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LEE DAE SEOB

Korea's Agricultural Production in the Russian Far East

Not having enough farmland to meet domestic food demand, South Korea has devised a long-term program for the development of agricultural production abroad. The present article analyzes the existing practice and strategy of South Korea and Russia in various spheres of agricultural production and trade. Focusing on a number of South Korean grain producers operating in the Russian Far East, the article addresses several acute problems that impede the development of agricultural production and Russian-Korean cooperation in agribusiness.

Keywords: *Korea, Russian Far East, agricultural production, grain production*

One aspect of food security is the availability of sufficient quantities of food. Over the past decades, considerable resources have been allocated to increase food production; however, population growth and changing dietary structures make these efforts inadequate. According to the United Nations data for 2013, it is expected that the world's population will reach 10.5 billion by 2050. This means that to feed all of humanity, food production will need to increase by 33 percent, and to fully satisfy demand, the food supply will need to increase by 60 percent [1].

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The development of agricultural production in neighboring countries

To achieve sustainable food security, it is necessary to expand the availability of food by increasing agricultural productivity, improving trade and distribution networks, reducing losses both during and after harvesting, and implementing other measures.

Food production is currently being challenged by factors such as limited land and water resources and the growing volatility of weather conditions due to global climate change.

In addition, the supply of food products is affected by the transfer of speculative capital into the futures market as well as regulatory measures on the part of the largest exporting countries. The volatility of prices in the world grain market has increased significantly in recent years. For example, before 2000 a substantial jump in prices occurred twice, once in 1973 and then again in 1993. Since 2002 there have been several cases of unexpected price spikes in world markets. In particular, prices for rice, wheat, soy, and corn rose sharply several times between 2007 and 2012 (Figure 1). Following the 2000s, to ensure food security, most importers— especially Japan, the European Union, the Middle East, and South Korea—have paid considerable attention to policies of agricultural investment abroad.

Here, South Korea and its policy of investing in agricultural development in the Russian Far East is of particular interest—this policy in particular has had to go through many trials and errors. In the early 1990s, a number of private South Korean companies had to curtail their business in the Russian Far East due to a lack of necessary information regarding supply-side relationships, poor managerial conditions, and the financial burden of the initial investment. South Korean companies and the South Korean government learned from this experience and realized that they needed to implement specific instruments of economic policy and government support from both South Korea and partner countries.

Since the beginning of the 2000s, the South Korean government has introduced special measures aimed at supporting investments in the development of agriculture abroad. In 2008, South Korea adopted the 10-Year Comprehensive Plan for Overseas Agricultural Development, the primary goal of which was to achieve 65 percent self-sufficiency in

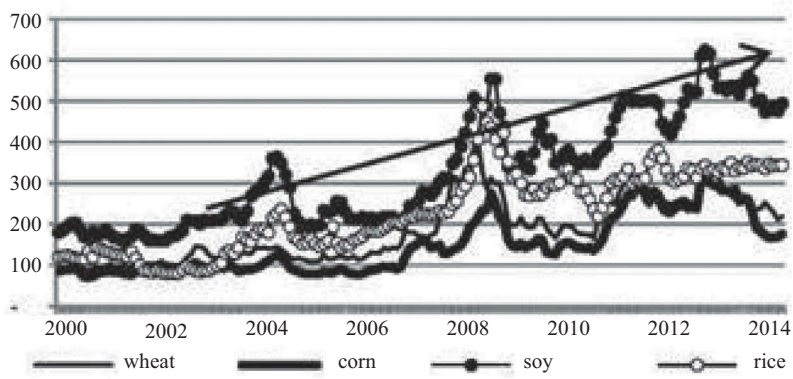

Figure 1. **Price Dynamics for the Major Types of Grain, 2000–2014, in USD per Ton.**
Source: Chicago Mercantile Exchange, 2015.

the main types of agricultural products. In addition, in 2012 the government adopted the Law on the Development and Cooperation of Agriculture Abroad.

For South Korea, the Russian Far East is still a priority investment region. However, there remain several problems that require comprehensive study and possible solutions. For example, the lack of infrastructure for grain marketing and trading continues to be a salient issue. In short, to improve the management of South Korean enterprises in the Russian Far East, it is necessary to study the existing practices and strategies of both countries in various spheres of agricultural production and trade in order to understand how both governments can help.

Korea's participation in the development of agriculture in the Russian Far East has been the subject of various studies devoted to effective managerial strategies. In particular, a classification of agricultural companies was conducted, which included companies that focused on production or sales as well as companies based on private or government ownership [2]. The most effective working practices were studied. South Korean agribusiness companies operating in the Russian Far East have been analyzed to understand how much government support was needed from both sides [3] and how effective the companies' business models were [4]. In terms of trade opportunities, attempts have been made to identify major regional issues, and more effective trade strategies have been proposed [5]. Based on a study of the South Korean

government's policy on the development of agriculture abroad and the main reasons for the departure of many South Korean agribusiness companies from the region, several proposals been suggested to the government [6].

The present article, based on field research, is devoted to a discussion of the current situation of South Korean agricultural production in the Russian Far East and the operations of South Korean agribusiness companies. In addition, I have analyzed the economic policies of both countries, developed a number of proposals for their optimization, and highlighted the priority and feasibility of those business models that can be directly used in public policy aimed at improving bilateral cooperation.

The state of agriculture in South Korea and the Russian Far East

Although small in scale, South Korea agriculture is considered quite capital-intensive and high-tech. The total area of arable land is approximately 1.7 million hectares, about 0.6 hectares per capita, while the rural population consists of approximately 2.8 million people. These are rather modest indicators. Because of rapid industrialization, agriculture decreased from 17.6 percent of GDP in 1970 to 2.4 percent in 2015. In addition, fewer young people are engaged in agriculture. The proportion of people aged sixty-five and over in the total number of agricultural workers increased from 5 percent in 1970 to 36 percent in 2014.

Historically, South Korea has had low self-sufficiency in terms of food products (except for rice, the demand for which was satisfied by more than 95 percent in 2014). Thus, in 2015 the self-sufficiency level for wheat was 0.5 percent, for grain 1 percent, and for soy 7 percent. The import dependence of the country on primary grain crops is evident.

In recent years, annual grain imports have amounted to about fifteen million tons, which makes South Korea the fifth or sixth largest buyer of grain. The low level of food self-sufficiency coupled with the volatility of world grain prices has forced South Korea to develop agriculture abroad and to cooperate with other countries in this area.

As for the state of agriculture in the Russian Far East, it has 5.2 million hectares of arable land of which only 2.34 million hectares were

Table 1

The Use of Arable Land in the Russian Far East, in Thousand Hectares

Region	Total	Grain	Government reserves	Fruit	Hayfields	Pastures
Russian Totals	196,072	115,337.6	4,197.4	1,169.8	18,597.1	56,769.9
Far East	5,183	2,344.1	427.0	52.2	1,251.7	1,108.1
Primorsky Krai	1,397	699.2	61.2	20.4	273.9	342.0
Amur Oblast	2,151	1,282.0	275.6	7.0	259.3	326.8
Khabarovsk Krai	239	76.1	16.2	11.4	96.5	39.2
Jewish Autonomous Oblast	248	88.7	58.3	2.5	59.4	38.7
Kamchatka Krai	92	47.0	0.7	4.3	18.1	21.9
Magadan Oblast	83	21.5	2.0		33.8	25.6
Republic of Sakha	886	94.2	13.0	0.7	482.3	295.7
Sakhalin Oblast	82	35.4		5.9	22.8	18.0
Chukotka Autonomous Okrug	5.8				5.6	0.2

Source: Korean Rural Community Corporation, 2012.

cultivated in 2014; that is, there is great potential for expanding agricultural production (Table 1).

However, development in this sector is hindered by a number of problems:

1. the declining population in the Russian Far East leads to a reduction in the size of the agricultural market
2. the distribution channels for agricultural products and logistics infrastructure are outdated
3. the absence of a developed market of production leads to an increase in production costs and adversely affects product competitiveness;
4. weather conditions in most of the territory are unfavorable for agricultural production

5. despite the membership of Russia in the World Trade Organization (WTO), the system of product quality certification, as well as the trade rules, are still lagging behind international standards.

Due to both the poor state of agricultural production and adverse climatic conditions, labor productivity in the Far East is very low, and the lack of infrastructure is a critical issue for the marketing of agricultural products.

At the same time, there are many opportunities for the development of export-oriented agriculture in the region. It is rich in agricultural resources and has advanced technologies, which increases its potential for development. Also, geographical proximity to large consumers like China, South Korea, and Japan provides a reduction in logistical costs compared to other exporting countries (e.g., United States and Australia). The grain produced in the region does not contain GMOs, which provides guaranteed demand from neighboring South Korea, China, and Japan. In addition, there are many opportunities for expanding the area of cultivated land and the development of water transport. Given this potential and advantages, thirteen private Korean companies have invested in the agriculture of the Russian Far East, and the Korean government has established a support center for such companies.

Presently, the volume of agricultural production in the Far East is approximately 5.6 percent of Russia's total production (Table 2). Of the nine regions of the Far Eastern Federal District, Amur Oblast has the highest volume of agricultural production, while Chukotka Autonomous Okrug has the lowest. The Jewish Autonomous Oblast is first in terms of agricultural production as part of the total volume of production, while Chukotka Autonomous Okrug is last. Over 75 percent of the district's agricultural production is provided by three regions: Primorsky Krai, Amur Oblast, and Khabarovsk Krai.

The Russian Far East specializes mainly in growing grain, potatoes, and vegetables. However, the production of grain does not exceed 1 percent of Russia's total production, 4 percent of its potatoes, and 3 percent of its vegetables. Because of these low volumes, federal agencies have shown a lack of interest when it comes to developing the agricultural sector in the Far East. The unofficial status of Russia's breadbasket belongs to the North Caucasus, the Don Basin, Volga, and southwestern Siberia.

Table 2

Production of Agricultural Products in the Russian Far East

Region	Production volume, in billions of rubles	Including agricultural production	
		Volume, in millions of rubles	Percent of total output
Russian Federation	32,073	2,444,830	7.6
Far Eastern Federal District	1,731	96,825	5.6
Primorsky Krai	368	20,693	5.6
Amur Oblast	152	23,210	15.3
Khabarovsk Krai	275	15,356	5.6
Jewish Autonomous Oblast	25	5,410	21.6
Kamchatka Krai	96	5,066	5.3
Magadan Oblast	48	1,710	3.6
Republic of Sakha	330	18,244	5.5
Sakhalin Oblast	392	6,665	1.7
Chukotka Autonomous Okrug	45	472	1.0

Source: Russian data, 2012.

South Korea's policy for developing agriculture abroad

At the heart of the South Korea's system of support for its abroad agricultural investments policy lie the 10-Year Comprehensive Plan for Overseas Agricultural Development and the Law on the Development and Cooperation of Agriculture Abroad. These documents have facilitated the creation of four main forms of government support for South Korea's agricultural policy abroad: loans and subsidies, building human resources, providing information, and business consulting.

Private companies can turn to the government for secured loans and subsidies to conduct preliminary feasibility studies. Loans are granted for the acquisition of permits for entrepreneurial activity, the purchase and construction of fixed assets (including warehouse facilities and technology), and land rights. The main objective of lending is to reduce investment risks for companies, especially when creditworthiness is

influenced by external factors that impede the activities of both the companies themselves and related enterprises. It is noteworthy that the law stipulates that loan recipients must deliver their agricultural product to South Korea in case of emergency; however, this clause has never been imposed, and the very concept of an "emergency situation" has not yet been determined by the government, so as the saying goes: time will tell.

Until 2012 loans were issued only to producers of grain crops and fodder grain, including wheat, soy, corn, cassava, and later coffee and sugar cane. In addition, the government reduced the requirements for securing a loan, leaving the estimated value of a mortgage on real estate at 50 percent while increasing the estimated value of land from 50 percent to 70 percent. In addition, insurance policies, property guaranteeing payments, registered government municipal bonds, and bank deposits are recognized as legitimate forms of collateral.

Of the total volume of targeted government loans to support foreign agricultural investment (approximately $124 million), South Korean companies operating in the Russian Far East received approximately 22 percent ($27.2 million; Table 3). However, since 2014 they have made no more requests. Also, the volume of grain produced by companies that received government loans has increased from 15,242 tons in 2010 to 35,717 tons in 2015.

Companies performing preliminary research and development feasibility studies of agricultural production abroad are eligible for government

Table 3

The Purposes and Volumes of Government Loans Provided to Korean Companies Operating in the Russian Far East, 2009–2013, in Millions of USD

Year	Number of companies	Production	Volume of loans
2009	4	wheat, soy, corn	8.446
2010	2	soy, corn, oats	7.063
2011	1	wheat	2.783
2012	1	soy, corn	6.262
2013	1	soy, corn, oats	2.609

subsidies that cover up to 70 percent of their expenses for research and analysis.

One important form of support for foreign agricultural investment is a unified information system created by the South Korean government. It is used to generate forecasts, analytical reports, reviews of the investment situation, the state of a country's economy, data on the taxation and administrative systems of various countries, and reports concerning investment risk and return. All these and other data are published on the government website www.oads.or.kr.

In terms of personnel, the government has implemented a wide range of educational programs, which includes onsite training for participants interested in agricultural production abroad, and has offices in countries such as the United States, Australia, and those in Southeast Asia. Participants in these programs are mainly farmers, agribusiness businessmen, university students, and government officials. In addition, the South Korean government encourages national universities to offer courses in agricultural production abroad to educate the younger generation.

To achieve the main goal of 65 percent self-sufficiency, the South Korean Strategy for the Development of Agriculture Abroad involves the implementation of four strategic plans: 1) the development of cooperation between private- and public-sector enterprises and organizations, 2) financial support, 3) the creation of a warehouse and technological infrastructure, and 4) the formation of a system of foreign economic development assistance and risk management (Figure 2).

The South Korean government promotes cooperation between the private and public sectors in largescale capital-intensive projects (e.g., the construction of port elevators, the creation of multi-industry complexes, etc.). The main mechanism of public-private partnership is the creation of a consortium of private- and public-sector enterprises. With regard to the extension of infrastructure, the legal basis for government support is the Law on the Development and Cooperation of Agriculture Abroad. The South Korean government provides educational programs for employees of private and public companies and offers necessary information and advice on business management to new investors (Association of Agricultural Producers Abroad). The government is also determined to adhere to

Goal
To reach 65% food self-sufficiency by 2020

⇧

Investment destination countries
Production: countries with lower production costs:
Philippines, Indonesia, Cambodia, Ukraine
Sales: countries with established infrastructure for marketing and trade:
US, Brazil, Ukraine, Russian Far East

⇧

Strategy	Measures
Cooperation between private and public sector enterprises	- Establishment of a consortium of private and public sector enterprises - Memoranda of intent for obtaining land use rights in partner countries - Expansion of agricultural production abroad - Strengthening the role of the Committee for Agricultural Development Assistance Abroad
Financial support	- Expansion of financing for agricultural enterprises - Approval of agricultural resources funds
Infrastructure development	- "Law on the Development and Cooperation of Agriculture Abroad" - Support for the development of human resources - Expansion of information services and management consulting - Creation of the Association of Agricultural Producers Abroad
Expanding international cooperation and establishing a risk management system	- Participation in the activities of the United Nations Commission on International Trade Law - Development of a risk management manual - Development of a model for forecasting the international grain market

Figure 2. **Korean Strategy of Agricultural Development Abroad.**
Source: Ministry of Agriculture, Food and Rural Affairs, South Korea, 2011.

international laws and norms for investing in agriculture abroad and participates in the activities of the UN Commission on International Trade Law.

Agricultural strategy for the development of the Russian Far East and the Baikal Region

The Russian Far East makes up a third of the Russia Federation and occupies a geographically advantageous position in close proximity to Asia and the Asia-Pacific region. It is rich in natural and energy resources, and in recent years industrial production and agriculture have grown considerably as a result of direct foreign investment made by entrepreneurs who hope to help the region achieve its potential.

But the socioeconomic situation of the Russian Far East is significantly different than that of the rest of the country. In order to overcome the obvious gap, the Russian government periodically takes measures to develop the region. In 1987, the government adopted the Federal Program for the Development of the Far East and the Trans-Baikal Region Until 2000. In 1996, the program was transformed into the Program for the Development of the Far East for 1996–2005. Since

2009, the Strategy for the Socio-Economic Development of the Far East and Baikal Regions Until 2025 has been in effect. To enforce the strategy, the Russian government has established the Ministry of Development of the Far East with offices in Moscow, Vladivostok, and Khabarovsk.

The strategy includes hundreds of projects funded in such a way that their implementation is guaranteed by the government. Its budget is about $105 billion. To realize the program, investment in industry and agriculture is expected to increase in order to raise employment in the short term, create infrastructure in the energy and transport sectors for the development of the manufacturing industry in the medium term, and facilitate scientific competitiveness for the development of local communities in the long term (Table 4).

The strategy contains twelve special programs in selected areas, including the development of fisheries and agriculture, which are considered to be the most important specialized industries. In the agricultural sector there are plans to build nine salmon breeding and aquaculture facilities on the Kuril Islands; a fish processing plant in Yuzhno-Kurilsk; a group of greenhouses in Blagoveshchensk; an agribusiness complex in Chigiri, Blagoveshchensk; and two soy processing plants in Belogorsk and Birobidzhan (Table 5).

Within the total budget of the strategy the agricultural sector is relatively small, and most projects concern the construction of processing facilities. With a comparative advantage in soy production, the Russian Far East does not have sufficient processing capacity and is forced to ship soy to other regions for processing. With the help of new financing, the construction of modern processing facilities will give the region great advantages.

The strategy also includes special programs to improve the standard of living of the population and protect the environment for the sustainable development of agricultural production. To increase the competitiveness of agricultural products, the region needs a sufficient area of arable land, high-quality seed grain, and developed sales markets. Thus, the planned construction of a grain elevator will create new jobs, attract new investments on the basis of public-private partnerships, and establish a future supply channel of grain to South Korea, Japan, and China [9].

Table 4

Strategy for the Socio-Economic Development of the Far East and Baikal Regions Until 2025

Ministries of the Russian Federation responsible for the implementation of the strategy	Ministry for Development of the Russian Far East; Ministry of Economic Development; Ministry of Natural Resources and Environment; Ministry of Industry and Trade of the Russian Federation; Ministry of Energy; Ministry of Transportation; Ministry of Agriculture; Ministry of Education and Science; Ministry of Labor and Social Protection; Ministry of Sports; Ministry of Health; Ministry for Culture; Ministry of the Russian Federation for the Affairs of Civil Defense, Emergencies, and Elimination of the Consequences of Natural Disasters
Programs	– Increase economic efficiency – Development of the production of mineral raw materials and natural resources, forestry and fishing industry, agriculture, transportation and energy infrastructure – Creation of comfortable living conditions, ensuring environmental safety and protection, development of research and development and government support of personnel support, as well as supporting the socio-economic development of the region – Development of tourism through government support of the socio-economic development of the region
Federal programs	– Socio-economic development of the region until 2018 – Socio-economic development of the Kuril Islands (Sakhalin Oblast) for 2007–2015

Source: [7].

South Korea's agricultural enterprises in the Russian Far East

In 2015 there were thirteen private South Korean companies in the region, twelve of them registered in Russia. They produced mainly corn, soy, wheat, and oats. Today, nine companies continue their

Table 5

Agriculture Projects in Strategy for the Socio-Economic Development of the Far East and Baikal Regions Until 2025

Project	Region	Investment, in millions of rubles
Construction of facilities for salmon breeding on the Kuril Islands	Sakhalin Oblast	2,022
Fish processing plant in Yuzhno-Kurilsk	Sakhalin Oblast	7,760
Soy processing plant in Belogorsk	Amur Oblast	400
Construction of greenhouses in Blagoveshchensk	Amur Oblast	322
Agribusiness complex in Chigiri, Blagoveshchensk	Amur Oblast	982
Soy processing plant in Birobidzhan	Jewish Autonomous Oblast	1,965
Total		13,451

Source: [8].

operations, and four are preparing to exit the field (mostly corn and soy producers). Their main market is Russia, and only a small amount of grain is exported to South Korea.

Table 6 shows some of the performance indicators of South Korean companies in the region. In 2013 their combined production amounted to approximately 50,000 tons. In 2014, of the more than 35,000 hectares that were planned for use, only 23,000 hectares were cultivated. Gross harvest of grains collected from this land amounted to approximately 60,000 tons. Of this volume, only 3,256 tons of corn and 370 tons of dried fodder were exported to South Korea. The company Seoul Feed exported some of the grain to South Korea for its parent company that produces animal feed. In addition, 13,537 tons of grain was placed in a seed fund and stocked for future transactions. The rest of the harvest was sold in Russian domestic markets.

Seoul Feed has been developing agricultural production in the Russian Far East since 2009. Starting with the processing of 6,500 hectares for the cultivation of soy, corn, and oats, the company expanded to 14,342 hectares of land. However, it has never utilized

Table 6

Volumes of Production and Distribution of Korean Agricultural Companies Operating in the Russian Far East, 2013–2014

Company	2013		2014 (planned)		2014 (actual)		Sales (2013), tons		
	Area, hectares	Volume, tons	Area, hectares	Volume, tons	Area, hectares	Volume, tons	Local	Inbound	Warehousing
Total	21,794	49,004	35,142	112,261	23,079	60,436	32,735	3,626	13,537
Agro Sangsan	5,503	9,714	7,000	21,200	6,448	15,750	6,143		3,571
– rice	2,873	7,263	4,000	12,000			4,000		3,263
– soy	2,325	2,095	2,000	3,500			2,000		95
– wheat	55	53	150	2,250			23		30
– barley	40	46	130	1,950			20		26
– fodder	210	257	720	1,500			100		157
Nam Yang	330	185	330	321	360	280	137	18	30
– soy	330	185	300	300	360	280	137	18	30
Bari Dream	200	127	150	95	200	120	47	40	40
– soy	200	127	150	95	200	120	47	40	40
Seoul Feed	4,020	11,163	7,534	21,720	4,696	10,717	3,652	3,198	7,097
– soy	730	890	3,300	6,600			2,408		
– corn	2,494	9,023	1,200	7,200			297	3,198	6,236
– oats	263	300		900			947		103
– volume fodder	533	950	234	7,020					758

Agro Primorye	1,302	976	2,228	3,800	2,271	4,366	719		257
– soy	920	506	1,532	2,058			396		110
– wheat	120	176	137	343			100		76
– barley	150	126	207	415			100		26
– fodder	112	168	352	984			123		45
Hyundai	6,811	14,469	7,250	18,725	7,329	19,283	11,927		2,542
– soy	4,706	4,435	5,350	8,025			3,412		1,023
– corn	1,800	8,793	1,500	8,750			7,959		834
– fodder	305	1 241	400	1,950			556		685
Agro–Amur	550	1,890	300	1,500					
– soy	44	150							
– corn	506	1,740	300	1,500					
Vladinvest	2,778	9,800	10,000	43,900	1,465	8,904	9,800		
– soy			3,000	5,400					
– corn	2,778	9,800	7,000	38,500			9,800		
Pohang Agro	300	680	350	1,000	310	1,016	310	370	
– barley			250	1,000					
– volume fodder	300	680					310	370	
– pastures			100						

the land completely because of unfavorable price conjunctures in international and domestic grain markets. There are also difficulties for diversifying production. Initially specializing in soy, the company planned to produce corn but did not find suitable distributers and markets. It also plans to invest in research and development to grow high-quality corn and soy varieties that will be used to produce fodder with higher added value.

South Korean agribusiness company Hyundai also produces mainly soy and corn in the region. Since 2009, it has invested more than $40 million and has received approximately 20,000 hectares of land for use. The company itself farms approximately half of the land, and the rest is cultivated based on farm contracts. In addition, the company has built advanced storage facilities for storing 20,000 tons of grain; it plans to double that capacity in the near future.

Agro Sangsan is the only South Korean rice producer in the Russian Far East, and it processes rice at its own upgraded complex. The company also acquired a soy processing plant with a capacity of 35,000 tons and organized a research center for the production of organic agricultural products.

Agro Primorye has been engaged in seed production in Russia since 2008, investing in research and development of seed selection for domestic Russian markets. Currently it is a leader in Russia in this segment. It develops high-quality types of grain and regionalized varieties of seeds that are uniquely adapted to Russian conditions and plans to further develop in this direction.

All these companies are equipped with modern facilities for sorting, drying, and storing grain, which allows them to more effectively manage costs and better cope with the volatility of market prices. To maintain profitable agriculture, it is necessary to have appropriate storage facilities, established management systems, and sanitary-quarantine control and pest control. However, agricultural factory buildings in the region are often neglected, and there are many problems with sanitary-quarantine control and inventory management. Added to this are relatively high labor costs and even theft problems.

For other South Korean companies operating in the region, the construction of more storage facilities is a major priority. The problem is that construction costs are very high, which requires companies to receive financial support. Due to lack of funds, small companies are

often forced to use obsolete storage facilities and sometimes even store grain in open lots. This negatively affects the quality of products and the profits of producers.

Two field studies conducted in 2014 identified the following problems: bad storage conditions, an inadequate agricultural production market (which increases production costs), no long-term sales strategy, high trade logistics costs, no maintenance centers for agricultural equipment [9], and weak administrative support from the government of the Far East.

Conclusion

The main obstacles for the future development of agricultural production in the Russian Far East are logistical, especially when it comes to transporting grain by land and sea. In the main ports of the district, there are no grain terminals and elevators. This hinders distribution and deprives grain producers of opportunities to expand their businesses. The initial investment needed to build grain terminals is substantial, and not all private companies can afford it. For South Korean companies to effectively stimulate agricultural production in Russia, the governments of both countries should consider merging their investments (and in the future transfer these to experts). Also, for each investment project it is necessary to analyze the business plan, determine future grain production volumes, and assess the capacity of the railway network.

One solution to the problem may be the creation of an agricultural-industrial park. Currently the Russian government is considering the creation of a soy production cluster in the region. South Korean companies could invest in the construction and modernization of storage and processing facilities, the purchase of agricultural equipment and materials, and the development of marketing and logistics. In addition, investment risks should be assessed according to intergovernmental agreement and be insured by government-created funds.

The agricultural-industrial park could include a joint research center for the selection of high-quality seeds and the development of agricultural production technologies, machinery, tools, management, marketing, logistics, sales, and sanitation control. With the help of short-term planning, it will be possible to regulate agricultural production and the processing of grain for livestock. The long-term strategy should concern

marketing, logistics, and vertical integration of the relevant sectors for grain production and processing.

In general, the development of South Korean agricultural production in the Russian Far East is closely linked with the future of the South Korean food supply and the growing exports of South Korean agricultural technologies. These issues were raised during a 2016 meeting of South Korean and Russian officials. Finally, for effective economic cooperation in the areas of agriculture and fishing, it is necessary for both countries to develop a collaborative long-term agricultural investment strategy.

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