loans to the agricultural producers.

The growth rate of crop production from 2014 to 2017 was 18%, including the growth in vegetable production. The main share in the crop production output is the production of grain and leguminous crops, which in 2014 was equal 16.6%.

Considering the increase in production and the conjuncture of the world market, the price of a new crop grain may reduce to 8,000-8,500 rubles per ton. Grain export may reach 40 million tons in season 2018/2019. In the midterm, due to the increased yields, the production of grain may increase by 16-19% (up to 107-110 million tons) and export will be about 45 million tons (Table 1).

Name	Report	Assessment	Prediction		
	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Grain resources in total	106.1	116.2	117.6	118.7	119.6
Production	92.4	102.0	103.0	104.0	105.0
Import	0.9	0.7	0.6	0.55	0.5
Use	92.7	102.1	103.5	104.6	105.6
Export	25.4	32.0	32.3	32.2	32.4
Internal consumption	67.3	70.0	71.1	72.4	73.1

In the mid-term the high degree of production dependence on the unfavorable agro meteorological factors, simplified land cultivation culture (violation of the crop rotation, low volume of fertilizer usage), un-developed infrastructure of the export (lack of transshipment capacity in the deep-water ports, limited traffic throughput capacity of access ways) are the risks for the corn sphere development. Besides, there is a possible risk of rice production decrease due to the decrease of tariff shelter for this product in the context of Russia membership in WTO.

On the whole, high rate of return for the oil-bearing crops, their significant potential due to the modern production aimed at the import substitution of the goods, as well as the diversification of the high value-added products contribute into the increase of the volume for the traditional agricultural crops, introduction of their efficient processing and create the prerequisites to master less required crops, for example, oil flax (Kirby, 2005).

In 2018 the output yield of the sunflower is estimated to be within 10.9-12.1 mln tons, which is 5.9% higher than in the previous year and but 20% higher than in 2012. This year the vegetable oil output yield is expected to be about 5.2-5.4 mln tons which is 12% higher than the figure of the previous year and can become a record indicator for the whole history of the Russian fat-and-oil industry. The yield second in volume after 2013 creates the objective prerequisites to strengthen the achieved position in the export markets. Along with that, the reduction in customs tariff in sunflower seed export impacts the volume of the raw resources export.

In 2013 natural catastrophes (floods) in the Far East affecting the decrease in soya bean yield in this region impacted the production volume buildup for the soya beans in 2014. As a result, this 2017 year the soya yield is expected to be about 2.7 mln tons against the unprecedented 1.8 mln tons in 2012.

The world demand on the highly processed products preserves the trends in building up the gross collection of the oil-bearing crops including the one due to the increase in crop yield capacity.

## RESULTS OF A RESEARCH

The Ministry of Economic Development and Trade of Russia, in 2018 the output of vegetable oils will exceed the level of 2014 by 20-24%. Despite the refocusing of agricultural producers on other agricultural crops due to some doubts occurred in 2013 the crop area for the sugar beet was expanded a bit in 2017 which was determined by the positive changes in prices on sugar in the first quarter this year. For example, Krasnodar and Stavropol regions saw the largest expansion of the crop areas.

With due regard to the vegetative growth of the sugar beet the overall volume of sugar from the sugar beet yield in 2018 is expected to be about 6 mln tons.

In the mid-term the forecast is that the output of the beetroot sugar will reach 4.4 mln tons supported by the relatively stable yields.

The main risks in the sugar beet sub sphere are connected with the consequences from the sanctions imposed against a number of banks together with the deficit increase of ruble liquidity, stricter bank regulation and limited state support. The loan resources becoming more expensive and the complicated procedure to obtain them trigger the reduction in the planned investment volumes in the sugar industry (Poltarykhin, 2016).

Defensive tariffs on the sugar import from Moldova signed the Association Agreement with the EU with free counter yearly deliveries of sugar could positively affect the protection of the domestic sugar market.

In 2018 the vegetable production volume (105.4%) and potato production volume (104%) are expected to rise. The ban on vegetable import introduced in August 2014 from a number of countries can push the development of the vegetable farming. However, winter-spring 2015 can see the price leap connected with the low level of development and provision of the respective technologies and equipment to store the vegetables and potatoes. Greater access of the domestic products to the sales network is seen to have positive effect from the ban on vegetable product import from a number of countries. Later the technological advancement, the improvement of sectors' infrastructure is required to increase the competitiveness level.

The forecasted growth in vegetable yield output in the mid-term is determined by the increase of production share in the corporate sector, by the storage area expansion, as well as by the advancement of the capacities in primary processing of products.

Vegetable production is expected to increase due to, first of all, the increase in the production of protected ground vegetables. According to the data of the Federal State Statistics Service, in 2017 the area for the green houses in the Russian Federation in the agricultural enterprises was about 1 995.44 hectares. In the Russian Federation the production of the protected ground vegetables does not cover the population's need and the deficit in the products is covered by the imported goods. It is necessary to construct 2.6 thousand hectares of modern green houses to increase the production and import substitution (Terebova, 2017).

In livestock production, the intensification of production and the growth of the corporate sector share will make it possible to realize the production potential and increase the output by 8-9% by 2018 compared to 2013. According to the embraced Food Security Doctrine of the Russian Federation, meat self-sufficiency in Russia should be at least 85% (Table 2).

<b>Indicator</b>	<b>2001</b>	<b>2008</b>	<b>2010</b>	<b>2012</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Meat produced, total, thousand tons	4477	6268	7167	8090	9070	9484	9856
Import, thousand tons	2578	3615	2782	2715	1709	1172	1354
Export, thousand tons	2.9	3.3	19.2	56.3	78.3	83.7	84.9
Balance of trade, thousand tons	-2575	-3612	-2763	-2659	-1631	-1088	-1269
Meat market volume, thousand tons	7052	9879	9930	10749	10701	10572	11125
Meat consumption per person, kg	48.3	69.2	69.5	75.1	73.3	72.2	72.5
Domestic meat provision, %	63.49	63.41	72.22	75.33	84.81	89.72	89.94

Recent years have seen the trend in the decrease of the figures for milk production. In 2018 due to some inert trends milk production declined by 0.3% to 2013. In the milk production structure a high share of private subsidiary farming (48.1%) which is characterized by the usage of extensive technologies in production is one of the deterrent factors for the industry development (Poltarykhin, 2017).

The observed structural transformations in the corporate sector aimed at the technology upgrade, optimization of the breed stock result in the expected increase of milking herb efficiency with its annual growth rate of about 1.5-3 per cent up to 2020. Still the milk production growth in the country by 2018 is insignificant, about 1-1.8% in comparison with 2014.

The missing volumes can be compensated by more delivery of milk produce from, first of all, Belarus with a significant share in the overall volume of mild produce import. Also the missing volume can be covered by the exported products from the CIS states, Asia, New Zealand, Turkey, Serbia, etc. (Rogachev et al., 2016).

Along with that, there is a chance to renew the delivery of milk produce from the countries under the food embargo due to the fact that the lactose-free milk was taken away from the list of the sanctioned products. The experts state that a number of milk products (cheese with long aging, sour milk products, etc.) have a low level of lactose which does not impose any special difficulties for the foreign companies to refocus their production processes on the production, registration and delivery of the milk products as lactose-free ones for the Russian market.

Along with that, the limits on import will provide the wider access for the domestic products to the sales networks which becomes the reason for the companies to increase the production volume.

## **DISCUSSION OF RESULTS**

In recent years there have been significant positive changes in the Russian agrarian economic sector, despite a general slowdown in economic development. The level of provision determined by the Russian government has been achieved for many vital food products. The result is a purposeful government policy in the last decade.

2014 was the defining year in the development of both agriculture and livestock production. When imposing reciprocal measures on sanctions, the import of agricultural products to Russia was limited, which enabled many agrarian producers to increase production and sales?

## CONCLUSION

Thus, in the mid-term the additional level of budget financing together with the Customs, tariff and non-tariff regulations, infrastructure development, stable effective domestic and foreign demand on the agricultural products will promote the growth dynamics for the agro industrial sphere, implement the industry potential and intensify the import substitution process. The combination of the above mentioned factors can positively affect the production volume of agricultural products for a three-year period by 1.3 points and food industry by 4 points.

## REFERENCES

- Boldyreva, I., Andryushchenko, O., Nikitaeva, A., Udalova, Z. & Rudash, J. (2017). The agricultural production and food industry development trends in the context of food security of Russia. *Journal of Environmental Management and Tourism*, 8(3), 642-647.
- Kirby, A. (2005). Exporting to Russia. *Polymers Paint Color Journal*, 195(4486), 54-56.
- Novák, P. (2014). Two attempts at exporting the revolution into Persia. Soviet Russia and Persia in 1920. *Cesky Casopis Historicky*, 112(4), 713-744.
- Poltarykhin, A.L., Ganieva, I.A., Churin, A.N., Melnikov, A.B. & Mikhaylushkin, P.V. (2017). Desarrollo del Mercado de carne en Russia. *Espacios*, 38(48), 13.
- Poltarykhin, A.L., Shumakova, O.V. & Mozzherina, T.G. (2016). Import substitution as the basis of solving problem related to food safety of the Russian Federation. *Ijaber*, 14(9), 5911-5920.
- Rogachev, A.F., Shokhnekh, A.V. & Mazaeva, T.I. (2016). Manufacturing and consumption of agricultural products as a tool of food security management in Russia. *Revista Galega de Economia*, 25(2), 87-94.
- Terebova, S.V. (2017). Cooperation between Russia and the European Union: From importing to exporting technology. *Studies on Russian Economic Development*, 28(3), 327-337.
- Zhuravlev, P.V., Mikhaikushkin, P.V. & Poltarykhin, A.L. (2015). Modernization of balanced scorecard as a tool for estimating corporate structure's functioning effectiveness. *Actual Problems of Economics*, 163(1).