Institutional and transport conditions for the development of agricultural exports from the Far East region

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Abstract. The purpose of the study was to investigate the influence of the state regulation and transport support on the export of agricultural products in the Far East Federal District of Russia. The study identified the two main positive effects the territories of advanced socio-economic development made on the development of the industry: 1) large businesses invested in the crop and livestock sectors, 2) the number of investments in agricultural projects increased. The article also discussed the growing role of China as the Russian Far East trade partner and investor, and the influence of the transportation factor on the growth of the Federal District’s agricultural export potential. The development of the transport infrastructure stimulates the export of agricultural products from the Far East.

1. Introduction
Agriculture in the Far East has always focused primarily on consumption within the region. For decades there was a very limited number of exported products. However, the 2014 food embargo caused changes in the agrarian policy of the country. These changes have resulted in the expansion of both the list of exported products as well as their volumes. At the same time, the New Model of the Far Eastern Federal District economical development has been launched that also facilitated the changes in the production and export of agricultural products.

In addition, the factor of external demand and the transport factor had a significant impact on the development of agricultural exports.

The purpose of the study was to identify the effects of all of these factors on agricultural exports within the Far Eastern Federal District at the present stage.

2. Results and Discussion
There are plenty of scientific publications on the agrarian policy in domestic and foreign economic literature [1, 2]. In particular, researchers concentrate on the modern agricultural policy in Russia [3, 4, 5], which is strongly influenced by the country’s domestic and foreign policy factors.

In Russia, in recent years, the priorities of state support in agriculture have been identified: accelerated import substitution and increased export potential, stimulation of agricultural production, development of land reclamation, development of small forms of farming and rural cooperation [6]. Preference is given to the development of export-oriented agricultural sub-sectors. These include producers of wheat, barley, corn, sunflower oil, for which Russia is a net exporter.

For agriculture in the Far East, where only soybeans and products of its processing are mainly exported, modern agricultural policies can promote expand the export niche [7].
The Far East provides the vast majority of Russian soybean exports. According to the Federal Customs Service of the Russian Federation, the share of soy and its products in the structure of agricultural exports of the Far East in 2018 amounted to 80%. In addition, corn and wheat (11%) are notable export items.

Soybean exports increased in 2014-2018 by 11.2 times but decreased in 2019 due to poor weather conditions and flooding (table 1). The main producers of soybeans and exporters are the Amur Region and Primorsky Territory, they account for more than 80% of soybean exports.

Table 1. Export of soybeans from the Far Eastern regions, thousand tons (data from the Federal Customs Service of Russia).

| Region              | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---------------------|------|------|------|------|------|------|
| FEFD                | 74.3 | 377.6| 383.1| 409.7| 833.5| 703.0|
| including:          |      |      |      |      |      |      |
| Amur Region         | 21.1 | 206.0| 231.4| 236.2| 416.7| 321.3|
| Primorsky Territory | 31.7 | 75.9 | 62.8 | 89.8 | 236.8| 252.5|
| Others              | 21.5 | 95.7 | 88.9 | 83.7 | 180.0| 129.2|

Almost all soybeans are exported to China, which is the most significant partner for the Russian Far East in trade and investment cooperation not only in agriculture, but also in other natural resource sectors. And this role of the PRC has grown recently.

In Russia, in general, the most promising export destinations to China are the supply of agricultural and food products, forest products, the provision of transport and logistics services, and electronic commerce. In 2018, exports from Russia to China saw a significant increase in agricultural products, aquatic biological resources and other food products (by 151.4%).

Raw materials are mainly exported from the Far Eastern Federal District to China, as the manufacturing industry is underdeveloped. In 2018, 80% of all exported wood products, almost 100% soybeans, 44% fish were shipped from the district to the PRC.

The increase in soybean exports to China was facilitated by the signing in 2015 of an agreement on admitting Russian cereal goods to the Chinese market and expanding soybean supplies. The Far Eastern regions were included into a limited list of territories from which agricultural exports to the PRC are allowed.

However, the raw material orientation of exports leads to the further linking of the district to China only as a source of raw materials, which poses a threat to the economic security of the Far East and reduces the stability of its development [8].

In 2016, the Russian-Chinese Fund for Agricultural Development was created. The Fund was created under the Agreement between the Far East Development Fund and the Asia-Pacific Food Fund (PRC) for the joint development of agriculture in the Far East, including the expansion of exports of processed agricultural products. The Fund provides financing in the amount of 10% of the project cost, another 10% is provided by project initiators, the remaining 80% of the project cost is loans from Chinese banks. Among the first recipients of the Fund’s funds, two companies are Ratimir LLC, the largest Far Eastern meat processor, and Amur Agro Holding LLC, a large plant-growing enterprise. The company "Ratimir" plans to build a pig-breeding complex in the Primorsky Territory, the volume of investments will be 15 billion rubles. “Amur Agro Holding” is implementing a project for the construction of plants for the deep processing of soybeans and wheat in the Amur Region, with an investment of 2.9 billion rubles.

The production of processed agricultural products gives hope that not only raw materials but also value-added goods will be exported. This will contribute to the sustainable development of agriculture in the framework of the international cooperation of the Far Eastern Federal District with China and other Asia-Pacific countries.
In 2019, the Protocol on phytosanitary requirements for products produced from soybean and other plant species (soybean meal, rapeseed meal, sunflower meal, and oilcake) and exported from Russia to China. This allowed us to expand the list of processed crop products that can be exported.

The same can be facilitated by such instruments for the development of the economy of the Far Eastern Federal District as territories of advanced social and economic development (ASEZ). The creation of ASEZs attracts large investors into the agriculture of the Far East, creating production in both crop production and livestock.

For example, in the framework of the Mikhailovskaya ASEZ (Primorsky Krai), Yuzhnaya ASEZ (Sakhalin Oblast), which have an agricultural focus, in 2014-2018 large investors (Rusagro-Primorye LLC, Mercy Trade LLC, Mercy Agro Sakhalin JSC) actively created farms for growing and producing pork with a focus on meat export to China. Far Eastern producers are ready to supply about 1 million tons of pork to China.

However, to date, with regard to exports from Russia to the PRC of pork, as well as other types of meat and meat products, a number of restrictions have been introduced by the Chinese side. This does not allow expanding the export of products, developing the integration of the Far East with the Asia-Pacific countries in agriculture.

An important step in strengthening cooperation between the Far Eastern Federal District and the PRC is two documents adopted in 2018: “The Plan for the Development of Agriculture in the Russian Far East and the Baikal Region, as well as in the North-East of China” and “The Program for the Development of Russian-Chinese Cooperation in Trade Economic and Investment Spheres in the Far East of the Russian Federation for 2018–2024”. In addition, the Russian-Chinese Investment Fund for Regional Development began its activities [8]. These strategically important initiatives will help boost investment in the Far Eastern Federal District.

Transport is an important factor in the development of agricultural exports. Currently, agricultural products are supplied to China mainly by road and rail. Export transportation is carried out through border points in the Primorsky and Transbaikal Territories. In 2019, between the Russian Federation and the PRC within the Far East, there were 10 land checkpoints across the state border: 3 railway and 7 automobile.

To develop cooperation in the field of agriculture between the Russian Federation and the PRC, it is necessary to form new transportation routes, build infrastructure (bridges, roads) and improve the institutional conditions for international transport. These processes are taking place.

For example, until 2019, the route principle was used in road transport between the Russian Federation and China. Transportation could be carried out only in a limited border area (no more than 30 km inland) and between previously agreed points. These rules have been in force since 1992 and significantly limited the possibility of international road transport. In 2018, the conditions have changed. Between the countries an Intergovernmental Agreement on International Road Traffic between the Russian Federation and the PRC was signed. Since 2019, within the limits of the issued permits, the parties can carry out international transportation without restriction on the distance of penetration into the neighboring territory. Transportation requirements: 1) equipment of vehicles with satellite navigation systems (Russian GLONASS and Chinese Beidou) and 2) the car must be registered in advance with the customs authorities of the PRC and the Russian Federation.

Another example of a change in the institutional conditions for road transport between the Russian Federation and the PRC was the use of TIR Carnets. TIR (Transports Internationaux Routiers) is an international standard for customs transit of freight transport. The TIR system operates on the basis of the 1975 UN Customs Convention on the International Transport of Goods.

The main advantages of the TIR procedure are [9]: simplification of international trade and cost reduction; reducing the time of delivery of goods in international road traffic by reducing the downtime of vehicles at the borders; simplification of border crossing procedures due to the unification of the procedures and standards of TIR Carnets; the absence of the need to pay customs duties at the borders related to the import and export of goods; the ability to choose a convenient customs warehouse for unloading.
Currently, 73 states of the world are parties to the TIR Convention. Russia has been applying the rules of the Convention since 1975. China officially joined the TIR in 2016. The use of this system in practice only began at the end of 2018 at several checkpoints across the state border. In communication with Russia, TIR Carnets are currently used at automobile checkpoints across the Zabaikalsk-Manchuria and Pogranichny-Suifenhe border.

An important direction in the development of export transportation of agricultural products is the construction of a system of grain terminals. Now grain transshipment is taking place in the seaport of Vladivostok. Direct reloading from railway wagons to sea vessels is used. Only transportation to nearby countries is effective: Taiwan, China, Japan, the Republic of Korea [10, 11].

The development of transport infrastructure will stimulate growth in grain exports. In 2018, 76 thousand tons of grain were exported from the Far East and Siberia to China through the border crossings for the agricultural season (from July to December). In 2019, over the same period, 86 thousand tons of grain were exported (113.2%). In order to develop agricultural exports in the Far East, it is planned to build grain terminals in railway junctions and seaports. At the same time, the construction of grain terminals will be carried out using new forms of economic development of the Far East: ASEZ and the Free Port of Vladivostok (FPV).

A railway terminal will be built in the Trans-Baikal Territory by a resident of the ASEZ “Zabaykalye”. The company will build a terminal for transshipment of grain from Russian wagons to Chinese ones near the border crossing point Zabaykalsk-Manchuria. The planned capacity of the project involves the volume of transshipment of grain crops up to 8 million tons per year. The total investment will amount to 8.9 billion rubles. The creation of the railway grain terminal is a phase of the project to increase the export of Siberian grain to China. This terminal will create competitive advantages for Russian producers over grain suppliers to China from Canada, Australia, and the USA.

Under the Free Port of Vladivostok regime, the company Primorsk Sea Grain Terminal was registered. By 2024, the company will build a specialized grain terminal in the Primorsky Territory (Bolshoi Kamen settlement). The terminal will be designed to receive, temporarily store and export wheat, rice, rye, barley and other cereal crops to the countries of the Asia-Pacific region. The capacity of the complex will be 3 million tons per year, the volume of investments will be 900 million rubles.

In 2020, a grain terminal in the Primorsky Territory (Seaport in Troitsa Bay) has already begun work. This is the first phase of the Eastern Grain Gate project. The terminal capacity is 600 thousand tons of grain per year, investments amounted to more than 200 million rubles. The project is implemented by the “Vostochny Potok” company (part of “Kuzbassugol” JCS). The purpose of the project is the organization of grain transportation to the Asia-Pacific countries. It is planned to modernize the elevators, including in the Amur Region, the construction of a grain terminal (three lines) in the seaport in Troitsa Bay, the acquisition of specialized railway rolling stock (hoppers).

With the introduction by the Russian authorities of more attractive institutional instruments, Chinese partners are also interested in joint investment in both agricultural and transport infrastructure facilities. For example, “Power China” company is considering building a grain terminal with 29 elevators. In 2019, Power China signed an agreement on cooperation in implementing projects in the Russian Far East with the Russian-Chinese Regional Development Fund and the Far East Agency for Attracting Investments and Export Support. According to the agreement, elevators will be built at the same time and automobile and railway infrastructure will be developed for the supply of agricultural products and raw materials to China.

Another project that also combines the development of agriculture and transport infrastructure includes the cultivation of agricultural products, the creation of specialized grain ports along the Amur River and the construction of storage facilities for storing agricultural products. The three participants - the Harbin Dongjin Group company, the Chinese port construction company and the Far Eastern Agency for Attracting Investments and Export Support - signed a cooperation agreement on the implementation of the project, which will be implemented in four Far Eastern cities (Khabarovsk, Nikolaevo-on-Amur, Komsomolsk-on-Amur, Blagoveschensk), as well as the village of Nizhneleninsky. Export of products (mainly soybeans and silage) will be carried out in China, Japan,
South Korea. The volume of investments in crop production will amount to 10 billion rubles, in infrastructure development - 15 billion rubles.

3. Conclusion
The main role the agricultural industry of the Far East has been to stimulate the growth of the region and consolidate the population here [12]. Thus, the agricultural industry in the Far East was not considered as a promising exporter. The systematic financial support from the federal government had facilitated the products to the within the local market. This situation had existed for a long time.

In 2013-2014 a high demand for soybeans in China had intensified production in the agriculture of the Far East. This phenomenon was also stimulated by the strengthening of the Russia-China trade cooperation and the enhancement of export potential is among the priorities of the Russian agrarian policy. At the same time, the New Model of the Far Eastern Federal District economical development has been launched. All of these factors contributed to attracting large investors to the Far Eastern agricultural industry. Their implementation of investment projects will expand the list of exported products. Thus, a new trend of the Far Eastern agriculture export orientation has appeared. Here should be mention that it is the current trend of Russia's agricultural policy as well [7].

The Primorsky Territory and the Amur Region may be considered the most developed regions in terms of their agricultural industries. They are the main Russian suppliers of soybeans. There are large agricultural projects as part of the ASEZ in the Primorsky Territory and the Amur Region. The use of ASEZ gives the Far East agriculture an opportunity to expand the industry and go to the foreign markets. It might be the main purpose of the ASEZ. However, the steady development of the agricultural sector needs the established policy [3].

Transport accessibility is important for export development. China is the main trading partner of the Russian Far East. Therefore, the Russia-China transport infrastructure becomes one of the critical elements for the two countries cooperation in agriculture [13,14]. In other words, new transportation routes and improved the institutional conditions (e. g. grain terminals at sea and river ports) are needed for international transportation as a factor of successful development of agriculture.

References
[1] Dethier J and Effenberger A 2012 Agriculture and development: a brief review of the literature. Econ. Syst. 36 (2) 175–205
[2] Wise T 2015 Two roads diverged in the food crisis: Global policy takes the one more travelled. Can. Food Stud. 2(2) 9–16
[3] Barsukova S Yu 2017 Agrarian policy of Russia Social Sciences and Present 5 31–45
[4] Shagayda N and Uzun V 2015 Food security: assessment issues Economics Voprosy Ekonomiki 5 63–78
[5] Liefert W M and Liefert O 2015 Russia’s economic crisis and its agricultural and food economy Choises 30(1) 1–6
[6] Import Substitution in Agrarian and Industrial Complex of Russia: Problems and Prospects 2015 ed I G Ushachev (Moscow : VNIESKH) p 447
[7] Antonova N E 2018 Influence of modern federal policy on development of the export potential of agriculture of the Russian Far East Regionalistics 5(4) 24–34
[8] Antonova N E and Bardal A B 2019 Security and sustainability of the Far East economy development in the context of integration: resource and transport factors Power and Administration in the East of Russia 4(89) 17–29
[9] Holopov V K and Sokolova O V 2018 Use of the TIR Carnets in the foreign trade of the Eurasian Economic Union Russian Foreign Economic Bulletin 8 84–96
[10] Bardal’ A B 2019 The potential for integration of the transport complex of the East of Russia into the international market of transport services Economic and Social Changes: Facts
Baklanov P Y 2018 Conjugations of transport networks between southern regions of the Russian Far East and neighbouring countries *IOP Conf. Ser.: Earth Environ. Sci.* **190** 012043

Demyanenko A N 2017 About “Far Eastern Hectare”, or how to attract population to the Far East: historical experience *Regionalistics* **4(3)** 5–13

Shibasaki R, Arai H and Nishimura K 2019 Impacts of Eurasian Transport Connectivity enhancement on Russia *E3S Web of Conferences* **135** 02001

Baklanov P Y, Moshkov A V and Romanov M T Basic structural links in the long–term development of transport systems of the Far Eastern region of Russia 2018 *Vestnik Moskovskogo Universiteta, Seriya 5: Geografiya* **4** 83–92