THE RUSSIAN AGRICULTURAL REFORM DURING VLADIMIR PUTIN'S REGIME AND THE IMPLICATIONS FOR THAILAND

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A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts Program in Russian Studies
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นางสาวรัตนากร ศรีเมือง

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต สาขาวิชารัสเซียศึกษา (สหสาขาวิชา) บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย ปีการศึกษา 2555 ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

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การวิจัยในครั้งนี้เป็นการวิจัยเชิงคุณภาพ (Qualitative Research) มีวัตถุประสงค์ คือ 1) เพื่อ ศึกษาพัฒนาการนโยบายการเกษตรของรัสเซียในยุคจักรวรรดิรัสเซีย และยุคคอมมิวนิสต์ 2) เพื่อ ศึกษาการปฏิรูปการเกษตรของสหพันธรัฐรัสเซีย 3) เพื่อวิเคราะห์ผลการปฏิรูปการเกษตรของรัสเซีย และนัยที่มีต่อประเทศไทย

ผลการศึกษาวิจัยพบว่าการปฏิรูปการเกษตรในสมัยวลาดิมีร์ ปูติน ปี 2000-2008 เป็นช่วงที่ รัสเซียปรับโครงสร้างด้านการเกษตรเพื่อให้สอดคล้องกับตลาดมากขึ้น มีนโยบายส่ งเสริมการเกษตร เพื่อต้องการลดการนำเข้าสินค้าเกษตรจากต่างประเทศ ผลจากการปฏิรูปการเกษตรของรัสเซียมี สัญญาณให้เห็นถึงการพัฒนาที่ดีขึ้น เช่น การสนับสนุนการเพิ่มผลผลิตการเกษตรจนสามารถ กลายเป็นผู้ส่งออกข้าวสาลี ข้าวบาร์เลย์ และเมล็ดทานตะวันรายใหญ่ของโลกได้ มีการสนั บสนุนให้ นักลงทุนต่างชาติเข้าไปลงทุนในภาคการเกษตร การเพิ่มงบประมาณ การปฏิรูปที่ดิน และการ พยายามเข้าเป็นสมาชิก WTO เป็นต้น แม้ว่าจะมีนโยบายสนับสนุนทางด้านการเกษตรและประสบ ความสบความสำเร็จ แต่รัสเซียยังต้องพึ่งพาการนำเข้าสินค้าเกษตรเพื่อตอบสนองความต้องการ บริโภคภายในประเทศ

รัสเซียเป็นประเทศคู่ค้าอันดับ 1ของไทยในตลาดกลุ่มประเทศเครือรัฐเอกราช นับตั้งแต่ปี 2000 เป็นต้นมา แม้ว่ามูลค่าการค้าระหว่างกันยังถือว่าน้อยมาก ส่วนใหญ่สินค้าที่รัสเซียนำเข้าจาก ไทยเป็นประเภทอุตสาหกรรมเบาเช่น น้ำตาล ยางพารา อาหาร ผลไม้กระป๋องแล ะแปรรูป เป็นต้น อย่างไรก็ตามแม้ว่ารัสเซียจะมีการปฏิรูปการเกษตรจนสามารถลดการนำเข้าสินค้าเกษตรจาก ต่างประเทศ แต่สินค้าเกษตรที่ไทยผลิตได้เป็นสินค้าคนละชนิดกัน จึงเป็นโอกาสที่ดีสำหรับสินค้า เกษตรไทยที่จะส่งออกไปยังรัสเซีย แม้ว่าการส่งออกสินค้าเกษตรของไทยไปรัสเซี ยจะมีมูลค่าเพิ่มขึ้น และต่อเนื่องแต่ก็ประสบกับปัญหาเช่น ปัญหาด้านโลจิสติกส์ ปัญหาด้านบุคลากรที่มีความเชี่ยวชาญ เกี่ยวกับรัสเซีย ระบบภาษีและไม่ใช่ภาษี เป็นต้น

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The paper used qualitative research, with the objectives to 1) study the evolution of the agricultural policy from the time of the Russian Empire to the Soviet Union, 2) study the agricultural reform of the Russian Federation, and 3) analyze the results of the Russian agricultural reform and the implications for Thailand.

The study found that the agricultural reform of Vladimir Putin from 2000 to 2008 adjusted agricultural structure to correlate more with the market, reducing agricultural import. The reform has shown many positive developments including increased production in wheat, barley and sunflower, making Russia one of the world's major exporters of the products; support of foreign investments, budget increase, land reform, and the attempt to join the WTO. Even though the policies have been successful, Russia still depends on the import of agricultural products to satisfy domestic consumption.

Russia has been Thailand's no. 1 trading partner among the CIS since 2000, despite a low level of trade. Mainly Russia imports light industrial products, such as sugar, rubber, food, canned and processed fruit. Even though Russia has reformed agriculture and been able to reduced the agricultural import level, Thai's agricultural products are of different types, creating opportunities for Thailand to find more channels in exporting to the country. Furthermore, despite the continual increase of export value to Russia, there are problems, such as logistics, lack of personnel with knowledge about Russia, and the tax and non tax system.

Field of Study:	RUSSIAN STUDIES	Student's Signature
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CHAPTER I

INTRODUCTION

Background and Rationale

Russia is one of the countries that has high economic growth. Its economy has continually expanded. Its main economic mechanism is the export of natural resources, such as oil and natural gas. Nevertheless, despite a variety of resources, the country still faces the shortage of agriculture. According to Dr. Nikolai Leonov, a former KGB general and former MP with a doctorate degree in history and mathematics,

"Russia in the old days never purchased food from other countries and only exported its products to Thailand. Currently, the country needs to import food for half of the overall consumption annually due to the lack of support in agriculture from the government which reduced the manpower in the sector."

However, this problem is not new. Lenin used War Communism policy in 1918 to resolve the economic crisis by making farmers produce "excess" agricultural products for the government. The products were then distributed to factories in the form of raw materials and to soldiers, laborers, and citizens in the form of food. However, in practice, the agricultural sector faced a lot of problems such as outdated equipment. Agriculturalists lacked the incentive to increase production². In 1921, Lenin introduced the New Economic Policy (NEP), whose goal was to abandon the production excess by allowing farmers to sell the extra products themselves. This created free trade and the incentive to produce more. The NEP policy was considered to be state capitalism. Nevertheless, despite the improvement, many problems occurred as the reduced control and planning from the center, with the aim to expand free trade between industries and agriculture, were disproportionate. Prices of agricultural products decreased while prices of industrial products increased. The price gap led to the Scissor Crisis in 1923.

Then, Stalin canceled the NEP and created the Five Year Plan which focused on collectivization and heavy industry which would serve as the agricultural

¹Rom Phiramontri, "Russia in the Next Decade," *Journal of Russian Studies* 2,1-2 (October 2011): 201.

²Paul Gregory and Robert Stuart, *Russian and Soviet Economic Performance and Structure*, (New York: Addison Wesley, 2001), pp. 39-42.

foundation and socialist economy. This was meant to destroy elements of Western capitalism, which could be found in the NEP. The plan aimed to adjust the socialist economy in order to accelerate production³. The collectivization system could be separated into collective farm (Kolknozes) and state farm (Sovkhoz). The system caused severe protests from farmers as they hoarded food and killed their animals to prevent them from becoming the state's possessions. The government then responded to these protests by opening opportunities for them to leave the collectivization system.⁴

The agricultural reform of the Soviet Union before its fall during the Gorbachev regime was part of its openness and restructuring programs known as Glasnost & Perestroika, which were meant to serve as the basis for socialist democracy. This allowed economic independence similar to the free market system. Also, citizens had more rights; the control of production, distribution, and price regulation from the center was reduced, and private businesses were supported. However, Gorbachev's reform was a failure as the facilitation of the economic structure and mechanism did not take place and Russia was still not ready to be a free market country. In the 1980s, the Soviet Union went from being self-sufficient in food production to becoming a net food importer.⁵

After the fall of the Soviet Union in 1991, Yeltsin became President of the Russian Federation and started reforming the economy by creating the market economy and allowing prices to be in accordance with the market. However, during the first phase of the reform, food shortages and high prices occurred and troubled citizens' lives. The agriculture lacked efficiency due to the use of unsuitable land, chemicals, and the problems of land renting. In addition, agricultural equipment was not effective and could not meet the demand of consumers. During the Yeltsin's regime, there were attempts to reform agriculture through issuing laws in order to adjust the structure and create commercialization. Laws relating to private farms were authorized to be appealed to collective farms. Also, the government no longer interfered with employment and agricultural production. Despite the increased support to create more private farms, in 1995 a total of 280,000 farms, which accounted for 5% of the overall farms in Russia, were regulated by the state. It acted as the chief marketing agent for the food sector by establishing fixed order for goods, thus guaranteeing farmers a market.⁶

³ Ibid., pp. 43-51.

⁴David Stuart Lane, *Soviet Economy and Society*(New York: New York University Press, 1985), p. 269.

⁵ Ibid., pp. 164-168.

⁶Stephen Wegren, "Agrarian Policy under Putin," *Post-Soviet Geography and Economics* 43 (January 2002): 4-14.

Nevertheless, despite the attempts to create commercially viable agriculture, the gap between prices of domestic products and imported products was still small. As a result, during this period, the agricultural sector was not quite successful.

In 2000, Vladimir Putin became President during the high economic growth. The ruble currency appreciated and the import of food significantly increased. Russia was the second largest importer of food next to China. Furthermore, the country developed agriculture by allowing investors to rent land for agricultural activities. This increased economic efficiency as investors brought with them quality technology, used good seeds, and initiated a good production process which increased outputs. In 2009, Russia was the fourth largest exporter of wheat and it is predicted that by 2019 it may replace America as the top wheat exporter. Putin's agricultural reform reduced food shortages but the country still needed the import of agricultural products, which mostly came from Europe and America. The share of imported food exceeded 40%.⁷

Presently, Russia is the top trade partner of Thailand, besides Eastern Europe and the CIS. Most of the products exported to Russia are agricultural products as the prolonged freezing climate prohibits agricultural production and food is not sufficient to meet consumers' demand in the country. Russia spent 17 million dollars alone in 2008 for the products from Thailand. Important Thai agricultural products include rice, fresh shrimp, canned fruits, canned seafood, granulated sugar etc. In addition, Thai export of rice in 2008 increased to 273,534 metric tons, which was a 17% increase from 2007. Russia also imported processed food from Thailand worth not less than 50 million dollars. Hence, it can be said that agricultural and food products have potential in Thailand's export industry and are needed in the Russian market. Thus, the researcher is interested in studying the agricultural reform of Russia and the increased channels and opportunities of Thai products in Russia.⁸

⁸ *Thailand is attempting to export more goods* [Online], 17 July 2009. Source http://www.mcot.net/cfcustom/cache_page/79425.html

⁷ Putin's Agricultural Policies [Online], 8 May 2011. Source http://www.globalsecurity.org/military/world/russia/agriculture-putin.htm

8 Theiland is attempting to export more goods [Online], 17 July 200

Objectives

- 1. To study the evolution of the agricultural policy of the Russian empire and the Soviet Union.
 - 2. To study the agricultural reform of the Russian Federation.
- 3. To analyze the results of the Russian agricultural reform and the implications for Thailand.

Hypothesis

- 1. Russia has a policy/plan to boost/promote agricultural reform.
- 2. Thailand should have more opportunities to export agricultural products to Russia.

Scope of study

Though this study provides a historical background to agricultural policy and agricultural reform in Russia, its focus is on the Vladimir Putin's period:

- 1. To study agricultural policies, products improvement, and domestic and international market support during the Vladimir Putin period (2000-2008).
- 2. To study the channels and opportunities for Thai agricultural products in the Russian market during 2000-2008.

Conceptual framework

In order to understand the political and economic situations of Russia since the 20th century, one needs to cover the main concepts and terms and their implications. With many great transitions Russia has faced, there have been changes all over the country. As a result, the definition of each concept and term must be fully analyzed in order to capture the whole picture with full understanding. These include Marxism-Leninism, Capitalism, Globalization, and SWOT Analysis.

Marxism-Leninism was coined by Vladimir Lenin. It was one of the first terms used to define what communism was all about. Written by Titus Suciu for the Bulletin of the Transylvania University of Brasov, **Marxism and Globalization** states that after the communist revolution in Russia in 1917, other countries began to

adopt the term and define themselves as new countries with the new system. It was the idea that emphasized the need of the working class to rise and revolt against capitalism so that they could destroy the oppression imposed on them by those in power. Those who favored the idea also believed that capitalism was a corrupt system which sought only to expand its empire through colonization and exploitation. Marx believed that capitalist countries exploited the working class by making them work extra hard for the benefits of the upper class. He called it "unequivalent exchange". Eventually, Marx predicted that the countries would collapse and socialism, a superior organization, would emerge to replace and become the dominant force. The term was apparent during the Soviet regime and will be used to analyze agricultural policies.

By the beginning of the 21st century, capitalism has spread to most parts of the world. It has become dominant after mercantilism. Its main idea is to maximize benefits and productivity instead of investing in products or services that do not generate income. Adam Smith's Wealth of Nations is one of the most influential work that favored capitalism and his free-market theories were widely used in the 19th century. Written by the Economist, Survey: Profit and the Public Good states that although Smith favored benevolence over self-interest, economically speaking, the latter is a much more practical tool for society to evolve. With everyone trying to enhance their own interests, society can have new products and services. As long as people are free to engage in their enterprises and pursue their goals, the public interest can be advanced. Prices in the market economy are a very important indicator of consumers' demand. Companies must identify customers' behavior in order to seek the best possible result. This, in turn, benefits society as a whole as more developments are encouraged. As companies make profit, they can utilize the extra income to develop their own process. Customers thus are more satisfied with the choices and the implementation given by the companies. A century later, with the collapse of communist ideology, the term prevailed and has been widespread ever since.

Can Policy be the Same in Localization and Globalization? Issues and Perspectives, written by Abbas Pourhassan and published in the Interdisciplinary Journal of Contemporary Research in Business, states that contrary to centralization, globalization focuses on international trading and marketing while reducing barriers, tariffs, export fees etc. Products and services are exchanged between many parts of the world in order to maximize production and profits through specialization of each sector. This can be done through capital flows, migration, foreign investment etc. The combination of cultures, societies, and economies will greatly contribute to high growth for those involved in this system. Globalization also allows the concept of outsourcing to take place. Software development, customer support, marketing, accounting and insurance are outsourced to developing countries in order to reduce

costs. In addition, employees in the countries have more job opportunities. The concept also increases competition in many countries. This leads to lower prices and eventually benefits consumers of involved countries. This term will be used to analyze the Russian Federation and its agricultural policies.

In order to examine the implications for Thailand's export to Russia, SWOT Analysis is needed to open up every perspective of the economic system. The term was coined in 1960s by Albert S Humphrey. Produced by Mind Tools, **SWOT Analysis** states that it is a very important strategy which gives information about the transaction's capabilities and resources in the given circumstance. The term consists of strength (the advantages you have, the strengths that other people do not possess etc.), weakness (possible improvements, factors associated with the loss of your sales etc.), opportunity (changes in technology, in government policies, or in social patterns etc.), and threat (obstacles, competitors' capability, current economic situation etc.). Each of the word will help users to distinguish and properly analyze their economic situation. It also clearly informs both internal and external factors involved in each activity.

Literature review

In order to clarify the implications of Russian agriculture, I have divided the research into three sections.

- 1. Chapter II: Russian Empire and the Soviet Union period
- 2. Chapter III: the post Soviet Union period
- 3. Chapter IV: the export of Thai food to Russia

Firstly, the research focuses on agriculture during the Russian Empire and the Soviet Union. Russian & Soviet Economic Performance & Structure, written by Paul Gregory and Robert Stuart, will be analyzed as it talks about Russian agriculture under the Tsars and the Soviet Union. Chapter 2, "the Economic History of Russia to 1917", discusses Russia's economy during the prerevolutionary era. It is important for readers to understand the base of the Russian system from 1861 onwards before grasping the current circumstance. After a modest growth during 1861-1880, some argue that Russia faced "agrarian crisis", or a failed attempt to create contemporary agriculture. Despite significant changes, Russia was still in the wrong direction of becoming more economically independent. Chapter 3, "War Communism and the New Economic Policy: 1918-1928, discusses War Communism, a measure to take care of the civil war and the changing political system. However, there was no planning in the administration and nationalization was fully implemented. Then, the

New Economic Policy replaced the former and granted the existence of markets. However, the markets had no directions and nationalization was still a major part of the system. The economy improved greatly but the NEP was abandoned in 1928. In Chapter 8, "Special Sectors: Foreign Trade and Agriculture", the Soviet Union's foreign trade policy is analyzed. Due to its nature as a command economy, trade largely failed, compared to market economies. The system did not include a convertible currency, comparative prices, and meaningful prices. Exported items included basic products, such as energy and oil. In addition, foreign investment was nowhere to be found due to the absence of equity rights. Collectivization, which was introduced in 1928, worsened the situation. Despite a series of attempts, agricultural modernization did not create productivity and the country had to import more crops to satisfy the domestic demand. This pattern continued to the late 1970s and 1980s and the Gorbachev's era.

Then, Food and Agricultural Policy Reforms in the Former USSR: an Agenda for the Transition will be used to discuss the failed policies of the Soviet Union since the early 1900s. Before the transition, the Soviet Union created a very inefficient food production system and the prices were distorted. It was not until 1991 that the government invited the World Bank to organize a team to improve the situation. The EBRD, EC, OECD, and IMF were also invited. The collaboration was aimed to ensure sufficient supply, suitable price, privatization etc. It was also aimed to change the trade policy and increase support from the government.

Secondly, the paper discusses the agricultural system after the fall of the Soviet Union and the transition to capitalism, which completely changed the economic foundation. Written by Stephen Wegren and Frank A. Durgin, the **Political Economy of Private Farming in Russia** discusses the investment of the private sector during the Yeltsin's regime. Private farming must take into account sociological, demographic, financial, and economic influences. It attempts to describe the legal foundations of privatization, including laws, decrees, and resolutions. It also tries to identify the center's emphasis on private farming and its development. Questions regarding Moscow's implementation in rural areas, investment, and the elements which will improve agriculture of Russia will be addressed. In addition, **Globalisation and the Development of Capitalism in Russia** presents agricultural policies during the presidency of Vladimir Putin and the rise of Russia as one of the world's leading agricultural exporters.

Russian Views of the Transition in the Rural Sector, edited by L. Alexander Norsworthy, is a collective work of Russian experts on the rural sector. However, only topics on Russian agricultural reform will be used. The purpose is to absorb a variety of opinions from the experts in order to gain a better understanding of Russia's failure in agricultural reform.

Firstly, "Agrarian Reform in Russia in the 1990s: Objectives, Mechanisms, and Problems", written by Vasily Uzun, discusses the right to own private land since 1990. Despite the improvement, there were still many problems regarding regulations, details, and principles. The new policy was not implemented by lower officials. The agricultural reform was carefully selected by policy makers but failed to make an impression. Problems included political interests, the constant problems of debts and losses faced by farmers and entrepreneurs etc. Then, "Driving Forces in Russian Agrarian Policy in the 1990s", written by Renata Yanbykh, describes the institutions and government bodies which were involved with agricultural policy, outlines of the main political parties' agrarian program, and the emergence of companies associated with the issue. "Land Reform: Expectations and Social Consequences", written by Vladimir Bogdanovsky, discusses the results of the reform. Food production did not increase as originally expected and living standards in the countryside became worsened. More people even lost faith in the reform and in the government. Furthermore, many farmers were not interested in private farming, were confused by the issue, and still preferred working in the collective system.

In addition, "Public Opinion concerning Russia's Agricultural Reforms", written by Eugenia Serova, discusses the post-Soviet era and the reform of agriculture which had only produced modest results. A survey of individuals related to the implementation of the issue indicated that they were still unclear about the whole concept. In addition, 84 percent of the people believed that the reforms did not improve but actually worsening the situation. Some even believed that the reforms would be effective only after ten years. "Paradoxes of Agrarian Reform in Russia", written by Zemfira Kalugina, discusses the decline of collective enterprises despite the reform. The price structure did not suit agriculture and the social and marketing infrastructure had not vet been implemented. More people lost trust in the system and had less incentive, while private sector agriculture was still ineffective. "Reform and Economic Behavior in Russian Agriculture", written by Eugenia Serova, presents positive results, including the increase of farm managers' incentives to maximize profits, the decline of state purchase, and the improvement of financial discipline. It describes the strategies employed by enterprises in order to adapt to a market economy. Also, four adaptation models were indicated: active participation in the market; conformity and compensatory activity; the "mimicry", and passivity.

An article by Gregory Feifer, Russia: Farmland Reform May Prove Putin's Lasting Legacy, discusses the initiation of reform which allowed the privatization of agricultural land. The law granted the right to sell farmland for the first time since the tsarist era. Despite strong opposition from the Communist Party and widespread corruption, the struggle for the reform has just begun and the rights of owners and managers could be increased in the future. Russia Can Be Food Self-Sufficient, and Export, Putin Says, an article in Executive Intelligence Review, states the intention

of President Putin to be independent in the agricultural sector and protect citizens from rising food prices on the world markets. He aims to pursue more effective control regarding monopoly regulations. His five objectives include the increase of gross output, technological re-equipping, the achievement of price stability, better risk management, and monitoring of food products. In addition, **Russia to Increase Support for Agriculture in 2012 – Putin**, written by Sergej Pivovarov, discusses Putin's aim to increase support for agriculture by 10 percent in 2012 to 130 billion rubles. The agricultural sector is to present proposals while the government is conducting a new state program. In addition, the president wanted the investigation of the missing money allocation in 2010-2011. The Ministry of Agriculture must return the money to farmers in order to create transparency.

Soviet Policy for the 1980s will be used next for information about agricultural implementation in the 1980s and the complication of the system under Brezhev. Lastly, written by David Lane, **Soviet Economy and Society** gives an insight into the complication of the Soviet Union's farming system and the attempt by its leaders to solve the economic problems and improve the agricultural productivity of Russia.

Lastly, **Food Market in the Russian Federation**, written by the Office of Commercial Affairs, discusses the export of Thai food to Russia and the main products which include rice, fruits, seafood, processed food, palm oil, sugar, sweet corn, SMG, and pet food. The article shows the amount of imported products from 2007 to 2008 which represents an increase of export of Thai goods to Russia. In addition, **Russia in the Next Decade**, written by Dr. Rom Phiramontri and published in the *Journal of Russian Studies*, Volume II, provides an opinion on how Russia would be like in the next decade in terms of its economy, society, politics, and international relations. The issues discussed in this journal are related to Dr. Leonov's' opinions regarding the current agricultural problems and reduced labor forces due to the lack of government's support, which left people with no choice but having to rely on foreign import.

Increased tendency for Thai shrimps export to Russia, written by Doksabang, states that high-level Thai officials attended the World Grain Forum in Russia after receiving the invitation. The issue of food safety and food security was discussed. Due to the growing starvation in many parts of the world, Thailand showed the potential to export main agricultural products such as rice and corn to many countries in order to feed the population. The event also expanded the chance for Thailand to increase export to Russia, which includes products such as canned fruits, processed rice, rubber, canned seafood etc. In addition, shrimps will be one of the main exported products.

Research Methodology

This study of Russian agricultural reform from the Russian Empire to the Russian Federation will rely on documentary research to find its impacts on the country and its development. I also use descriptive analysis to pinpoint how change in Russian agriculture from being controlled by central authorities to becoming a more liberal market-oriented enterprise has improved Russian economy.

The paper begins with a literature review which was organized according to the development of Russian agriculture. The information was collected from primary as well as secondary sources, including books, journals, news, reports, dissertations, and articles from the Internet.

Significance of the studies

During the Vladimir Putin's regime, Russia initiated agricultural reform that resulted in an increase in agricultural production. It was also able to resolve the problems of food shortage. However, the country still relies on the import of agricultural products. Due to the expansion of positive relationship between Thailand and Russia, Thailand should be able to export more agricultural products to Russia in the future. Therefore, it is very important that we understand domestic developments in Russia because this could have important impact on Thailand.

Plan for Research Activities

Length of time			,	2011							201	12			
Research Activities	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G
Literature Review															
Data Collection Process															
Analysis															
Thesis Writing															

CHAPTER II

THE DEVELOPMENT OF AN AGRICULTURAL POLICY OF THE RUSSIAN EMPIRE AND THE SOVIET UNION

This chapter details agricultural policies of the leaders from the Russian Empire, Peter I, to the last leader of the Soviet Union, Gorbachev. It shows the struggles which Russia has had to endure for centuries despite constant changes. In the end, the root of the problems lies in the core value of the country, the value of which was never severely tempered until the end of the 20th century. This chapter is mainly categorized into 2 main eras: the agricultural policy of the Russian Empire (1) and that of the Soviet Union (2).

1. Agricultural policy of the Russian Empire

Before the 1917 Revolution, the Soviet Union was formerly known as the Russian Empire, with 75% of Slavic people, 3 official languages (Russian, Belarusian, and Ukraine), and Eastern Orthodox as national religion. The Slavic state was founded in 862 around the city of Kiev, the most important center of trade. However, in 1240 the state was defeated by the Tatar and dispersed into small states. The Grand Prince of Moscow then gathered the independent states to form Muscovy and expanded the empire into Belarusia and other territories. In 1700, Peter the Great changed the name Muscovy to the Russian Empire and established St. Petersburg as the new capital city. The population was known as the Great Russians.

Even though the Russian Empire was a large country abundant with natural resources, the downside was that the resources could not be much utilized due to its size and the lack of transportation. Roads were insufficient and were in poor condition. The cold climate made it unsuitable for plantation and the production process was unproductive. Under the Tsardom system, Russian agriculture became inefficient. The fields were divided into strips for each family to conduct its own livelihood without maximized production for the whole country.

The political system at the time was characterized as Oriental Despotism, giving power to the state to own everything in society, especially the land, and have authority over religion. From 1500 to 1700, the state tried to limit the ownership of

land of the boyar and seized the remaining land to give it to officials to manage for their own benefits. It was normal for 400-500 farmers to work under the management of 30-40 officials. In addition, the state could issue orders to force farmers to take care of the unused lands in the East. The state would not allow farmers to have ownership of the land and thus deprived them of local power.

Although Michael I, Alexis I, and Feodor III brought prosperity and changes to Russia through adjustment of the military and tax collection, support of trade and industries etc, many people were still poor; farmers lost freedom and were indentured servants who were taken advantage of by officials. Still, the country in overall was progressing until Peter I who built the country to become even stronger in terms of economy, foreign diplomatic relations, military advancement, and scientific progress.¹

Between 1682 and 1725, Peter I modernized the country, based on the western model by reforming the economy and various programs. In terms of an economic reform, he commercialized Russia by following the western economic concept and forbidding the import to Russia, accelerating industry productions, such as in manufacturing of soaps, wigs, shoes, and weapons. Russia created its own factories in Tames, Akem, and Vinius, and Marcelis. It would provide funds and procure labor for factories. Experts of various fields from Western Europe were also welcome to settle and invest in Russia. The Tsar also created public industries for the private sector to operate, recruited farmers to work in industries, as well as stimulated officials to invest in trade. In only 20 years, more than 200 large industries and 2,500 small industries in Moscow were created. Products that had never been taxed before were taxed and sale tax was initiated, contributing to a substantial increase of income for the country. Russian products were significantly increased and most income was spent on army expansion and wars. Roads and bridges were built for convenience in transportation. In terms of agriculture, many inventions were adopted and agricultural products were so much improved that they became the country's main exports.

Because the Tsars owned all the land in the Russian Empire, farmers working on the land were directly indebted to the state. In practice, the village commune, a Slavic system which was regarded as more important than a family institution, would possess and distribute the land to farmers. This emphasized equal distribution of land and could be seen mostly in the north. Even though they were independent to a certain degree, they had to accept that the state owned the majority of the power and

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¹Dixon Simon, *The Modernisation of Russia, 1676–1825* (Cambridge: Cambridge University Press, 1999), pp. 28-58.

they had to pay toll tax.

In the 19th century, the country began adopting advanced machines and technologies from the west. In the same way as Great Britain, Russia began its industrial revolution with textile manufacturing, which would expand to Vladimir and Moscow. Nevertheless, the serfdom system slowed down the industrial sector due to the immobility of labor, contributing to the impoverishment of the poor.²

During Alexander II's era, farmers had a few incentives to do their work. Any room for improvements and better management was closed. Peasants working on the farms had to give their income to their masters and freedom was restricted, whereas peasants from Western Europe had freedom to live on their own. Despite the development of their rights in 1861 after the Emancipation Act which allowed them to have half of the land holdings, the intention behind such act did not aim for the betterment of their lives, but for suppressing revolts and preserving aristocracy. The crown and the treasury owned almost 50% of the total land while the remainder was divided for the gentry and peasants. Many peasants found the distribution insufficient, but had to quietly obey the order. The act also imposed communal agriculture, a form which forced more prosperous commune members to take defaults of less prosperous members, prohibiting incentives for the former to create wealth.³

Thirty years after the emancipation, the number of rich farmers increased. There were approximately 10% of rich farmers who owned 35% of the total land, with an average of 55 acres per family. On the other hand, the other 50% owned 22 acres per family, or only 20% of the country's total land. Still, a greater difference could be seen from the lack of horse power. Rich farmers would lend the animal to the poor and the latter might repay by working in the rich farmers' land. This was an acceptable method used to compensate the lack of sufficient

equipment and labor.

In 1900, the agricultural production was only at 68%, mainly from oats, barley, wheat, and rye. The overall picture was still grim. This can be seen from Its production, compared to western countries, was still far behind. Because of the low production, farmers were in harsh conditions. Middle

² Ibid., pp.65-74.

³ See Pushkarev, Sergei, *The Emergence of Modern Russia 1801-1917* (Alberta: Pica Press, 1985), pp. 337-343.

income peasants, equipped with 1-2 horses and 35-40 acres of land, had just enough food for their families. According to a survey conducted in 1895, more than 50% of farmers lacked sufficient bread and only 20% of the total had high consumption. Average income was only between 150-180 rubles.

Table 2.1 Agricultural efficiency between Russia and Western countries during the beginning of the 20th century

(unit: pound/acre)

	Types of Production						
Country	Wheat	Rye	Oats				
Germany	1,109	812	1,064				
The U.S.	868	605	909				
Russia	406	468	407				

Source: P.R. Gregory, *Russian National Income*, 1895-1913 (Cambridge: Cambridge University Press, 1982), 152.

The emancipation of slaves by Alexander II in 1891 freed farmers from the state's commitment, allowing them to legally own land. However, in reality the situation did not improve and the communal system was still maintained, having to pay taxes for the state for 49 years. The members shared the same equal debt imposed by the leaders, depriving them of freedom they were supposed to have. The only exception to receive such privilege was to transfer the burden to the remaining family members. As a result, the transfer of farmers to the industrial sector or other career opportunities was not possible, making it impossible to increase the labor or middle class population. It was not until the uprising of farmers in 1905 and the Stolypin Reforms of 1907 which ultimately canceled the land compensation fee and granted farmers with freedom to move freely and own their land.

The industrial sector regained its prosperity in 1890. The state intervened in the affairs of businesses and industries more than any country in the world. According to Table 2.2, the growth rate between 1860 and 1913 was at 5% annually, a very high rate when the high number of population is taken into consideration. It was especially better when Sergei Witte became Finance Minister and implemented an import tax for the first time in 1891, tripling the production of pig iron. In 1900, Russia became the top oil producer. Train route expanded by

73.5%. By 1904, there were a total of 39,000 miles of train tracks with 450,000 employees, which contributed to an increase of industrial output, such as minerals, oil, and coal in the south.

Table 2.2 Agricultural output index of Russia between 1860-1913

1860	13.9	1896	72.9	1905	98.2	
1870	17.1	1897	77.8	1906	111.7	
1880	28.2	1898	85.5	1907	116.9	
1890	50.7	1899	95.3	1908	119.5	
1891	53.4	1900	100.0	1909	122.5	
1892	55.7	1901	103.1	1910	141.4	
1893	63.3	1902	103.8	1911	149.7	
1894	63.3	1903	106.5	1912	153.2	
1895	70.4	1904	109.5	1913	163.6	
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Source: P.R. Gregory, *Russian National Income*, 1895-1913 (Cambridge: Cambridge University Press, 1982), 155-56.

Nevertheless, the industrial sector, compared to the overall economy, had a very small size, contributing 20% of national income with only 5-10% of the total labor force. The national income still lagged behind other European countries. This is partly due to the increasing population, from 13 million in 1724 to 129 million in 1897. Foreign capital also played an important role in expanding the economy.

Overall, the negative impact of the emancipation outweighed positive development; the land was being wasted, farmers were restricted from reaching their full potential, and tax arrears were increasing. Taking these factors into account, it was not surprising to witness a revolution in 1905. Subsequently, this forced the government to initiate the Stolypin Reforms of 1906 and 1910. The reforms were very important in reducing the strength of communal agriculture, as the debts of peasants were cancelled and they could get out of the commune. Unfortunately, positive changes came too late and the agrarian crisis had already started: rising tax arrears, poverty, and the decrease of grain output was too severe.⁴

⁴ Ibid., pp.353-367.

2. Agricultural policy of the Soviet Union

The next part of this chapter is divided into 3 parts: the Soviet Union's agricultural policy during 1917-1952 (1), the Soviet Union's agricultural policy from 1952 to 1985 (2), and the Soviet Union's agricultural policy from 1988 to 1991 (3). It describes about the Soviet Union's agricultural policy and the individuals who influenced the outcome of agricultural production. It can be identified from the beginning that the Soviet had a very rough start. Without a radical reform, the situation would remain stagnant until the end of the century.

1. The Soviet Union's agricultural policy during 1917-1952

Russia had had a tremendous political turmoil during these past centuries. After the abolishment of monarchy to change the country's administration to the communist regime in 1918, and before moving to democracy under Gorbachev and the change of political system, the country had faced many obstacles and difficulties. Past leaders under the authoritarian system tried their hardest to maintain their power as long as possible while many new succeeding leaders intervened to take control of the country. After the Bolshevik overthrew Nicholas II, the country was under communist's rules and its ideas were planted in the country, with its determination to compete with the western countries and achieve Utopia. However, the Soviet Union eventually fell due to its own internal chaos and widespread mismanagement.

One of the main reasons why the Soviet Union disintegrated in 1991 was because the monopoly of power by the state closed out all ideas from internal or external forces. Because citizens were deprived of political participation, the lack of morale was permanent, and the private sector was not able to get involved with the national economy, the communist administration was gradually but surely crumbling to its knees. Even though Gorbachev pushed forward reforms, democratic principles and capitalism to fix the country, it was too late and the damage had already been done to the whole country.

World War I cost not only the lives of soldiers who perished on unknown land and soil, but it also took away the labor force from the agricultural sector. As many as 15 million people were placed on battlefields, leaving empty land and reduced production, especially on the northeastern side of the country. The export of wheat in 1916 decreased significantly. Demand then exceeded supply, resulting in food shortage. In the beginning of March 1917, St. Petersburg severely lacked bread and people had to queue up for days to buy it. A total of 100,000 laborers and 25% of the industrial laborers stopped their work and protested. This eventually led to the overthrow of Tsars on 8 March 1917 and 4 days later Nicholas II resigned and set up a provisional government led by Alexander Kerensky.

The new government prohibited wheat selling by merchants. Excess production was to be sent to the state's Food Organization and the prices of products

were fixed and paid by the government. The result was resentment from farmers as the government solely controlled their production and prices, leaving them little choices to gain profits from their work. By summer of 1917, the price of bread tripled and that of milk and butter increased fivefold. In conclusion, the food shortage continued. The communication system also became worsened, coming to a halt in certain areas which reduced the production of coal in Donbas. Cotton production was also stopped because cotton could not be transported from Turkistan. The disruption of economy also affected the wheat flour production and factories in various cities were closed. All of these factors eventually led to the overthrow of the government by the Bolsheviks in October for a new change.

After the revolution which abolished the monarchy, Lenin, a prominent apprentice of Karl Marx, became leader of the new Soviet Union. The new management was under the "dictatorship of the proletariat". Every resource would be collected and planned by the state alone. It focused on the development of industries, urban areas etc. in order to achieve "Lenin's strategy of socialist transformation". The state would suppress ideas and behaviors of the mass, strictly following Marx's Utopian socialism.

At this stage of the revolution, Russian society was not yet fully transformed into a socialist state, as Lenin first emphasized state capitalism. Farmers and laborers were given the power to control their own production in order to prevent possible revolts. The Bolsheviks implemented land reform by transferring the land to the local Soviet committee and prohibiting the hiring of labor or purchasing of land. This was to ensure equal land distribution according to the principle. As for laborers in the industrial sector, they had full authority in production, product distribution, and other services, especially food, fuel, and necessary equipment.

Within 2-3 months after Lenin took control, sugar and oil industry were transferred to the state and foreign trade and important domestic products, such as coffee, were monopolized by the state. In the first half of 1918, Lenin strictly controlled production and distribution of products. He aimed to increase labor efficiency by using strict regulations on the laborers, elevating educational and cultural standards, and adopting advanced scientific methods. He analyzed that in order for Russia to be socialist society, it needed to go through state capitalism first and fight the power of small capitalists, including small-sized entrepreneurs, traders, speculators, and hoarders.

The impact of the policy was that capitalism spread more to the local. It turned cultivators into industrialists. The age-old routine of having gentry and lord control every decision of the agriculturalists was submerged. The output was sold to the local and international market. Farmers were no longer isolated from the world. This was the first time when capitalism penetrated production technique and

improved social labor. It created large-scale agricultural products, based on the use of machinery and required extensive co-operation of workers. When the new system is compared to the old system, farmers in the new system were stuck to their village community and were deprived of the opportunities to contact with the outside world. It had brought down local seclusion and insularity. Land holding by farmers was not as important as looking for the internal market of each household or village. Capitalism eliminated the physical punishment of farmers and the discrimination against them. They no longer carried the obligation of serving the landlord, but the only thing they served was the market. Unfortunately, the progress was halted when the civil war broke out in 1918, forcing the state to implement harsh measures and control every production.⁵

During the War Communism between 1918 and 1922, workers received equal pay, money was eliminated, and private market ceased to exist. In terms of agriculture, the surpluses were requisitioned by the police who were sent to the countryside to take away grains from the middle income peasants and the rich. This destroyed the link between deliveries and their incentives. Approximately 37,000 enterprises were nationalized by 1920. Also, by 1918 private trade was abolished. The state was the only one responsible for feeding the population, resulting in an increase of black market. The distribution of wages was based on the types of job. Those involved in heavy work received the highest amount of income. By 1919, there were 30 types of work, each with different wage for workers.

There was a severe lack of resources during this period which immensely affected the industrial sector. The result could be seen throughout the roads in Moscow and St. Petersburg. As H.G. Wells, a British writer, observed that every house was torn down to turn wood into fuel. The transport of resources from other countries could not be carried out due to either the lack of trains or the energy crisis after losing Donbas. The production of oil in Baku and Grozny was also disrupted. It was estimated that fuel used for production was only at 40% and 50% in 1916 and 1917, respectively. Table 2.3 clearly illustrates the negative impact between 1913 and 1921.

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⁵Paul Gregory and Robert Stuart, *Russian and Soviet Economic Performance and Structure* (New York: Addison Wesley, 2001), pp. 39-56.

Table 2.3 Comparison of Russian economic index between 1913 and 1921

Unit: Percentage

	1913	1921
Gross National Product : GNP	100	31
(index)		
Heavy industry (index)	100	21
Coal (million ton)	29	9
Oil (million ton)	9.2	3.8
Electric energy (million	203.9	520
kilowat – hour)		
Iron ore (million ton)	4.2	0.1
Steel (million ton)	4.3	0.2
Brick (million ton)	2.1	0.01
Sugar (million ton)	1.3	0.05
Train (loading quantity –	132.4	39.4
million ton)		
Agricultural production	100	60
(index)		
Import improducts (based on	1374	208
the value of 1913) (index)		
Export products (based on the	1520	20

Source: L. Volin, *A Century of Russian Agriculture* (Cambridge, MA: Harvard University Press, 1970), 205.

The War Communism had a negative impact on peasants, encouraging them to hoard surpluses, especially during shortages. As the market system had already perished, the state was left without directions and no administration was introduced. In addition, because wages were equally distributed, skilled workers refused to work in the industry and left factories. Between 1917 and 1920, around 2.6 million to 1.2 million townspeople was reduced. By 1920, it was increasingly evident that the policy was failing and its danger was not to be underestimated. Peasants were extremely tired of the administration and revolts were common. In March 1921, the Kronstadt Uprising finally forced the government to change its policy. 6

Because of great pressure placed on the government, the New Economic Policy (NEP) was created. Lenin issued the collection of taxes from farmers instead of taking away their excess products. The collection of taxes, rather than depriving them of excess materials, increased their incentives and gave them the freedom to gain extra benefits. Private trade was resurrected and commercialized trade was heavily supported. The NEP also allowed the private sector to run the industrial businesses. In the beginning of 1922, more than 10,000 enterprises of the state were hired by the private sector.

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⁶ Ibid., pp.63-69.

In addition, the state invited foreign investors to receive raw materials of advanced production equipment. By 1928, there were 69 companies, or 0.6% of the country's total production, which began investing in the country. Trading with foreign countries also improved. In 1922, Russia signed trade contracts with England and with other countries in the following years. The total export value increased nine fold from 1924 to 1925 when compared with that from 1921 to 1922.

Transportation, especially train, was also revived. Still, the lack of energy continued to be the main problem, resulting in underdeveloped roads. In 1925, there were 7,488 cars, 5,550 trucks, and 263 passenger cars, while horses were still mainly used.

The situation had improved because the policy aimed to amalgamate market and socialism. The core of the policy was to reestablish relations between the state and the peasants. The requisitioning of agricultural products was abandoned and market system was reopened, allowing farmers to sell the surpluses and promoting differentiation. The requisitioning was replaced by the proportional agricultural tax, a single tax based on a net produce of a peasant's fixed proportion. In order to establish a more market-oriented economy, the state allowed peasants to sell their products to whoever they wanted, including the state or a business. They were also permitted to lease land and hire laborers. In the retail trading, most were dominated by the private sector by the end of 1922.

Even though enterprises were allowed to initiate their own contracts to buy new materials and supplies, the state still dominated the industry. The large-scale industry was still nationalized under this system, but decision making was decentralized. Enterprises were allowed to create trusts. This granted contracts to be implemented and they were loosely supervised by the state. Mostly the Commissariat of Finance controlled the finance through the budget and credit system. Money was also reintroduced in the system and the private sector was encouraged to deposit their money in the banks by reducing limitations. A stabilized currency called the Chervonets was used and the old currency was abandoned.

Unfortunately, despite some success of the NEP, it was eventually replaced by a new system where command economy dominated. The state changed it because they began to see the rise of peasants as a threat to the state's policy. In addition, it was believed that the policy had already reached its potential, leaving little growth, and the capital stock needed replacement from new investments.

In addition, the Soviet abandoned the NEP due to many misunderstandings that had arisen. Firstly, by setting agricultural prices low, farmers tended to hoard the products for price increase in the future. This is considered to be a normal response to such measure. However, the Soviet thought of it as an act of opposing the

regime. Secondly, the state did not take into account the opportunity cost concept. Thirdly, the Soviet emphasized the distribution of grains to the state more than the distribution to the market, which was a more important factor for economic development. Lastly, the intervention of the market caused unintended consequences, usually negative ones. This can be seen when the state set low prices in agriculture and in industry and the attempt to limit the power of the private sector, which was viewed as the enemy of the state, for higher prices.⁷

Stalin soon took power in 1922 and increased centralization of the state's power, including stricter policies in politics, economy, and society. Stalin's grip of power was so strong that anyone opposing his measures would be harshly punished. He aimed to develop heavy industries to compete with capitalist countries, but the implementation backfired and deprived people of basic necessities.

When Stalin took power, he brought with him the ambition to eliminate capitalism, once and for all, and established a full-scale command economy. The Five-Year Plan was then created, with its goal to turn a weak country dependent on capitalist countries into an industrial country with the capability of standing on its own feet. Its main aim was to transfer the small agricultural areas to collective farming, leaving no resurrection of capitalism in the country. It was to create defensive strategies to prevent possible external threats and reinforced its independency from capitalist countries. The main core of this concept was heavy industry and collectivization.

The collectivization process did not start until 1929 and 25,000 people, including the police, workers, and loyalists, were sent to implement the process. According to Table 2.4, it can be clearly indicated that the rise of the process after 1929 was rapid and completed by the mid 1930s. While many would argue that peasants accepted the change willingly, it was actually through brutal force. Farmers who resisted the idea were arrested, deported, or executed. Approximately 3.5 million peasants were in forced labor, another 3.5 million were resettled, and another 3.5 died during the collectivization process. The state then became the dominant force in controlling the economy of the countryside and urban areas.

⁷ Ibid., pp.72-78.

Table 2.4 Expansion of the Collective Farm Sector, 1918-1938 (selected years)

Year	Collective farms (1000)	Households in collectives (1000)	Peasant households collectivized (%)
1918	1.6	16.4	0.1
1928	33.3	416.7	1.7
1929	57.0	1,007.7	3.9
1930	85.9	5,998.1	23.6
1931	211.1	12,033.2	52.7
1932	211.1	14,918.7	61.5
1935	245.4	17,334.9	83.2
1938	242.4	18,847.6	93.5

Source: L. Volin, *A Century of Russian Agriculture* (Cambridge, MA: Harvard University Press, 1970),211.

Immediately after collectivization was implemented, the agricultural output was reduced during 1929-1933. According to Table 5.3, the decline was especially evident in the livestock sector. These grain producing regions led to the famine in 1932 and 1933 which cost many lives. The income of farmers declined to one-half of what they used to receive. People from the agricultural sector were forced to work in the industrial sector. Between 1926 and 1939, the population in the urban increased from 26.3 to 56.1 million, resulting in an annual population growth of 8.7% during those years while the number of agricultural forces declined at an annual rate of 2.5%. Many rural people left the countryside because of the worsening condition of the collective farming system, fear of punishment and deportation.

In 1928, Stalin adopted a new procurement method to get rural food surpluses. A system of compulsory food procurements was started and made an increase in deliveries of peasants' food. However, later on the system backfired and the countryside saw the depletion of food and animal feedstuffs. The peasants could no longer enjoy the food they once had and their morale became low. They even had to kill a large number of their livestock to survive. This eventually led to famine in Ukraine and north Caucasus. In addition, approximately 8 million babies were born, only to face death not long after their birth.

Stalin also confiscated the land of farmers whom he considered capitalists and kept them isolated from the new order. They were banished from their village, deported to distant areas, or sent to labor camps. The attacks on these individuals threatened other farmers not to follow their paths. Farmers who wanted to do well financially had to become more individualistic, but since they were severely punished and without justification, few farmers dared to follow their system. Even though they were aspired by others, there was nothing for the others to do but to follow the leader's way.

In 1929, the state implemented full collectivization and more than half of the peasants were assimilated. Unsurprisingly, the drastic change brought nothing but chaos and disaster to every participant. Since then the number of collectivization gradually increased until 1936 when only one tenth of the households was not included in it. The rapid expansion of towns also resulted in more people starving due to the insufficient supply of food, and when famine occurred in 1932, the countryside suffered even more hardships. A number of 120 million peasants was affected, not to mention the whole structure of the Soviet agriculture.

The government also set up the Machine Tractor Station to provide convenience and to enhance agricultural efficiency. The number of tractors increased from 1,200 in 1928 to 80,000 in 1937. The collectivization resulted in much conflict between farmers and the government, especially during the period where Stalin strictly enforced the measure. By 1930, 7 million people perished from starvation. Table 2.5 shows an increasing number of farmers in the collective system. By 1937, the collectivization was complete. There were 243,700 collective farms all over the country with 93% of farmers.

Table 2.5 The increase of farmer's ratio in the collective farming system from 1930 to 1936

Unit: Percentage

Famer's	Year						
ratio	1930	1931	1932	1933	1934	1935	1936
Households of farmers in the collective system	23.6	52.7	61.5	64.4	71.4	83.2	89.6
Growing area of farmers in the collective system	33.6	67.8	77.6	83.1	87.4	94.1	-

Source: E. Strauss, Soviet Agriculture in Perspective (London: Allen & Unwin, 1969), 301.

Overall, the collectivization failed to a large extent. Surpluses from the agricultural sector were not created and animal power was lost, which demanded replacements by the industrial material to build farm machinery. This shows that the value of the industrial output to agriculture exceeded the value of agricultural output to the city. From Table 2.6, it can be seen that from 1928 to 1937, the industrial sector grew at an annual rate of 11% while the agricultural sector grew at only 1%. In addition, from Table 2.7, household consumption grew at only 0.8% and GNP decreased rapidly from 80 to 53%. Foreign trade was reduced, in part by the world market conditions at the time, but in part by centralization of the state.⁸

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⁸Ibid., pp.81-94.

Table 2.6 The Soviet Economy in the 1930s: Performance

	1928	1933	1937	1940
A. Rates of Growth (1928–1937)				
1. GNP (1937 prices) (%)			4.8	
2. Labor force				
nonagriculture (%)			8.7	
agriculture (%)			-2.5	
3. Industrial production (1937 prices) (%)			11.3	
4. Agricultural production (1958 prices) (%)			1.1	
livestock			1.1	
5. Gross industrial capital stock (1937 prices)*	34.8	75.7	119	170
B. Prices				
 Consumer goods (state and coop stores)** 	100	400	700	1,000
2. Averaged realized prices of farm products**	100	_	539	_
C. Foreign Trade Proportions				
1. Exports + imports ÷ GNP (%)	6***	4	1	

^{*}billion rubles

Sources: A: A. Bergson and S. Kuznets, eds., Economic Trends in the Soviet Union (Cambridge, MA: Harvard University Press, 1963), 36; B: F. D. Holzman, "Inflationary Pressures, 1928–1957: Causes and Cures," Quarterly Journal of Economics, vol. 74, no. 2 (May 1960), 168–69; C: Narodnoe khoziaistvo SSSR v 1958 g. [The national economy of the USSR in 1958] (Moscow: Statistika, 1958), 57.

Source: E. Strauss, Soviet Agriculture in Perspective (London: Allen & Unwin, 1969), 307.

Table 2.7 The Soviet Economy in the 1930s: Structural Changes

The state of the s	1928	1933	1937	1940
A. Changes in Manufacturing				
1. Heavy manufacturing + overall manufacturing				
net product share (1928 prices)	31	51	63	_
labor force share	28	43		_
2. Light manufacturing ÷ overall manufacturing				
net product share (1928 prices)	68	47	36	
labor force share	71	56		
3. Changes in Sectoral Shares				
1. Share in net national product (1937 prices)				
agriculture	49	-	31	29
industry	28	_	45	45
services	23	_	24	26
2. Share in labor force				
agriculture	71	_	_	51
industry	18	12	_	29
services	12	-	_	20
. GNP by End Use (1937 prices)				
1. Household consumption ÷ GNP	80		53	49
annual growth rate (1928-37) (%)			0.8	
2. Communal services ÷ GNP	5		11	10
annual growth rate (1928-37) (%)			15.7	
3. Government admin and defense ÷ GNP	3	_	26	21
annual growth rate (1928-37) (%)			15.6	
4. Gross capital investment ÷ GNP	13	-	26	19
annual growth rate (1928–37) (%)			14.4	

Source: Strauss, Soviet Agriculture in Perspective (London: Allen & Unwin, 1969), 309.

^{**1928 = 100}

^{***1929}

2. The Soviet Union's agricultural policy from 1952 to 1985

During the Khrushchev's era, Khrushchev initiated "de-stalinization" in 1956 and disapproved measures favoring the execution and punishment of those opposing the leader. After the economic solutions which Stalin had left after his death, Khrushchev focused on the reduction of weapon production and heavy industries and the increase of consumer products, especially agricultural products which lacked independence and required regular import of wheat from the West, including from America, Canada, and Australia. He also relieved the tension between the Soviet Union and the West by issuing a "peaceful coexistence" policy in the same year, stating that war would not be used as a tool to confront the opposing party and peaceful relations were a solution. Nevertheless, his condition was that the West must not seek to challenge the Soviet system, including its influence in Western Europe.

During the administration of Brezhnev, who came to power in 1964, the government policy was as strict as that of Stalin, and in foreign relations there were many instances of aggressive policy, such as the invasion of Czechoslolvakia in 1968, the support of North Vietnam, the interference in Afghanistan by overthrowing its government etc. Thus, his foreign policy did not exactly improve the situation but rather expanded direct influence of his ideology and power to the capitalist. On the bright side, compromising foreign policies included the signing of SALT I and SALT II with President Nixon and President Carter in 1972 and 1979, respectively, which created mutual benefits in the security and reduction of arms.

Still, the agreement to sign such treaties did not derive from the intention to reduce arms conflict per se, but it was rather because of the failure of the economy, particularly the failure of agricultural production which eventually forced Brezhnev to apply détente with America. The treaty would allow the import of wheat to reduce its shortage in the country, preventing internal chaos, and promote the investment of American businessmen for long term benefits.

The Soviet Union, at this time, still lacked technological development and incentive to stimulate production. The investments in weapons and the army averaged 3.5% a year, creating greater burden for the country's economy. In addition, the Helsinki Treaty was signed in Finland in 1975, acknowledging basic human rights regardless of their differences in gender, political ideas, background, and culture, and signaling a gradual move toward democracy.

The Soviet Union under the era of Andropov saw little change. With his background as chairman of the K.G.B., he ruled the country strictly and aggressively, both in terms of domestic and foreign policies. Nevertheless, he acknowledged the failure of the economy and created the Five Year Plan for the 1971- 1975

period. However, it caused widespread opposition from the communist party, intellectuals, and the central agency, who were afraid of losing the leading position to control resources, the military, and the lower agencies. If such a plan was implemented, the power would be distributed to the lower agencies which could eventually lead to decentralization of the power, reinforcing democratic principles and reducing the infallibility of the state.

Khrushchev, a son of the peasants, knew all of the problems and addressed them accordingly. He knew that there were fewer animals; the income of farmers was too low, so was productivity, and high taxes on farmers proved to reduce their incentives. His most distinguished measure was to implement a "virgin land" campaign by using the unused land in Kazakstan, Siberia, and the Urals for cultivation. By 1956, 35.9 million hectares were used. Procurement prices increased by 25% and the cost of transportation and equipment hiring from the MTS were cut. The collective farms were able to establish their own production goals and gain more independence in the use of land.

Even though Khrushchev proudly said that the Soviet Union's production of meat and butter would soon surpass those of the U.S., his plan failed and humility emerged. The result of the virgin land produced some mixed results. The land contributed more than 50% of the overall grain harvest but 13,000 square miles of topsoil were removed due to the erosion of wind in 1960. Then in 1963 the land performed poorly, forcing Khrushchev to import grains from the West.

The lack of incentives had always been a major problem for the Soviet Union. Farmers were not encouraged to perform with the best of their ability. The state consistently changed the prices and the agriculturalists' income was set below the cost of production, including products such as eggs, milk, and meat. Another problem was the shortages of products. The government responded by increasing the prices, resulting in protests in Novocherkassk and the death of 24 people. In the use of private plots, they contributed 50% of the farmers' income, despite making up 3% of the total land used

Khrushchev's measure also included the cultivation of maize. However, he did not take into account that the land and climate did not contribute to the growing of such product, hence the negative result. In the end, his virgin land policy increased land under wheat production to 67 million hectares compared to 39 million hectares in 1950. Still, when the amount of investments in such a program is considered, the production was not satisfying.

The Central Committee of the Communist Party predicted that from 1954 to 1955 the new 33 million acres of land should produce 18-20 million metric tons of grain and 13-15 of the total should be distributed in the market. By 1954, 33.5 million acres had been used for plowing but the result was not what they

expected. Too large an amount of crops was planted and the officials could not harvest them all in time, leaving the amount of production to outweigh the number harvested. In 1959, it was unfortunate that despite an increase of plowed area of virgin land, draughts, caused partly by unpredictable precipitation, destroyed 38% of the harvest. However, Khrushchev did not find the problems threatening and ordered the expansion of such land in East Siberia and the Far East. 9

In addition, the problem of wind erosion caused some areas to lose crops; the wind collected unprotected soil in the virgin land and transported the dust to other areas with vegetation. There were also bad storms in 1960 and 1962 which worsened the problem. Water erosion was a big problem overlooked by Khrushchev, causing the loss of 500 million tons of top soil and essential nitrogen every year.

In 1961, with a view to increasing population, Khrushchev demanded a crash program and cultivation of fallowed land to meet the rising demand. The weather in 1962 was unpredictable but grain production in overall was positive and surpassed the previous year by 10 million tons. It was in 1963 which showed that the grain production did not live up to the demand of the population, causing disaster which eventually led to a change of the regime in 1964, when Khrushchev's power was overthrown.

Regarding the overall reform, Khrushchev emphasized the elimination of departmentalism in the cabinet. As he believed that during Stalin's time it was these people who managed the country's economy but they lacked coordination, their disintegration should foster improvement. By the end of 1957, the authority of economic decision-making was transferred to other economic councils, reducing the power of the central. For example, Gosplan was in charge of 1,000 important products while the Republics' Gosplan was responsible for the other 6,000 products or 80% 10

Regional economic councils were assigned to take care of the economic regions and to increase production. Gross output was also used as an indicator to stimulate the incentives of enterprises and pay bonuses for those who achieved the production goal. The progress can be seen in Table 2.8.

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⁹Martin McCauley, *Khrushchev and the Development of Soviet Agriculture: The Virgin Land Programme 1953-1964*(New York: Holmes & Meier Publishers, Inc., 1976), pp. 37-48.

¹⁰Ibid., pp.52-61.

Table 2.8 Selected Macroeconomic Growth Rates, 1955 – 1962

Real income per capita	Labor production in industry	National income produced	Year
0.9	9.5	11.9	1955
5.9	7.0	11.3	1956
8.7	6.6	7.0	1957
5.9	6.2	12.4	1958
1.8	7.4	7.5	1959
6.4	5.4	7.7	1960
1.6	4.4	6.8	1961
3.2	5.5	5.7	1962

Source: A. Bergson, "Income Inequality Under Soviet Socialism," *Journal of Economic Literature* vol.22, no. 3 (September 1984), 107.

Khrushchev also had measures to improve citizens' livelihood, health, and education. Furthermore, he saw that the collectivization of Stalin was deeply flawed, producing very low production and stagnating farmers incentives. Investment in agriculture was insufficient and taxes on private plots were so high that producers had no motivation to carry on their work. As a result, Khrushchev proposed higher pay for farmers, overall adjustment of collective farms, reduction of taxes on private plots, increased investment, especially in chemical fertilizers, and expansion of land for corn plantations, which increased from 3.5 million hectors to 28 million hectors in only a few years. The figures can be seen from in Table 2.9.

Table 2.9 Changes in agricultural production in 1953-1958

		Production						
	1953	1954	1955	1956	1957	1958	1953	1958
Total grain harvest	82.5	85.6	103.7	125.0	102 6	134.7	31.1	56.9
Virgin land areas	26.9	37.2	27.7	63.3	38.1	58.4	10.8	32.8
Potatoes	72.6	75.0	71.8	96.0	87.8	86.5	5.4	7.0
Sunflower	2.6	1.9	3.8	3.9	2.8	4.6	1.8	2.6
Flax	0.16	0.22	0.38	0.52	0.44	0.44	0.15	0.39
Cotton	3.9	4.2	3.9	4.3	4.2	4.4	3.9	4.4
Meat	5.8	6.3	6.3	6.6	7.4	7.7	3.6	5.7
Milk	36.5	38.1	43.1	49.1	54.8	58.9	10.6	22.1
Cows	24.3	25.2	26.4	27.7	29.0	31.4	-	-
Pigs	28.5	33.3	30.9	34.0	40.8	44.3	-	-
Sheep	94.3	99.8	99.0	103.3	108.2	120.2	-	-
Gross agricultural	1							
production (1953=100) 100	105	117	132	136	151	-	-

Source: D.B. Diamond, L.W. Bettis, and R.E. Ramsson, "Agricultural Production," in A. Bergson and H.S. Levine, eds., *The Soviet Economy: Toward the Year 2000* (London: Allen & Unwin, 1983), 146.

Despite a good start, Khrushchev's lack of political background and experiences eventually caught up with him. He was forced out of power by other leaders in 1964. One of the reasons was the economic circumstance at the time, as the national income and labor efficiency decreased substantially in 1960. Regional economic councils were also reduced to only 47 and the Supreme Council for the National Economy was back in charge.

After Khrushchev's power perished in 1964, Leonid Brezhnev came into power. During this period, Kosygin reform was implemented in 1965 with 3 measures. The first measure includes administrative reform, or as often called "the recentralization reform", indicating the shift of power to 23 industrial ministries and the power was mainly back to Moscow. Gosplan also had more authorities and responsibilities. The second measure was concerned with incentives of enterprises. The state originally had the right to set production goals for 35-40 items but the number was reduced to only 8 so that the intervention of the newly established ministry could be prevented. The last measure was price reform in industrial products and in new products.

However, the reform moved very slowly, with an exception of the management reform. This was caused by the ministries that created new regulations and complicated bureaucratic red tape. Table 2.10 shows that national income produced increased slightly and the industrial output decreased.

Table 2.10 Selected Macroeconomic Growth Rates, 1961 - 1972

of providing to to week course, (1.2)	Average annual growth	inual growth rates (perce		
Variables	1961-65	1966-72		
National income produced	6.5	6.9		
Industrial output	8.6	8.1		
Labor productivity in industry	4.6	5.8		
Real per capitaincome	3.5	5.5		

Source: D.B. Diamond, L.W. Bettis, and R.E. Ramsson, "Agricultural Production," in A. Bergson and H.S. Levine, eds., *The Soviet Economy: Toward the Year 2000* (London: Allen & Unwin, 1983), 148.

During the first five years under Brezhnev, agriculture seemed to be doing well. However, in the 1970s the sector performed poorly and a lot of money was invested in reviving agriculture. Despite high expenditures, the return was very low and the sector became a burden to the country's economy. There were many factors which caused agriculture to plummet. The insufficiency of labor incentives was probably the most serious problem. Inputs of the industry were insufficient, the farm machinery quality was poor, and spare parts could not be found. Infrastructure was also underdeveloped; the roads were rough; grain elevators, storage space, and building materials were not enough. Investments in the matter were not fully utilized and misplaced. Feed supplies could not keep up with the demand. Marketing and planning were done poorly and the private sector was not supported.

Kolkhoz members received a guaranteed minimum rate for the collective work and for the first time it was possible for the collective farms to get credits to pay the members. This led to an increase in indebtedness and credits outstanding.

During the 1970s, agriculture performed very poorly. Some investments, such as in houses and schools, were not productive. Even though large investments were implemented, the output did not respond accordingly. Also, the number of people working on the farms increased 2.4 times to 15.5 million people. The downside was that more than half a million people were taken from productive work and used to be soldiers, schoolchildren, students etc. It was sufficient to say that the change deeply affected emotionally and financially. As they did not know the new assigned task, they became unproductive and a burden on the farms which had to pay them.

The positive side was that farmers were given more money. It was a development for them as it had been so long since they were more properly paid. However, this did not benefit the overall circumstance because of the large investments. As a result, the pay went up faster than farm productivity and higher pay was not the right solution to increase labor's incentives. As the state was struggling to find the proper solution, agriculture was becoming more of a burden to its expenditure as costs were rising and deficits had to be covered by bank credits. It tried to impose a large amount of money on agriculture, hoping to modernize and revive it. Unfortunately, the fundamental problem was that despite heavy investments, the quality derived from them was not as great. To make matters worse, in early 1980s the weather conditions became worsened, which led to 158.1 million tons, the lowest

harvest of the grain since the 1960s.

The farmers, despite the increased wages, still had a very low standard of living and limited opportunities to gain education. They still greatly depended on the director and chairman rather than on their own expertise. They also lost the love for their land and became indifferent. The major problem was that the correlation between reward and hard work was not apparent for the laborers. Because there were many jobs involved to create a result, a single individual did not feel very much

obligated to do the work well. A tractor might then, for example, plow the field very shallowly. There needed to be a system which evaluated sequential tasks separately as the work was also contributed by other people.

If the people were to implement the agricultural process and be awarded accordingly, then the incentive would be created and the desire to increase the size of the harvest would inherently emerge. The inspectors would not have to come and check the process if everyone cooperated for their own interests. The mentioned principle was conducted as an experiment in the first Brezhnev years but was not widely popular despite success. This was because it faced opposition from the local officials who were afraid of losing their jobs. If the experiments had gained more support, everyone would have discovered that the officials' jobs were, in fact, meaningless and unnecessary, thus making them lose face and income. The result showed that the productivity of labor was six times and wages were three times higher than the usual method employed by the state.

In addition to poor quality machinery, the struggle to receive needed machines, and the lack of spare parts still persisted. Customers' demand was not met because the system refused to take them into account and the organization responsible for transferring agriculture's orders performed the task poorly. The capital assets allocated for agriculture were only half of those in industry. The development of tractors, trucks, farm machinery, mineral fertilizers, feed concentrates, and farm building materials was significantly lacking. Theoretically, the industry was supposed to supply 2,350 kinds of machines and equipment, but only 1,000 were processed. The requests for more supplies by the farms were met in only 50% to 80%.

The plan to build grain elevators, the much needed factor, and storage spaces were highly undeveloped and the progress of infrastructure was very slow. There were also cases where, due to the lack of sufficient storing space, 18 million tons of wheat were left outside to face rain and snow. The issue of infrastructure could not be any worse. The problems of inadequate transport infrastructure, lack of specialized means of transport, of packaging materials, and of facilities for refrigeration persisted. Important facilities, such as slaughterhouses, were also located far away from the farms which forced additional transportation costs.

Brezhnev's policies emphasized the non-black-earth zones - the area which was inadequate in fertility and neglected in Khrushchev's era. Businesses under a separate ministry were assigned to implement tasks instead of farmers who had direct interests in the matter. They were mostly concerned with expanding expenditure and plans rather than focusing on quality activities that would create efficiency. They tried to find work that cost more instead of worrying about the condition of the soil, the equipment, or the peasants' needs.

Even though the state invested heavily in livestock complexes, the inadequacy of feed and electricity caused the investment to be useless. There were also complaints regarding the lack of basic but important investments that would yield quick return, such as corrugated iron roofs to protect machines or harvested crops. It seemed that the farm machinery industry had no interest in giving cheap and simple mowers to farmers because they were cheap and would not look very impressive in the plan fulfillment statistics.¹¹

During the 1970s, agricultural work was gradually transferred to service agencies from state and collective farms, but the agencies were still not efficient. Unfortunately, they did not have any interest to gain from agricultural tasks. Costs arose and the farms' financial situation became worsened. Despite the transfer of responsibility, agriculture still failed mainly because the service organizations were implicated with bureaucratic interest and they distrusted the peasants. The latter factor was a crucial one which many farmers had been complaining about. They were told when to sow, when to invest, etc. and they had no independence. This situation remained until Gorbachev's era.

3. The Soviet Union's agricultural policy from 1988 to 1991

In 1985, Gorbachev succeeded as the leader of the Soviet Union. He inherited a large number of problems from his predecessors: -2% GDP growth, trade deficit, misallocation of resources, centralization of political and economic power, lack of consumer products, interference of basic human rights, political freedom, and the media. Thus, Gorbachev tried to implement a significant reform by proposing "Demokratiya" "Perestroika", foundation "Glasnost", and as the development. Glasnost called for openness and transparency so that citizens were able to express their opinions. Perestroika means restructuring, particularly in economic activities for higher production and independence as well as adjustments in science, media, and politics. Demokrativa then refers to participation of citizens and republics in politics and the openness of election for more than one candidate.

After these terms were coined, citizens were now free to express their ideas and criticize their leaders or officials. They could receive news from and travel to foreign countries. The latter would also be able to monitor the situation in the Soviet Union more openly. The state would not interfere with the economic activities and creativity was encouraged for new ideas and progress. The private sector would have more rights to hold assets, the price mechanism would be applied according to the market, and the scientific field would be developed to the international standard. Citizens were also encouraged to be more responsible and to leave the old

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¹¹George W. Breslauer, *Khrushchev and Brezhnev as Leaders*(George Allen & Unwin Ltd: London, 1984), pp.24-31.

system behind.

The results show that the number of livestock changed very slightly and milk production declined sharply. There were some improvements in the number of tractors and farm equipment. Farmers still received higher pay, from 5.52 rubles in 1980 to 6.85 rubles in 1985. The value of capital assets increased 34% during the 5 year period. Yet again, old problems did not fade away and investment aiming to increase production and efficiency was fruitless.¹²

Gorbachev said it himself that the system required radical attitudes in field and factory for the improvement of the reform program. However, things did not go as planned. Gorbachev aimed to divide the reward for each person to receive for greater incentives of the farmers. Each group of agriculturalists was to choose its own leader. Most importantly, the payment must correlate with the results instead of relating payments to specific operations. In addition, payments must be clearly indicated in the contract, correlated with the quality, output, and cost.

Despite Gorbachev's good intention, the results were mixed. There were reports of success as well as failures on so many levels. In reality, the payments were not actually linked with the results as many had to be paid in advance before work. Contracts were not followed by the participants and became disintegrated. On the paper it said that arable land (over 80%), the cattle and pigs (over 60%), and sheep (over 90%) were covered by "collective, family and individual contract". In fact, productivity did not rise and many examples showed its decline.

The matter of industrial inputs had changed very little though it had received much attention. The farm machinery quality was still undeveloped. Little planning and bureaucracy still prevailed in agriculture. The procedure for requesting and purchasing equipment was so badly done that at the end of the day no one knew who needed which product and how many. For example, when the repair for K-700 tractors was required, such a simple task would require the service from a workshop located 300 km from the farm. Even though the tractors were very powerful, without the adequate supplies they could not reach their true efficiency.

The local officials were informed of leaving the peasants to do their own jobs. However, the old habits showed its color once again and they soon planned everything, though they were not on the field and getting their hands on the real agricultural processes. For example, the chairman of RAPO in Poltava province of Ukraine said that his state farms received plans from the provincial and republican level. The plans given did not fit with the circumstances of the area whatsoever, thus

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¹²Richard Sakwa, *Gorbachev and His Reforms*, 1985-1990(Deddington Oxon: Philip Allan, 1990), pp. 40-62.

leaving little room for improvement.

Another problem was the breach of contract by the state. As legislated in 1986, farmers with grains in excess of the quota could receive 100% of bonus. However, the payment was turned down as the officials did not take the contracts seriously. Also, Gorbachev allowed the leasing of land to families but there were reports that officials were ordered to eliminate glasshouses simply because they brought in too much money out of early vegetables.

Gorbachev's reform aimed to restructure the whole economy by changing its structure at the core and promoting widespread democracy. It was considered to be the most significant changes since Lenin in 1921. The Perestroika reform aimed to eliminate stagnation, creating trust and efficiency in society and the economy. It was the development of democracy, supporting people to criticize and open up their ideas. Their individuality was also highly valued. The reform aimed to increase the growth of Soviet Union's economy in every aspect by implementing economic measures rather than having the state's intervention. Citizens were to enjoy rights and privileges that they had never received before, including education and health care, the preservation of culture, the care for people's mentality etc. Lastly, the reform meant to eliminate corruption and value honesty and justice.

However, at first Gorbachev aimed to only "strengthen socialism, not replace it with a different system" and the overall economic system still depended on the planning of the state. The economic model was also not clear and Soviet economists had to travel to other countries to study the model. Eventually, Gorbachev's reform led to a more capitalist approach due to the major changes in the country's economy and the pressure of the West. Gorbachev then officially stated that Perestroika could not take place without democracy, free labor, and openness of ideas.

He set up 4 strategies: ideology, agricultural reform, general economic reform, and political reform. Even though he could not solve all the problems accumulated for decades, the reform subsequently led to political independence of other socialist countries under the Soviet power and to the end of the Cold War. For this reason Gorbachev was named "Man of the Decade" by the *Times Magazine* in 1990. It was the initiation of civil society, as politics and information were not immune from critics and debates. In 1989, representatives could be elected, signifying the transfer of power from the state to the people.

Since Gorbachev rose to become the party's secretary in 1985, he supported economic acceleration and identified 3 main problems of the Soviet Union: inefficiency, poor quality, and technological underdevelopment. Important measures

included an increase of industrial production from 38.5% in 1985 to 50.5% in 1990; quality control by setting up a new independent agency to control the standard of machines and consumer goods; human factor by changing high-level officials and welcoming debates with openness as well as increasing wages for higher incentives; anti-alcohol campaign by increasing the prices of alcoholic drinks and reducing

distribution of alcohol; and support of the private sector. 13

From 1987 to 1989, the important reform policies of Gorbachev included the allowance of private enterprises to be able to directly communicate with production factors and customers and to have more power in decision-making in utilizing their profits and investments. Wages were also increased and full self-financing was implemented, forcing enterprises to increase their profits and allocate them efficiently. Price reform allowed enterprises to negotiate new products. The private sector was able to operate its businesses freely, be it renting assets, making contracts, or hiring labors. Banks were restructured by transforming the functions of the state's banks into commercial banks with specializations in order to respond to the increasing credits. Lastly, trade and foreign investment reform allowed trade relations with foreign countries to be freer and created channels to receive help from global organizations and become a member of the GATT and the IMF. The results can be seen in Tables 2.11-2.14.

Table 2.11 Growth in NMP by Sector of Origin, 1971 - 1989

						(in	percent)
Districts Can entered				of Growth		to	are of 1989 tal output n current
	1981-85	1986-89	1986	1987	1988	1989	prices)
Total	3.2	2.7	2.3	1.6	4.4	2.5	100.0
Industry	2.9	3.3	0.6	3.6	6.1	3.1	41.9
(excluding turnover taxes)	(3.9)	(4.2)	(5.5)	(4.6)	(6.3)	(0.4)	(40.4)
agriculture	1.0	2.4	7.1	-1.4	2.5	1.7	23.4
Construction	3.2	6.6	12.1	5.5	7.6	1.6	12.8
Transport and communication	2.9	0.8	4.2	0.3	5.8	-6.5	5.6
Transport	2.8	0.4	4.1	-0.1	5.7	-7.4	5.3
Communication	5.8	7.6	6.2	8.3	8.0	8.0	0.3
Trade, procurement, and suppl	y 2.4	3.3	1.2	-0.5	4.6	8.2	6.5
Trade	2.5	3.4	0.2	-2.6	7.7	8.6	5.0
Agricultural procurement	0.7	7.8	4.9	6.2	6.7	13.5	0.6
Material-technical supply	3.2	0.4	3.7	5.4	-9.5	2.9	0.9
Data processing	3.6	22.0	3.0	15.9	13.5	63.7	0.2
Forestry	1.9	3.8	0.7	0.9	2.1	12.0	0.1
Other branches	0.1	7.6	0.3	5.2	22.8	3.5	0.9
Receipts from foreign trade	9.5	-4.2	-8.8	-4.7	-6.6	3.8	8.5

Source: United States Department of Agriculture, Economic Research Service, USSR: Outlook and Situation Report (Washington, DC: USDA, various issues).

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¹³ Ibid., pp.64-71.

Table 2.12 USSR: Gross Value of Industrial Output, 1917 - 1989

						lvae	1989 Output Shares as
	1981-85	1986-89	1986	1987	1988	1989	Percent of the Total
Total	3.6	3.4	4.4	3.8	3.9	1.7	100.0
of which:							100.0
Electricity	3.7	2.7	3.1	4.8	1.9	1.1	3.5
Fuel industry	1.2	1.4	3.7	1.9	1.7	-1.5	6.8
Ferrous metals	2.0	2.3	4.4	2.0	3.0	-	5.7
Nonferrous metals	2.1	2.5	3.5	2.2	3.2	0.9	3.8
Chemicals	5.0	4.0	6.0	4.5	4.6	0.9	6.8
Machinery	6.2	5.1	7.1	5.6	5.3	2.5	28.1
Forest and paper products	3.5	3.3	5.1	2.5	4.4	1.4	4.6
Construction materials	2.9	3.9	5.3	3.5	4.5	2.1	3.6
Light industry	1.5	2.3	1.7	1.3	3.6	2.5	13.8
Food products	2.7	3.4	1.8	4.3	3.4	4.2	15.2

Source: United States Department of Agriculture, Economic Research Service, USSR: Outlook and Situation Report (Washington, DC: USDA, various issues).

Table 2.13 Investments, 1976 – 1990, by Quinquennia

G-4	4070 00	4004 05	Col.2/Col.1	1006 00	Col.4/Col.2
Category	1976-80	(2)	(3)	(4)	(5)
- Company of the Comp	(1)	(=)	(0)	(-)	
Total investment	717.7	843.2	1.175	1,033	1.225
Machinery and equipment	243.2	311.2	1.280	444	1.430
Other	474.5	532.0	1.121	589	1.107
Investment by sector					
Industry	251.4	300.7	1.196	n.a.	n.a.
Energy and electricity	74.9	108.4	1.447	n.a.	n.a.
MBMW	60.9	73.0	1.199	131.4	1.800
Chemicals	24.8	22.6	0.911	33.9	1.500
Light	9.6	11.0	1.146	13.8	1.25
Food	16.3	18.3	1.123	n.a.	n.a.
Other	64.9	67.4	1.039	n.a.	n.a.
Agriculture	143.2	156.2	1.091	(160)	(1.024)
Transport and communication	85.0	104.3	1.227	n.a.	n.a.
Housing	101.9	127.7	1.253	n.a.	n.a.
Construction and other	136.2	154.3	1.133	n.a.	n.a.
Investment by complex					
Agro-industrial	240.0	269	1.121	331	1.230
Fuel-energy	99.4	144	1.45	180	1.25
Transport	n.a.	n.a.	n.a.	62	n.a.

Source: United States Department of Agriculture, Economic Research Service, USSR: *Outlook and Situation Report* (Washington, DC: USDA, various issues).

Table 2.14 USSR: Growth in Agricultural Production, 1981 – 1989

	Annual Percentage Rates of Growth, 1989 Gross						Share of	
	in Constant Prices						Value of	
Was and shipping	1981-85	1986-8	9 1985	1986	1987	1988	1989	output
Gross value of agricultural outp	out					75.0		
(in comparable prices)	2.1	1.9	0.1	5.3	-0.6	1.7	1.3	
Output (in physical	volume):						
Grain	0.3	2.4	11.8	8.3	-0.1	-7.0	9.2	10.8
Meat	2.5	4.1	0.6	5.3	5.0	4.2	2.0	31.1
Milk	1.6	2.4	0.7	3.7	1.6	2.9	1.6	19.1
Eggs	-0.1	0.8	-2.7	_	-0.9	1.4	2.8	3.6
Potatoes	1.7	-0.3	-14.6	19.5	-13.0	-17.4	15.2	6.1
Vegetables	0.6	0.5	-10.8	5.7	-1.7	0.3	-2.0	3.8
Fruit-including grapes	2.3	-2.7	-10.8	10.9	-21.3	4.2	-1.3	2.8
Sugar beets	0.3	4.3	-3.5	-3.8	14.4	-3.0	10.7	2.2
Cutton lint	0.6	-1.1	7.1	-4.4	-5.9	9.8	-3.1	3.2
Wool	0.2	1.8	-4.0	5.0	-1.6	3.6	0.3	1.8
Other	- 19	_	_	_	_		-	15.5

Source: United States Department of Agriculture, Economic Research Service, USSR: Outlook and Situation Report (Washington, DC: USDA, various issues).

Suffice it to say that Gorbachev at this stage had turned away from the old system completely and embraced significant changes for the betterment of the overall society. On 27 May, 1990, he made a televised statement "only the market can save us. The market is necessary for radically reforming our economy, for paving the way for enterprises, for the economic independence of worker collectives and of every worker and citizens. The introduction of the market has to create conditions that reward those who work well and productivity." On the contrary, in reality the credibility of Perestroika was gradually decreasing since Gorbachev was hailed as "Man of the Decade"; especially after the food shortage in the mid 1990, the request for help from the international community, the resignation of the Foreign Minister, and the declaration of independence of the Baltic States. The economic crisis was also a major factor which substantially reduced Gorbachev's popularity, leading to the

rise of Boris Yeltsin. 14

¹⁴George W. Breslauer, *Gorbachev and Yeltsin as leaders*(Cambridge : Cambridge University Press, 2002), pp. 42-46.

Gorbachev finally had to turn for support from Yeltsin, who was gaining more popularity, for support. Both agreed that a radical reform was needed. However, Yeltsin saw that the changes had to be quicker and proposed a 500-day economic reform plan to push forward the market system. The plan was drafted by Grigory Yavlinsky, who wanted Russia's economy to be transformed into regulated market economy. This included the acceptance of private property, the selling of enterprises, the giving of more management and decision-making powers to other states, and the cancellation of fixed prices by the government. This plan had specific details for

concrete implementation.

However, the plan was soon opposed by the opposing party. Gorbachev had to choose which side to support. This eventually led to a referendum and the proposal of a presidential plan. He had conflicts with Yeltsin regarding the reform. The other states wanted to be free from the Soviet's influence, something that Yeltsin agreed with but Gorbachev did not. Eduard Shevardnadze, Foreign Minister and one of Gorbachev's most important reform thinkers, resigned in December 1990. On 19 August, 1991, the situation got worse when the conservatives tried to take over the country after the economic and political tensions did not improve.

There are 9 possible reasons why the Perestroika reform failed. 15

- 1. Opposition from people with high political power.
- 2. Opposition from high-level officials.
- 3. Opposition from citizens, as can be seen from the labors' protests.
- 4. Severe inflation, resulting in resentment from citizens.
- 5. The lack of economic foundation to support the market system.
- 6. Domestic unrest.
- 7. Foreign unrest, especially economic reform in Eastern Europe.
- 8. Trade failure in communist countries.

¹⁵ Mikhail Gorbachev, *Perestroika:New Thinking for Our Country and the world*(New York,: Harper&Row Publishers, 1987), p. 17.

9. The inaccuracy or insufficiency of statistics, excluding signs of economic crisis.

Before the Soviet Union officially fell apart in 1991, the labor force contributed in agriculture was 20%. The investment in agriculture between 1970 and 1980 was approximately 20% of the total investments; most of which were invested in machinery, equipment, land development, irrigation, and livestock. It was estimated that agriculture contributed 18% to the GNP. Agriculture was very important to consumers, as half of their spending was for agriculture-related products.

After the dissolution of the Soviet Union, Russia still depended on agriculture and the major imports of agricultural products. This included importing cotton from Central Asia, grains from Kazakhstan, livestock products from the Baltics, Belarus, and Ukraine.

Due to the inefficiency of the agriculture system during the Soviet era, the former USSR found it extremely difficult to improve and bounce back from the old system. Minor changes would not be able to solve the problem and the effort came to a halt in 1991, when there was staggering inflation and decreased output. Major reforms were only alternative for improvement.

Despite support from the government by decreasing tax rate for businesses and providing financial resources, the state deficit and inflation increased. The rate of import also remained high. By the end of 1991, Russia's deficit rose to 31%. The government tried to solve the problems by controlling consumer prices, raising wages in response to higher prices, and increasing savings deposits etc. Nonetheless, the attempts did not work out as planned and the GDP of the 15 former USSR states

decreased by 10 to 15%.

Russia lost \$7.4 billion in foreign reserves in 1990 and republican governments prevented export of local products due to high prices. Trading with countries in the CMEA also failed. Soviet's exports and imports decreased by 32%

and 44% respectively.

The economic situation was a wreck for the former states. Russia then emerged after the breakdown in 1991 as one of the first to initiate reform by freeing prices. In 1992, approximately 80% of wholesale prices and 90% of consumer prices were set free. By March 7 in the same year, the policy was implemented to every product, freeing the remaining prices. The state only controlled prices of specific medicines, energy, precious metals, and transportation costs. Imports also did not face any restrictions.

As a result, the deficit was reduced to 19% of the GDP. Although the number was decreased, it was still higher than an acceptable level due to the import subsidies. Another problem was the decline in industrial production caused by interstate trade disruptions after the dissolution.

There were 4 attempts to improve the situation in 1991. However, the result proved to be contradictory. Consumer income increased more sharply than retail prices for food, causing wasteful consumption and excess demand for food. Because of poor climate and higher prices of agricultural inputs, food production in 1991 decreased by 7%. Imports of food were reduced by 18% in the same year due to the decrease of foreign exchange earnings and oil exports, the failure of CMEA trade, and the inability to get foreign credit for imports.

Conclusion

The growth of agriculture remained consistent from the 1960s to the 1980s but turned negative by 1990. Even though there were increases of producers' prices, financial support, and investments, agricultural growth did not respond positively. The investment was allocated to replace depreciated capital and the terms of trade turned bad. The production of agriculture could not be maintained. The failures were caused by bad policies. This can be seen from the investments which were distributed administratively but did not take into account economic outputs or cost reduction. In addition, clear property rights were neglected, reinforcing the

inefficient use of land and resources, and producers were deprived of incentives.

Furthermore, machinery, fertilizers, and agricultural equipment were of low quality. Only one-quarter of the investment went to the improvement of infrastructure, such as schools, housing, medical facilities, and roads. The production of crops was lower than the European countries'. Beef and milk contributed 60% of gross value of livestock output while grains contributed one-third and was an important source of feed supply and food. Approximately three-quarters of gross agricultural production were from contributions from the state and collective farms.

The production of crops mostly derived from Russia, Ukraine, and Kazakhstan. By 1991 the production was reduced by 58% in Kazakhstan and 24% in Russia and Ukraine. As the most important crop in Russia, accounting 40% of the overall production, grains had varieties due to different soil and climate, including spring and winter, oats, spring barley, and corn. Most of these were used as animal products. The production in Ukraine totaled 3.23 tons per hectare from1989 to 1991 and consisted of winter wheat, spring barley, and corn. The advantages the country had were favorable soil and good climate condition, with the use of pesticides and fertilizers. In Kazakshtan, on the other hand, as the third largest producer, the production totaled 0.84 tons per hectare. Even though the soil was good, the amount

of rain and the growing season were insufficient.

Approximately one-third of the pigs were raised in large fattening complexes while the remaining was brought up by small operations without complicated machines involved but only watering facilities. There was also a growing trend to produce fatter pigs due to customers' preference. The downside of raising pigs was diseases which were hard to control at times.

As can be seen, the ideas of Marxism were prevalent throughout the Soviet Union era. The need to suppress ideas and control political and economic matters was ingrained deeply in the system and in the leaders. Before Gorbachev arrived to salvage what was left of the Soviet Union, the preceding leaders were mostly afraid of the West and thought of it as a threat rather than as a valuable ally or a partner whom they could conduct businesses with. The prediction of Marx that capitalist countries would be brought down by peasants never happened. On the contrary, it was the socialist states which faced much opposition from the people, especially the poor, and had to find suitable changes to cope with the rising difficult living conditions. With no incentives involved in the economic system, workers did not find their work mentally or financially satisfying. Marx argued that the rich exploited the poor by

making them work hard for the rich's benefits. However, the benefits were used efficiently by capitalist countries, with the purpose of improving the overall economy, responding to the supply and demand of the market and filling customers' every desire. Meanwhile, the benefits, if there were any, in the socialist countries were allocated according to the decisions of the few, neglecting the fundamental market system which further deepened the lack of resources and wealth of citizens.

Overall, it has been a long fight against the political and economic oppression imposed by the authoritarian leaders. The treatment of a cure for agricultural impoverishment both the Russian Empire and the Soviet Union inherited is becoming more apparent, but there is still a long way to go. By having become a more open country, one can only hope that the situation will improve for the betterment of citizens involved.

CHAPTER III

AGRICULTURAL REFORM OF THE RUSSIAN FEDERATION

This chapter deals with agricultural reform of the Russian Federation during Boris Yeltsin (1) and Vladimir Putin's regime (2). It focuses on the transition from a command economy to market reform which liberated various sectors of the economy, including agriculture. Positive results, however, did not come to light until Putin became the President of Russia

1. Agricultural reform of the Russian Federation during Boris Yeltsin's regime

After the fall of the Soviet Union, liberalization of the markets was initiated. Subsidies were removed, forcing domestic products to compete with imported goods. Unfortunately, the abrupt change implemented by Yeltsin affected a number of domestic producers. Once the support of the government declined, the producers no longer had the advantage and had to bear the full costs of production. This can be seen from the reduction of cattle by 60% between 1990 and 2002. Even though market liberalization would produce sustainability in the long term, in the short run many producers could not cope with the change and were slow to fit into the new market.

A legislation allowing independent private farms to operate was implemented in 1990. This helped farmers to regain the land or equipment taken by the state and to get out of the system to create their own small farms. The state was obliged to return the underutilized land to the local. Subsidies were also present for farmers and a billion rubles were given to the AKKOR for the development of private farms. Funds were provided to the regions based on the number of farmers and the increased number of credits then raised the quantity of farmers accordingly.

The Congress of People's Deputies of the Russian Republic then legislated laws to restructure the sector and create a more commercial agriculture. The Law on Peasant Farms allowed private farms to function with collective farms and the state and granted the selling of products without interference from the state. The State

Committee for Agrarian Reform was also created to regulate the transfer of land to the private sector.

Yeltsin's main aim was to transform the state and collective farms into more effective market sectors. A decree in 1991 attempted to restructure the system and demanded farmers to either reorganize into joint-stock companies, cooperatives, or individual private farms or to remain their system. However, the initiated measures moved very slowly. Even though 95% of the state farms were restructured, one-third of the total refused to change. Many feared that the supply and demand system was unstable. This encouraged them to preserve the existing inefficient but predictable system of the former Soviet Union.

In 1992, farmers received 67% of the credits provided through AKKOR and the number of farmers receiving rose to 134% in 1993, indicating the development of the rural credit. However, the slow growth of independent farms and failure of independent farmers in the same year contributed to reduced state support. Since then the failure rates had tripled. Although it was possible to give the farmers some land, the sufficient number of land could not be given to every new farmer. Therefore, with the complication of the issue, as to whom or how the state should support the groups of farmers, the matter was not openly discussed and frozen.

In addition, reform after the dissolution failed to gather public support for individual farming. A survey conducted in 1999 showed that only 12% of respondents favored the idea of dominant household farming and the majority supported communal farming. This was caused by cultural tradition and social services received from the old system.

Another problem was that individual farms lacked the access of equipment and sources that were available to major producers. They also relied heavily on local collective farms for inputs. For example, half of the fodder used were from collective farms and the other half may have originated via informal channels. The researchers thus concluded that "no Russian peasant farmstead would survive a day without the collective farm."

Because of the dependency on collective farms, individual farms could not break away from them despite the change in policy. Even when changes were identified, they lacked sufficient resources to support them. Especially when the government no longer supported the farms, the acquiring of growth opportunities and upgraded equipment was out of the question. As a result, collective farms remained their operations alongside individual farms just like those of the Soviet era. They

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¹Wegren Stephen K, *Agriculture and the State in Soviet and Post-Soviet Russia*(Pittsburgh: University of Pittsburgh Press, 1998), pp.184-191.

were not profitable, could not afford to pay wages to the members, could not repay government credits, and sold products at lower prices in order to obtain needed cash.

In a market economy, such outcome would produce bankruptcy. However, in the case of Russia, government officials could not afford the devastation, as collective farms were vital to the well being of individuals in many villages. Federal and regional governments then offered the extension of farm credits. Loans were consistently unpaid and considered to be a subsidy for farmers. Consequently, cultivated land was reduced by 25 million hectares and much fertile land was abandoned.

Looking back, it can be identified that market liberalization occurred after policies from the Soviet era could no longer support the country financially. Yeltsin did not favor a gradual reform but would rather implement a drastic change for the free market system. This was known as the "shock therapy" and was applied to the agricultural sector as well. Thus, during 1990s the state's involvement in the sector declined significantly. This ultimately increased production costs of producers; even after raising higher prices they still did not receive as much benefits. Subsidized inputs, including fuel, farm equipment, seeds, and fertilizers, were no longer supplied to the producers. Many farmers struggled, competing with imported agricultural products with lower prices.

The shock therapy caused the prices of goods to rise substantially due to the freeing of prices, cleaning people's savings in a matter of days. The effect of decontrolling prices also impacted on the balance sheets of enterprises, resulting in the withholding of payments to workers. The government, with further withholding from 1994 to 1998 and refusal to pay pension for retirees, increased public discontent.

Furthermore, in an attempt to eliminate budget deficit in 1992, the proposal to cut budgets in defense, investments, and subsidies to consumers was not discussed with the parliament or the people. There was also no seeking of political majority in the Supreme Soviet, which consisted of the Communists, reformists, and the middle group. Eventually, the conflict exploded when troops loyal to Yeltsin marched into the Parliament in October 1993 instead of following the President's order to disintegrate.

Regarding the distribution of vouchers worth 10,000 rubles to every citizen, the plan was initially well-received by the people, as it was considered to be an asset ownership. However, in reality, people did not receive as much and some sold them to the middlemen for fast cash. It was, nevertheless, a success because assets from the state-owned companies were transferred to the private sector. The downside was that

the profits received could have been distributed more for the poor and the elderly in a form of pension or welfare payment.²

With regards to the IMF, it did not aim to restructure the economic system of the former Soviet Union but tried to fix the ongoing problems. It primarily targeted a strict monetary policy which regulated the discount rate of the Central Bank at 25%, strong ruble, and allowed foreigners to purchase short-term government bills to control the 7% budget deficit. The result was reduced inflation which fell to 3% by the end of 1997. However, there were many unintended consequences. The strong ruble exchange rate reduced the competitive advantage for Russia in the world market. The commercial banks were not restrained by the central bank and were able to invest in government bonds, which would produce zero profits years later.

Agricultural production decreased from 191.1 billion rubles in 1991 to 131.2 billion rubles in 1996 during the transitional period. The decline was caused by land condition and soil fertility. It was analyzed that these lands required a different type of improvement to reduce natural and anthropogenic impacts from water and wind erosion, sanitization, over wetting, water logging etc. During those years, soil fertility was reduced considerably. This may have been caused by the decrease of humus reserves in soil, organic fertilizer, and mineral fertilizers.

It was clear in 1996 that the agricultural restructuring did not go as well as Westerners had planned. Despite the increase of private farms since 1990, the number was stalled and, by the mid 1990s, had dropped, as some farmers favored cooperative enterprise or departed for other careers. Factors responsible for the decline included order fixing by the government and price guarantee which lowered the incentives of farmers. Most importantly, land reform did not produce its full effect and a clear outline of private property was not given. The rights of landholders and their protections were also not stated.

Crop farming was probably one of the few which received some benefits in 1997. Before that year, crops did not do well and declined by approximately 15%. Still, 30 regions saw their production increase in 1997 and even state farms responded positively to the market. This could be clearly seen when a shortage of buckwheat was eliminated for the first time and profitable land expanded.

Animal husbandry production, however, declined twice. The meat sector was also greatly affected, so was the milk production which saw the reduction of 20-30%. On the bright side, the share of subsidiary farms increased, resulting in the increase of meat output from 20% to 55% and of milk output from 26% to 47%. By 1999, pig and poultry production bounced back and, despite the decline of cattle, milk yield per

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²Ibid., pp.219-224.

cow grew by 2.3%. In addition, the production of meat, milk, and eggs increased by 7.2%, 3.5%, and 1.6% respectively.

Table 3.1 shows the agricultural production of each region during the 1990s and Table 3.2 indicates percentage share in gross agricultural output in each region.

Table 3.1 Percentage Shares of Macro-Economic Regions in Russia's Total Production of Selected Agricultural Products

Regions	Grain		Potatoe	s	Vegeta	bles	Meat		Milk	
	1986-90	1997-98	1990	1997	1990	1997	1990	1997	1990	1997
Russia Total	100	100	100	100	100	100	100	100	100	100
North	0.4	0.4	2.4	3.9	1.3	2.3	2.6	2.1	2.9	3.1
Northwest and Kaliningrad Oblast	0.8	0.6	4.0	4.0	4.0	5.0	4.3	2.8	4.5	4.3
Center	9.8	8.4	23.0	19.9	17.8	20.5	13.8	12.6	17.1	18.4
Volgo-Viatka	5.1	5.9	10.0	8.8	5.1	8.7	6.3	7.1	7.1	8.5
Central Black Earth	11.7	11.6	8.2	9.0	7.8	7.1	9.6	8.4	9.0	7.3
Volga	17.3	20.5	9.3	9.1	14.4	12.5	14.3	14.2	12.9	13.8
North Caucasus	21.8	18.4	5.6	6.2	23.7	10.6	15.6	13.1	11.2	8.2
Ural	14.0	15.8	15.1	15.7	10.1	14.9	13.3	16.7	14.1	17.2
West Siberia	12.5	12.6	12.9	12.5	8.5	9.2	11.4	13.5	13.0	13.3
East Siberia	5.5	5.2	6.0	8.0	3.6	5.9	5.7	7.1	5.3	4.6
Far East	1.1	0.8	3.6	3.9	3.8	3.4	3.5	2.3	2.8	1.4

Sources: "Russia Overview" http://www.worldbank.org/en/country/russia/overview

Table 3.2 Descending Regional Order of Russia's Major Agricultural Producers

Regions		Rank			age Share cultural O	
	1997	1991	1980	1997	1991	1980
Krasnodar Krai	1	1	1	4.41	4.92	6.16
Rep. of Bashkortostan	2	4	3	4.10	3.04	3.75
Rep. of Tatarstan	3	7	6	4.02	2.69	2.95
Moscow Oblast	4	3	8	3.00	3.31	2.80
Stavropol Krai	5	5	5	2.79	2.96	3.27
Rostov Oblast	6	2	2	2.71	3.46	4.21
Krasnoyarsk Krai	7	16	12	2.69	1.96	2.52
Saratov Oblast	8	8	9	2.53	2.42	2.64
Sverdlovsk Oblast	9	14	20	2.42	2.00	1.76
Altai Krai	10	6	4	2.36	2.77	3.56
Volgograd Oblast	11	9	13	2.33	2.38	2.47
Novosibirsk Oblast	12	12	10	2.26	2.08	2.63
Voronezh Oblast	13	13	7	2.24	2.08	2.81
Omsk Oblast	14		11	2.23	1.65	2.60
Chelyabinsk Oblast	15	18	16	2.22	1.82	2.06
Samara Oblast	16	15	18	2.21	2.00	1.90
Orenburg Oblast	17	10	14	2.09	2.31	2.41
Irkutsk Oblast	18		_	2.07	1.38	1.21
Perm Oblast	19	19	_	1.84	1.69	1.48
Nizhnii Novgorod	20	11	17	1.83	2.23	1.93
Oblast						
Cumulative % Share of				31.0	30.2	34.8
Ten Leaders				52.2	40.5	
Cumulative % Share of Twenty Leaders				52.3	49.7	56.5

Sources: "Russia Overview" http://www.worldbank.org/en/country/russia/overview

The imports of agriculture between 1996 and 1997 totaled \$9.2 and \$10.3 billion. In 1998, the import was about the same as that of 1997. The main agricultural import of Russia included beef, pork, and poultry, which totaled almost 30% of imports.

In 1998, there were approximately 28 enterprises which specialized in agricultural production. They produced cereals (92%), potatoes (9.3%), vegetables (23.1%), sugar beet (96.3%), sunflower seeds (84.6%), and fodder crops (96.2%), with the total crop output of 50%. On the other hand, in 1997, peasant farms produced cereals (7.5%), potatoes (1.2%), vegetables (2.8%), sugar beet (2.9%), sunflower seeds (14.2%), and fodder crops (2%), with the total crop output of 2%. In addition, household plots created cereals (0.5%), potatoes (89.5%), vegetables (74.1%), sugar beet (0.8%), sunflower seeds (1.2%), and fodder crops (1.8%), with the total crop output of 48%.

The consumption of agricultural products per capita in 1997 is as follows: 125 kg of potatoes, 117 kg of bread, 75 kg of vegetables, 33 kg of sugar, 31 kg of fruit and berries, and 7.9 kg of vegetable oil.

In 1998 the economic crisis, which was caused by default on domestic debt and ruble devaluation, affected Russia's agriculture and food sector greatly. Food consumption was reduced due to decreased citizens' income and the rising food prices. Imports of agricultural products and U.S. agricultural exports to Russia also decreased by three-fourths and by 80 percent respectively. The default of public debt and the devaluation of currency which caused the country's economic crisis resulted from; the drop in world prices for energy and metals, the increase of budget deficit from 4% of GDP in 1997 to 7% the next year, and the Asian economic crisis.

The crisis caused devaluation against the dollar, immense inflation, and reduced GDP. The depreciation of the ruble raised the prices of food products, affecting the food consumption demand. The rate of unemployment was increased and inflation sharply reduced consumer purchasing power. Regarding Russia's imports of food stuffs, they consist of high-value products (HVP's) including fruit, beverages, processed foods, and confectionary products. However, because the general income, the main contributor for HVP imports growth, was reduced, these imports were particularly hit hard.

The U.S. and the EU thus helped Russia with their food problems by sending aid to the population who lacked sufficient food supply. Donations from the U.S. were worth \$589 million and a \$520 million trade credit. Commodities donated also included 1.7 mmt of wheat from the Commodity Credit Corporation and 0.2 mmt of other commodities from the U.S. Food for Progress Program. The EU also gave 1.8 mmt of agricultural products with the total of \$470 million.

After 1999, there was the belief in the agricultural sector that the state should intervene more, resulting in a combination of free market policy and state support. This approach is similar to that of developed countries, such as the United States. Measures implemented included import quotas limiting foreign goods, export bans, and subsidies in the form of loans, credits, debt restructuring, and subsidized crop insurance.

1. Land reform and development of agricultural land during Yeltsin's era

Since 1990, Russia has had 220 million hectares of land. Agricultural land utilized by producers decreased from 214 million hectares in 1991 to 195 million hectares in 2003 while the land used by farms decreased from 96% to 88%. What also occurred was the transfer of land from corporate farms to individual farms, with the loss of 59 million hectares by the former in 1991 while the latter received more than 40 million hectares.

In 1990, Russia implemented the Land Reform Law and returned the right of private ownership to citizens, with the imposition of 10-year moratorium on buying and selling private land. A great number of land privatization was then initiated in 1991-92 when state land was distributed to rural people who were working for the state farms. The privatized land was divided into equal proportion for each individual, including collective farm worker, pensioner, and rural social services employee.

The result was that new 11.9 million shareowners were created and had 117.6 million hectares of land. By 1995, 56% of the 209.8 million hectares had been privatized by the government while the remaining land was transferred to the state redistribution reserve for future expansion of household farms and for the needs of peasants. Peasants who received the land did not capitalize on it and preferred to leave it with the collective farm. Later on, they would deploy a strategy by which members of a family would pool their shares to receive one adjoining land in order to prevent land fragmentation.³

The Russian Law on Peasant Farms was then considered to legalize private farming, permitting creation of independent farms outside the collective system. While the laws were being enacted, however, the conservatives were in full swing to prevent such acts from happening for years. It was not until January 2003 when agricultural land ownership rights eventually came to exist when the Law on

³O'Brien, David J. and Stephen K. Wegren, *Rural Reform in Post-Soviet Russia*(Washington, DC: Woodrow Wilson Press/Johns Hopkins University Press, 2002), pp.89-95.

Agricultural Land Transactions was enacted. Agricultural land mortgage then followed up in February of the year after.

In reality, the ban on buying and selling of agricultural land was nullified before January 2003 by presidential decrees and resolutions of governments, allowing land shares to be bought or sold. The shareowners then were able to convert the shares into plots for household farming. The opposition argued that the implementation could create concentration of land ownership by a few individuals or companies, cause bankruptcy of former collective farms, and expose too many lands of Russia to foreigners. Thus, the 2003 Law on Agricultural Land Transactions addressed these worries by allowing the state to have a preemptive right on land purchases and on the regional governments to enforce limitation of land concentration by an owner. In addition, foreigners and companies with a lot of foreign capital could not own the land.

Furthermore, prior to the act, the state and collective farms were reorganized as corporate farms, and as time passed by, people started to get their land from the farms and lease it to a producer who was able to offer competition. The land shares could be leased either from shareowners or individuals who converted their land share into a plot. However, the 2003 Law on Agricultural Land Transactions interrupted the process and stated that a land share had to be converted into a plot first before any leasing could take place. The trust manager then regulated the income between the landowner and the farmer/operator. The major problem was that such converting of land required high costs and complication of bureaucracy, and placing leased land in trust was a concept not known before by any peasants or anyone in the world.

The pattern of land ownership had changed greatly between 1990 and 2003. The number of agricultural land owned by the state was reduced from 100% to 40%. Almost 60% of the land was owned by the private, despite 51% of the total was represented by land shares from abstract papers. There were only 6% which were physical plots and owned by individuals. This can be seen from Table 3.3

Table 3.3 Agricultural land ownership 2003

	Million ha	Percent
Total agricultural land	220.9	100
Privately owned (as reported)	127.5	58
Individuals: land shares	112.7	51
Individuals: plots ¹	12.1	5
Corporations ¹	2.7	1
State owned (by difference)	93.4	42

Source:Total agricultural land from Goskomstat (2003a); breakdown by ownership fromRoszemkadastr (2002a),pp. 49, 57, 100, 109, and Roszemkadastr (2004), pp. 13, 253, 604, 616.1About 2.5 million hectares held in peasant farms registered as legal bodies has been moved from the category of corporations (where it is formally reported) to the category of individual plots.

The transactions of land market could be categorized as transactions involving buying and selling that required the transfer of legal ownership and leasing transactions which transferred rights without changes in ownership. Table 3.4 illustrates the agricultural land transactions.

Table 3.4 Transactions in agricultural land 2001: national statistics

	Number of transactions, '000	Percent
Leasing of state land to households	1,695.6	93.0
Leasing of state land to agricultural producers	81.4	4.5
Sale of state land to households	2.6	0.1
Sale of private land to households	44.5	2.4
Total transactions in agricultural land	1,824.1	100.0

Source: Estimated from Roszemkadastr (2002b), pp. 46, 52, 78, 84, 111, 113, 115. Data for later years not available.

It can be seen that the number of agricultural land bought and sold by individuals was very small, compared to leasing of land by shareowners and the state.

In Table 3.5, one can see that only household plots depended on owned land whereas leasing proved to be popular among corporate and peasant farms. The land leased in corporate and peasant farms was approximately 60% of the total used land. Three-quarters of the land leased in corporate farms was land shares. On the contrary, peasant farms leased land plots more than 40% of the total land leased, showing the fact that the overall atmosphere in Russian agricultural transaction was dominated by leasing.⁴

⁴Ibid., pp. 97-111.

	Corporate farms (n=136)	Peasant farms (n=222)	Household plots (n=190)
Average farm size	4100 ha	270 ha	2.6 ha
Leased land	61	57	3
Leased land shares	(46)	(32)	
Leased land plots	(15)	(25)	
Owned land	36	42	93
Purchased land shares	(2)	(30)	
Purchased land plots	(1)	(11)	
Land shares invested in equity	(33)	(1)	
Other	3	1	4
Total	100	100	100

Table 3.5 Sources of land in the survey (percent of the total area)

Source: "Land Use Policy" http://www.eastagri.org/files/Land_Policies_Russia

2. Agricultural reform of the Russian Federation during Vladimir Putin's regime

This part describes about Putin's rise to power and the changes in many sectors of the country. Agriculture during this time has significantly improved, even though some critics argued that it could have been better when Russia's capability and potential are taken into account. The information contains the following points: agricultural production, agricultural exports and imports, agricultural problems, foreign investments, overall budget, types of agricultural sectors, land transactions, joining the WTO, and SWOT analysis of Russian agriculture.

Before becoming President of Russia, Putin was from a humble origin, enabling him to understand the people and speak their language. After working in the KGB for 16 years, Putin helped bring capitalism to Petersburg and became the first leader since Lenin who could speak a foreign language and had stayed abroad. He quickly proved himself to the top officials and climbed his way up.

Putin's becoming the next president was unexpected. When a meeting was held to discuss the election of a new president, his name was not even mentioned. His popularity then gradually increased until Yeltsin appointed him Acting President. One of the main reasons which immediately boosted Putin's popularity was the second war in Chechnya, which began on 7 August 1999. Prime Minister Stepashin was unable to suppress the attacks of Chechen, giving Putin the chance to rise and to replace him and handle the issue. Even though there were many casualties, the public supported the war and his popularity soared.

Regarding the economy prior to Putin's accession, budget deficit from 1993 to 1998 was at 9%. Russia's business subsidies totaled approximately 16%, but they produced little value and benefits. The deficit caused financial crash in August 1998, forcing half of the total banks to go out of business. Nevertheless, it transformed the market and since 2000, compared to the pre-reform years, Russia has enjoyed budget surplus. Subsidies were eliminated, leveling the competition among Russian businesses.

The crash also helped strengthen the central power and reduce regional governments. The federal government could shift financial sources of the regional areas to the center radically, doubling the revenue of the former. Foreign trade taxes increased greatly, allowing the federal government to insist on cash payments and eliminate the barter system. In addition, the result of the financial breakdown gave the government a newfound ability to impose tax laws on large companies, especially on oil and gas enterprises.

Russian agriculture was downsized from 1991 to 2001; the output of sugar beet was reduced by 54.8%; grain, 27%; sunflower, 20.6%; flax, 18.4%; meat, 58.5%; milk, 41%; eggs, 26.4%; and wool by a factor of 5.6. During 1991-1998, two new areas which had succeeded as grain producers emerged: the republics of Tatarstan and Bashkortostan. They were successful mainly due to financial support and healthy local population.

The period also caused the decline of food output. While Yeltsin aimed to reduce food imports and gain economic independence, farm productivity was reduced, farm debt soared, and agricultural contribution to GDP contracted to 7%. During the 1990s, the country emphasized food imports more than investments in the agricultural sector, spending 13 billion dollars on the imports in 1997. The expenditure would only gradually decline afterwards. In spite of economic inefficiency, Russia did not seek help from the West at the time, as both conservatives and liberals disagreed with the idea. Furthermore, despite being the largest country in the world, only 13% of the total land was used for agricultural production due to unfavorable climate. The used land was mainly located in the European part of the country: the North-West, Central, South, Privolzhsky and Urals Federal Districts.

After becoming President, Putin used the term "managed democracy" to represent power from the top while ensuring that Russian citizens would receive legal protections like those of the developed countries. He believed this system would work well in Russia and be an important part of Russian history and culture. He also took away licenses from popular outspoken media channels in order to reduce criticism that could be imposed on him and the government. He furthermore tried to reduce the power of the oligarchs and limit direct access to him. The members in the

administration were replaced by those who used to work with him instead of the oligarchs.

After becoming Acting President, according to Agrarian Policy Under Putin written by Stephen Wegan, Putin said, "our first-order task is to raise the volumes of food output to the levels they were at the end of the 1980s-beginning of the 1990s and to appreciably reduce the country's food dependence on import". The new program aimed to develop the rural market, maintain food output, and complete the goals as soon as possible. It also clearly stated that state intervention should be limited, allowing the program to be more independent. Agriculture Minister Gordeev's primary goals of the program included strengthening the agricultural sector by reducing debts and increasing budget, implementing customs and tariffs to protect domestic production and producers, intervening commodity, dispersing subsidized credits, and improving agricultural equipment and the process of leasing machinery.

At a meeting of the Government Presidium, according to the Government of the Russian Federation, President Putin stated, "Above all else, the domestic farming industry must satisfy the needs of the Russian market and facilitate a proper balance, especially in terms of costs. We should only export surplus grain harvests. Proceeding from this logic, the government will gradually resume its measures of support with the goal of securing the position that our grain producers once held on the world markets. But I will repeat once more: our priority is domestic consumption." His statement of strong support for maintaining internal gain production can be seen by the measures his government followed during his presidency.

On the contrary to the Yeltsin's regime, Putin's agricultural policy had become important to policy makers. Gordeev said that the future of the country would depend on large farms. He also criticized past reforms as lacking "a scientific basis" and stated, "the Russian experience witnesses the fact that the future of agriculture is large enterprises and the vertical integration of agro-industrial organizations", according to Putin's Russia: Past Imperfect, Future Uncertain written by Stephen K. Wegren.

It can be clearly seen that since 1990 the policy has been changed significantly. The total agricultural land was 100% owned by the state back in the time of the Soviet. In 2003, it was reduced to 40%, meaning that 60% of the agricultural land had been distributed to farmers. In addition, 51% of the land was land shares and they could be transferred, sold, or leased to another owner. This saved owners from going through complicated ownership transfer and was very convenient. The leasing process was also relatively easy; once the owner had agreed with the new lessee regarding the lease term and payment, the lessee then made a deal with the collective farm's manager. In 1991 corporate farms totaled 95% of all the

farms but were reduced to 68% in 2003. On the other hand, individual farms for the use of agricultural work increased from 2% in the same year to 13%.⁵

Agricultural implementation was then spread out. The government would pay 50 percent of insurance premiums and there would be a special division created in the Agriculture Ministry in order to guarantee crops against bad weather, disasters, or pests. The Ministry of Agriculture and Food was responsible for the country's agricultural policy. Established to foster the interests of agriculture and move forward the issue for further considerations of the Cabinet of Ministers, it improved the Main Directions of the Agri-food Policy for 2000-2010. The objectives of the plan included antitrust policy, agri-food markets regulation, land policy and legislation, agricultural financing, regional support programs, reasonable protectionism, integration of domestic product into the global market, and unrestricted movement of products and services.

President Putin also set up the National Priority Project for Development of Agro-Industrial Complex, making agriculture one of the top national priorities, besides housing, health care and education. According to the project, the 3 main aims included an increase of milk and meat production, small farmers encouragement, and emphasis on rural housing through provision.

There was also another program to finance rural areas through the construction of schools, houses, hospitals and polyclinics, electric power lines, gas systems, water pipes, telecommunication services and roads. Import duties on agricultural machinery were also reduced so that companies could use technological re-equipping. Overall, over these years Russia had been trying hard to increase its agricultural output. At the federal level, the policy was liberal; the regional level, it was more conservative and protective.

Throughout the 1990s, debt in agriculture increased and continued to grow to 1999, where long-term farm debt eventually surpassed the state budget support by a factor of ten. With this problem, farms had no chance to buy new equipment or machinery for improvements. Farm workers also had increased debts and rural income was much less.

In response to this, Gordeev, like the former minister, favored the use of custom and tariff policies to support domestic producers. This policy then became a part of the government's ten year agricultural plan to 2010, aiming to reduce the debt and dividing it into taxes, insurance payments, and penalties and fines. Putin wanted to increase the protectionist role of the state in order to protect domestic food producers from unfair competition. Supporters of food security also included large

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⁵Anders Aslund, *Russia's Capitalist Revolution*(Washington, DC: Petersen Institute, 2007), pp. 23-43.

farms and private farmers, food processors, and interest groups such as the Meat Union, Grain Union, the Sugar Union, and the Agrarian Party of Russia.

The ten-year process plan indicated that tax and insurance payment debts would be reconstructed in the first six years while penalties would be followed up in the remaining four years. If one-third of tax and insurance debts were repaid in the first two years, half of penalties would be nullified. On the other hand, if the remainder of the debt was taken care of in the next four years, all penalties would be written off.

Furthermore, the solution to unprofitable farms of Yeltsin was to shut them down. Unfortunately, because the farms increased radically, it reached the point that it was not possible to close them down anymore. Gordeev, on the contrary, provided financial support for the farms that would be able to produce the most output. Then a plan in the early 2001 divided farms into four categories: profitable farms with no debt; profitable farms based on current production; unprofitable farms based on potential production; and unprofitable farms with no development potential.

Each farm would have to become solvent by acquiring labor discipline, restructuring debt, changing business plans etc. The profitable farms nearby would have to purchase the assets of the unprofitable farms and the Ministry of Agriculture had to distribute the land and property. Regional administrations would also have to play a larger role in helping the farms.

In addition, the CONSEPTION of the Federal Program on Providing for Fertility Restoration of Agricultural Lands for 2001-2010 aimed to develop agrochemical, hydro technical, land clearing, erosion-control, and the forest, among other things to prevent the deterioration of soil fertility and stabilize its production. Also included was irrigation and drainage system improvement; the proposed solutions of which are as follows:

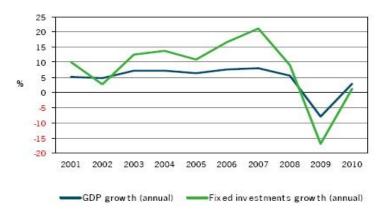
- To preserve the potential of the country's irrigation and drainage system; maintain their stabilization and development of crop production and animal husbandry.
- To improve soil and hydro geological condition of reclaimed lands.
- To reduce water losses and implement water-saving technologies.
- To replace old equipment with new ones.

In 2005, the spending in agriculture increased by 50% in terms of adjustment of inflation. Its policy was detailed in the Programme for the Development of Agriculture, Regulations of Commodity Markets and Rural Development for the Period of 2008-2012. The goals were to increase the standard of living in rural areas

and employment, modernize capital stock, conserve soil, gain better risk management etc. In order to achieve these goals, policy makers had to sustain the development of rural areas, create conditions of agriculture, prioritize agriculture subsector development, build sustainability of finance, and initiate regulations for agriculture product market. These plans were to cost 112.37, 66.55, 72.66, 292.69, 7.01 billion rubles, respectively.

As a result, it was not until 1999 when agriculture began to enjoy a steady economic growth, with an average 5-8% of GDP between 2001 and 2008. This can be seen from Figure 3.1.

Figure 3.1 Annual growth rates of Russian GDP and fixed investment, 2001-2010



2010 figures for Q1 (GDP) and January- June (fixed investment).

Source: "Russia GDP - real growth rate" http://www.indexmundi.com/russia/gdp real growth rate.html

However, some critics believed that the early years of Russian agricultural reform saw no changes, compared to the Soviet era. Agriculture did not receive support from a reliable financial and credit system. A Russian analyst concluded that "a network of banks which specialize in serving agriculture is missing. Commercial banks do not have the experience and the knowledge necessary for working in agriculture". The post-Soviet era also had three main problems with the agricultural credit policy.

Firstly, commercial banks declined to invest in agriculture. This can be clearly seen in 2000 at a meeting for bank representatives to discuss the issue of agribusiness finance, as no one showed up. Also, 80 percent of both domestic and

foreign investments have gone to the food industry such as tobacco, beer, and confectioneries. Only a few investments in agricultural materials have been initiated.

Secondly, a dependable bank for credit distribution in agriculture was still missing. For example, due to the financial crisis in 1998 the main bank with agricultural credits, SBS-Agro, defaulted. By the end of 1999, almost 1,500 banks and their 43 branches closed their operations. Thirdly, the credit policy had some problems because it did not give commercial banks an incentive to provide agricultural credits. As a result, a new credit policy was launched by Gordeev in 2000 to provide subsidized interest rates to buy needed inputs instead of providing subsidized inputs like in the past. State credits in this system were transferred to Rossel'khozbank, Sberbank, and to other banks which provided loans to food producers at higher interest rates. This aimed to increase an incentive for bankers while providing sufficient support for food producers.

Regardless, Putin arrived at the scene at the right time: the economic circumstance of Russia was recovering fast. When he became President, he continued the market reforms initiated in 1996-1997. From 2000 to 2002, the progress of the economy was very positive, especially the tax reform. The progressive personal income tax was reduced to 13% in 2001, after reaching 30%, and the corporate profit tax was deducted to 24% in the same year from 35%. Only an agency was responsible for tax collection and social security contributions were reduced to 26%.

Small and medium-sized enterprises were also able to rise up. In 2002, licensing and registration were made easier, creating more incentives for companies to join. By 2006, the number grew to almost 5 million businesses registered in Russia after having increased more than 7% a year. Furthermore, on 24 July 2002, the Duma legalized the sale of agricultural land, even though, in reality, some regions did not immediately adopt the law and connections with regional governors were very important to make such purchase.

However, in 2003, Putin suppressed Yukos Oil Company, the largest and most successful company in Russia, illegally and harshly. He did it to get rid of Mikhail Khodorkovsky, a very outspoken owner, and Putin's collaborators had an agenda to confiscate the assets of Yukos. This sparked a rise of re-nationalization; state companies bought successful private companies, with rumors that the sales were coerced and the prices were low. Corruption was also reported and ideological goals were not present. The result of re-nationalization was the stagnation of oil and gas production, banking, and machine building. The investment was also greatly affected, as its ratio was quite low in spite of economic progress. According to An Assessment of Putin's Economic Policy by Anders Aslund, Liberal leader Boris Nemtsov expressed his resentment, "It is offensive that under Putin the state has taken on the role of plunderer and racketeer with an appetite that grows with each successive

conquest. But the greatest calamity is that nobody is allowed to utter a word in protest regarding all this. "Keep quiet", the authorities seem to say, "or things will go worse for you. This is none of your business."

Nemtsov described Putin as a believer in a healthy market; however, "he doesn't believe that Russia needs a democracy too. It is difficult to someone with a KGB background that there is a connection between democracy and competitive markets. This is the real difference between Putin and Yeltsin. Yeltsin believed in this connection in his very soul, especially after he visited the U.S. and went to an American supermarket." During his presidency from 2000 to 2004, Putin utilized both liberalization of economy and restriction of democracy. This can be seen from the implementation of tax code, a land transaction bill, a criminal code and joint stock company law in terms of economic freedom and the jailing of the major oil producer Mikhail Khodorkovsky and the suppression of media during the Duma election in terms of democratic liberation.⁶

Because freedom was not fully implemented in every aspect, some saw that economic reforms could have gained more potential. According to Yegor Gaidar, Finance Minister of Russia, "between 2000 and 2002, President Putin introduced a series of important economic reforms. Unfortunately, the events of 2003 and 2004 suggest that...economic reforms have slowed down just as the consolidation of political power has increased. Reforms of the Russian pension system and restructuring of the energy complex have stopped... Consolidation of power under Putin only cements the role of the corrupt Russian bureaucracy." Another critique correctly summed up the issue: "I am not sure that Putin views the consolidation of political power as necessary for promoting economic reform. I think he views the consolidation of control over his own bureaucracy as vital to promoting economic reforms...Control over bureaucracy is vital for enforcing any policy whatsoever...The ground under the president is very soft – wherever he steps, it gives way under corruption."

In 2004, the oil prices began to look brighter, benefiting Russian state treasury and its reserves. Unfortunately, it did not produce a higher growth rate but it was the year which signified repression, corruption, and stagnant economic reforms instead. Putin was given a license to be authoritarian and did not take any sustainable reform one would have hoped for. In addition, the promise of Putin to join the WTO by 2003 was greatly delayed, as his protectionist measures dominated national interests, conflicting with the regulations of the organization.

⁶World Bank, From Transition to Development, A Country Economic Memorandum for the Russian Federation [Online], 2005. Source https://openknowledge.worldbank.org/handle/10986/8628

Though Putin was honored by the Time magazine as "man of the year" in 2007, critics said that the murder rate was higher than that of Yeltsin or the United States. They believed the "success" he received was from the results of his predecessors' reforms in the 1990s. From1999 to 2007, by Freedom House standards, the country had become more authoritarian. According to the World Bank, the European Bank for Reconstruction and Development, and the Transparency International, Russia steadily maintained the corruption and was too strict and centralized to handle constant problems.

Opinion poll showed that Russian citizens were not happy with the corruption. The number of people involved in corruption could be considered the greatest in world history. Critics also complained that even though the economic growth had increased by 7% a year, the figure was still not impressive after abundant oil revenues were taken into account. The surplus could turn into deficits as imports increased by 35-40% a year and production of energy was stagnant.

The "ease of doing business ranking" measured the ranking of countries that were easy to do business with. Russia ranked 120 out of 183 in 2010, having its position decreased to 79 in 2006. When it comes to starting a business, Russia ranked 182 because of the heavy setup that took a long time to complete. Border trading was also quite difficult due to a large amount of paperwork, the time involved, and the high costs of export and import. With regards to getting credit and protecting investors, the country ranked 90. Unsurprisingly, corruption remained the biggest problem, as the country ranked 146 out of 180 with a score of 2.2 (10 being the most dishonest). It was still acceptable to pay bribes to officials and regard them as "unofficial taxes".

Another problem which posed some serious threats to the citizens' well being was the lack of health regulation. Russian men were consuming too much alcohol, causing many to die from alcoholism. Anti-alcohol measure was thereby initiated and adequate healthcare system was focused on. The education the youth received was also of poor quality because of corruption in the bureaucracy. Overall, despite positive changes from 2001 to 2004: annual growth rate of 6-7%, surplus budget, reduced inflation etc., the capita GDP was only one-quarter of the U.S. With the total of 30 million Russians, 20% of the population was still very poor.

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⁷Meliantsev, Vitali A., *Russia's Comparative Economic Development in the Long Run* [Online], March 2004. Source http://www.socionauki.ru/journal/articles/130064/

1. Agricultural Production

Russia's agricultural production result has been mixed during these past years. Russia suffered from crop failures between 1998 and 2000, but bounced back with bumper crops, creating a surplus of 15 million tons, causing domestic grain prices to decrease substantially. The ones who benefited the most were a growing class of middlemen or treidery. Their revenue totaled \$17.2 billion in one year while their investments worth only \$2 billion. By 2002 the country exported 18.4 million tons that worth \$1.4 billion and became one of the world's main grain exporters once again. The development of grain output can be seen from Table 3.6

Table 3.6 Annual grain output in the Russian Federation (million tons)

1976 - 1980	1981 - 1985	1986- 1990	1991 – 1995	1996 - 2000	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
106	92.0	104.3	87.9	65.2	63.4	69.3	88.6	47.9	54.7	65.5	85.2	86.5	73.5	73-75*

^{*} Estimate.

Sources: Rossiiskii Statisticheskii Ezhegodnik (Moscow, Goskomstat, 1996), p. 563; Sel'skoe Khozyaistvo v Rossii (Moscow, Goskomstat, 2002), p. 58; Zhanna Oleinik, 'Rossiiskoe zerno uidet zarubezh', RBC Daily, 11 May 2004, http://www.ikar.ru/press/2004 05 /o.shtml.

Some crops excelled over these past years whereas some failed to live up to the expectations. The production depended greatly on weather conditions and price levels. The products that were doing well included sunflower, sugar beet, vegetables, and potatoes. The production of sugar beet improved radically and increased by 25% in 2006. Sunflower also grew since the reform, probably due to the use of high quality hybrids and mineral fertilizers, applying up-to-date technologies to its production. This can be seen from Figure 3.2

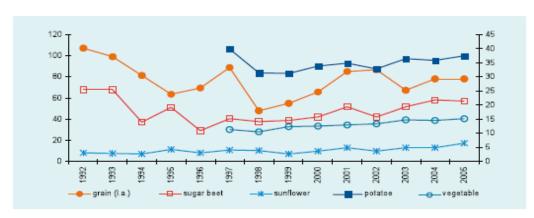


Figure 3.2 Production of selected crops in Russia, million tons

* i.a. – left axes

Source: National statistical officer, OECD.

Crop is the agricultural production which makes more than half of the total output. In 2005 it contributed to 53%. However, the trend is decreasing slowly due to the weather and the price. On the other hand, grains and wheat still play a major role in the country's agriculture. Sunflower, sugar beet, vegetables and potatoes have exceeded the level of output in pre-1991. The production of livestock is not doing very well, particularly animal inventories. Nevertheless, poultry production's growth rates increased by 10% during 2000-2004 and pig meat production also expanded during 2002-2007. For certain regions, for example, in Moscow, Belgorod, Penza, Stavropol and Krasnoyarsk, the production of hog and poultry increased by 130-160% in 2006.

Since 2005, the number of hogs, sheep and goats increased while the number of cattle was constant. The production of meat has grown 30% higher in 2009 compared to 2004 and 2005. Volga federal district was the main milk and egg producer in 2009, with 32.2% and 26.2% of the overall production. Central federal district was the main cattle and poultry producer in the same year, with 26.4% of total meat output.

In 2009 crops such as cereals, sugar beet and sunflower decreased by 10-15% compared to 2008. The main crop grown in the country is wheat while other cereals include barley, oats, rye, corn, legumes, millet, buckwheat and rice. The Southern district is the main producer of cereal whereas sugar beet production is grown in Central and Southern districts. The production of potatoes on the other hand can be found in the Volga and Central Federal district and vegetable production in Southern district. The results of crop have also developed greatly compared to 2001-2005

period. Table 3.7 and 3.8 show the harvest for main crops and crop yield between 2001 and 2009.

Table 3.7 Gross harvest for main crops in Russia, 2001-2009 (million tones)

Indicator	2001-2005	2005-2008	2008	2009	2009/2008
	(average)	(average)			
Cereals	79.1	86.4	108.1	97.0	89.7%
Sugar beet	18.6	27.4	29.0	24.8	85.6%
Sunflower	4.5	6.6	7.3	6.4	87.4%
Flax fiber	53.0	48.0	52.8	53.0	100.3%
Potato	35.6	28.1	28.8	31.1	107.9%
Vegetables	14.2	11.8	12.9	13.4	103.6%

Source: "GROSS HARVEST AND YIELDS OF BASIC AGRICULTURAL CROPS"

http://www.gks.ru/bgd/regl/b11 12/IssWWW.exe/stg/d01/15-14.htm

Table 3.8 Crop yield in Russia, 2001-2009 (tones per harvested hectare)

Indicator	2001-2005	2005-2008	2008	2009	2009/2008
	(average)	(average)			
Grain	18.8	20.3	23.8	22.7	95.4 %
Sugar beet	241.0	316.0	362.6	322.0	88.8 %
Sunflower	9.9	11.7	12.3	11.5	93.5 %
Flax fiber	5.7	6.9	7.8	8.3	106.4 %
Potatoes	113.0	132.0	137.2	142.0	103.5 %
Vegetables	179.0	179.0	196.7	200.0	101.7 %

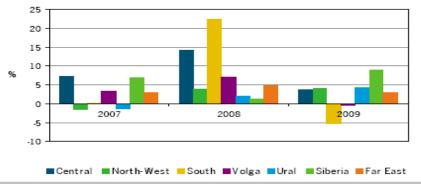
Source: "GROSS HARVEST AND YIELDS OF BASIC AGRICULTURAL CROPS" http://www.gks.ru/bgd/regl/b11 12/IssWWW.exe/stg/d01/15-14.htm

Investments in agriculture decreased greatly compared to 2008. This happened mostly in the livestock sector, as the investment in cattle and intensive livestock was reduced by 30-50% compared to the year earlier. Investments in new grain elevator, dryers, milling capacity and feed mills also decreased significantly.

Other products such as oilseeds have been prominent in the agricultural export since the 1990s. By the beginning of the 2000s, vegetable oil had its share in the export as a result of domestic oil extracting industry. In 2005, the country became a net exporter of not only sunflower seeds but also sunflower oil.

As Figure 3.3 shows, main agricultural regions include Krasnodar, Rostov, Bashkortostan and Tatarstan. In 2009, the productivity of some regions such as Moscow and Altay increased but main agricultural regions such as Voronezh, Krasnodar, Stavropol, Volgorad and Rostov suffered a decline.

Figure 3.3 Agricultural output in the main agricultural regions in Russia, 2008-2009



Note: C=Central Federal District; So=South Federal District; V=Volga Federal District; U=Ural Federal District; Si=Siberian Federal District.

Source: "Russia: Agricultural Overview"

http://www.fas.usda.gov/pecad2/highlights/2005/03/Russia Ag/index.htm

a) Grain

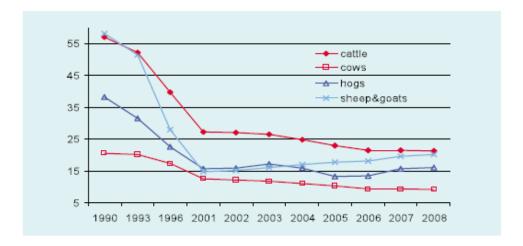
Grain became Russia's main agricultural export during the recovery period instead of conventional products, such as fish and seafood. It contributed 42\$ to the overall export in 2007. The government intervened for maximized profits by supporting prices in positive harvest years by buying the excess grain to maintain high prices. On the other hand, when there were bad harvest years, the government would distribute the product from its stores so that the prices did not become unacceptable. Thus, in 2001-2008, the government stepped in to buy grain, except in 2003, when it intervened to sell.

Grain production thus increased from 2000 to 2008 due to improved yield, management practices, physical infrastructure investment, and favorable weather. The increase was also a result of the combination of technology and the integration of agricultural operators. The yield of grain over 2001-2008 was 1.83 tons per hectare compared to 1.30 over 1996-2000. Mostly the production originates from the southwest of the country; the Southern, Central and Volga regions contribute approximately 74 of production. The areas, nevertheless, are also mostly affected by heat waves.

b) Livestock

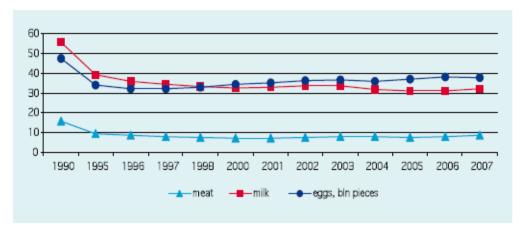
The livestock sector is worse than the crop production. Animal inventories were still far behind the levels before the reform, as indicated in Figure 3.4 and 3.5.

Figure 3.4 Livestock inventories in Russia, million heads, as on 1 January



Source: "Russia: Agricultural Overview" http://www.fas.usda.gov/pecad2/highlights/2005/03/Russia_Ag/index.htm

Figure 3.5 Production of major livestock products in Russia, million tonnes*



* - live weight

Source: "Russia: Agricultural Overview"

 $http://www.fas.usda.gov/pecad2/highlights/2005/03/Russia_Ag/index.htm$

Even though the stocks of animals decreased, the animals' productivity grew consistently. Poultry production grew at a rate of 14-17% a year while pig and sheep inventories started to grow after the government supported livestock breeding. Figure 3.6 shows the trend of such products.

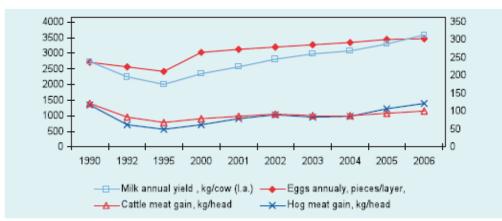


Figure 3.6 Livestock and poultry productivity* in Russia

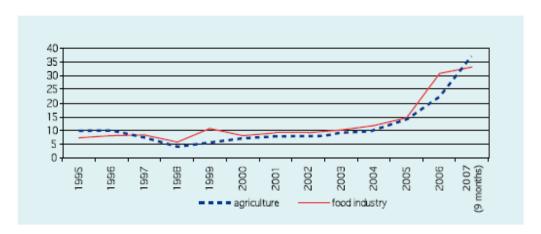
* i.a. – left axes

Source: "Russia: Agricultural Overview"

http://www.fas.usda.gov/pecad2/highlights/2005/03/Russia Ag/index.htm

After 1999, the agriculture sector had consistently improved, so had capital investments, as indicated in Figure 3.7 and 3.8

Figure 3.7 Capital investments in the agro-food sector in Russia, constant prices of 1995, billion RUR



Source: "Foreign investment in Russia"

http://ec.europa.eu/economy finance/publications/publication10969 en

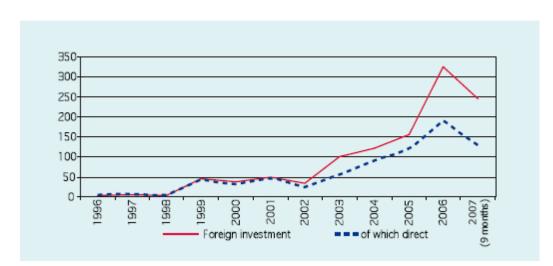


Figure 3.8 Foreign investments in agriculture in Russia, million USD

Source: "Foreign investment in Russia"

http://ec.europa.eu/economy_finance/publications/publication10969_en

On the other hand, some of the food commodities, such as vegetable oil and white sugar, have exceeded the level before the reform while some, such as sausages, pasta, and margarine, have almost recovered. Table 3.9 shows the production of food in Russia.

Table 3.9 Production of selected food products in Russia, '000 tonnes

	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007
Meat	6,484	2,370	1,193	1,284	1,456	1,677	1,698	1,827	2,100	2,500
Sausages	2,283	1,293	1,052	1,224	1,468	1,700	1,832	1,957	2,100	2,400
Butter	833	421	267	271	279	285	271	277	274	n.a.
Dairy (in liquid milk equivalent), million tonnes	20.8	5.6	6.2	6.7	7.7	8.5	8.7	9.5	10	10
Vegetable oil	1,159	802	1,375	1,281	1,197	1,598	1,867	2,206	2,600	11.a.
White sugar	3,758	3,155	6,077	6,590	6,165	5,841	4,852	5,588	5,800	6,100
Flour, million tonnes	20.7	14	12.1	12	10.9	11.2	10.8	10.2	10.2	10.1
Groats	2,854	1,418	932	994	951	890	893	926	966	1,100
Pasta	1,038	603	704	764	821	874	950	982	1,028	n.a.
Margarine	808	198	462	515	536	542	561	630	677	n.a.

n.a. – not available

Source: Global Insight, Country Reports, Russia.

The demand for food has grown faster than the average real income of the population. Fruit and cheese consumption have grown rapidly, so have poultry sales. After the economic crisis, many agribusiness companies took a shot at domestic supplies of main agricultural products, but would later learn that the markets were highly undeveloped and raw produce was costly. The exports of agriculture had increased over the years but import still played a major part in the Russian economy. This can be seen from Figure 3.9

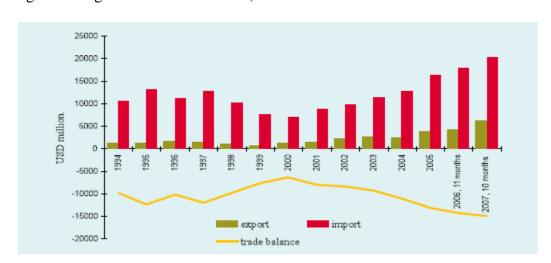


Figure 3.9 Agro-food trade in Russia, million USD

Source: Foreign Agricultural Service, Production, Supply and Distribution Online, http://www.fas.usda.gov/psdonline/; World Trade Atlas, Global Trade Information Services.

2. Agricultural exports and imports

a) Exports

The exports mostly consist of minerals, such as crude oil and natural gas (67%), with metals (13%), chemical products (6%) and machines, and equipment and transport (6%). Meanwhile, the export of food products and raw materials of agriculture totaled 3.3% of the overall exports in 2009 while the same products totaled 18% of the imports in the same year. China has become the main supplier of Russia with the share of exports of 13.6%, surpassing Germany and Ukraine. The Netherlands, on the other hand, had a share of 2.1% in export to Russia and was the most important country for Russia exporters, as indicated in Table 3.10

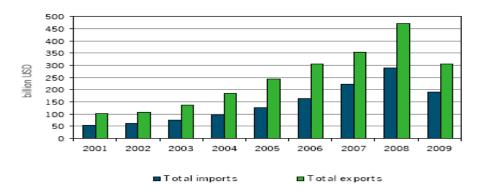
Table 3.10 Major import and export partners of the Russian Federation in 2008 and 2009

Imports by	Share in	Share in	Exports from	Share in	Share in
Russia	2008 (%)	2009 (%)	Russia	2008 (%)	2009 (%)
China	13.0	13.6	Netherlands	12.2	12.0
Germany	12.8	12.7	Italy	9.0	8.3
USA	5.2	5.5	Germany	7.1	6.2
Ukraine	6.1	5.4	China	4.5	5.5
France	3.7	5.0	Ukraine	5.0	5.5

Source: Foreign Agricultural Service, Production, Supply and Distribution Online http://www.fas.usda.gov/psdonline/; World Trade Atlas, Global Trade Information Services.

During 2001-2008, Russia had had a steady growth of exports and imports. However, at the end of 2009, both of the values dropped by a third compared to the year earlier. This can be seen from Figure 3.10

Figure 3.10 Russian exports and imports, 2001-2009



Source: Foreign Agricultural Service, Production, Supply and Distribution Online http://www.fas.usda.gov/psdonline/; World Trade Atlas, Global Trade Information Services.

When it comes to agricultural trade, Russia has a major trade deficit. The export value was USD14.0 billion, which was less than half of the value of imports: USD29.1 billion. This implied that the economic crisis affected agricultural imports more than exports. Even though the imports grew consistently between 2001 and 2008, the exports had only a small increase before declining in 2007. This can be seen from Figure 3.11.

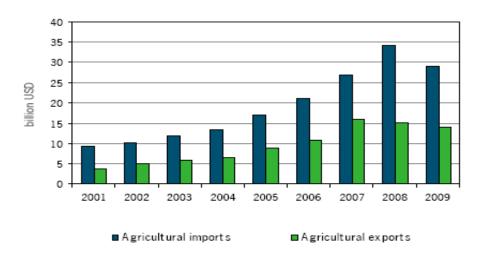


Figure 3.11 Russian agricultural trade during 2001-2009

Source: Foreign Agricultural Service, Production, Supply and Distribution Online http://www.fas.usda.gov/psdonline/; World Trade Atlas, Global Trade Information Services.

Main agricultural products exported include cereals (a third of the total exports), wheat and barley, fish (18%), sunflower and rape seeds. Meanwhile, main agricultural products imported include meat (21%), with a value of USD6.2 billion, fruits and nuts (15%), beverages and spirits (6%), fish (6%), vegetables and dairy products. Most of the imported products, including fruit and vegetables, declined significantly in 2009 because of the import substitution policy.

b) Imports

Even though the overall trade of Russia is positive, its agriculture sector has a large trade deficit. Russia imported at the value of USD14.5 billion but exported only at the value of USD3.2 billion. In addition, the sector could not benefit from the regulations of trade which were improved due to the ruble's devaluation. Although both imports and exports were increasing consistently in 2000, the latter was on a faster pace, causing trade deficit to become deeper.

The exports of agriculture focus on only a few products, such as wheat (26%), barley (5%), fish (12%) etc. Sunflower and rape seeds are also main products when trading with the EU. On the other hand, the imports of Russian agriculture consist of greater range of products. This includes 18% of meat, 5 to 6% of beef, poultry and pork, 13% of fruits and nuts, 9% of beverages and spirits, and other products, such as dairy, fish, sugar, and molasses and tobacco.

Countries that imported Russian products in 2005 included, in order of import value, Kazakhstan (USD525 million), Ukraine (USD446 million), Egypt (USD344

million), Azerbaijan (USD215 million), Georgia (USD 180 million), and China (USD150 million). Countries that exported their products to Russia consisted of, in order of export value, Brazil (USD2,116 million), Ukraine (USD1,412 million), Germany (USD903 million), United States (USD881 million), the Netherlands (USD641 million), and China (USD598 million).

Top ten importers of agricultural products in 2009, on the other hand, were China, Egypt, Kazakhstan, South Korea, Azerbaijan, Turkey, Japan, Ukraine, Uzbekistan and Finland. Main suppliers of agricultural products included Brazil, USA, Germany, Ukraine, the Netherlands, China, Turkey, France, Argentina and Poland, as illustrated in Table 3.11

Table 3.11 Russia's main agricultural export and import partners (2009)

Exports from	Value	Share	Imports by	Value	Share
Russia	(million USD)	(%)	Russia	(million USD)	(%)
China	2,709	19	Brazil	3,321	11
Egypt	1,182	8	USA	1,825	6
Kazakhstan	1,178	8	Germany	1,775	6
South Korea	811	6	Ukraine	1,442	5
Azerbaijan	612	4	Netherlands	1,349	5

Source: Foreign Agricultural Service, Production, Supply and Distribution Online http://www.fas.usda.gov/psdonline/; World Trade Atlas, Global Trade Information Services.

Between 2000 and 2008, the imports of agriculture increased from \$7billion to \$33billion. This made Russia the second largest importer in the emerging markets, next to China. The food imported mainly consisted of highly processed products,

meat, fruit, and vegetables. According to figure 3.12, the imports of the country's agriculture had grown a great deal since 2000.

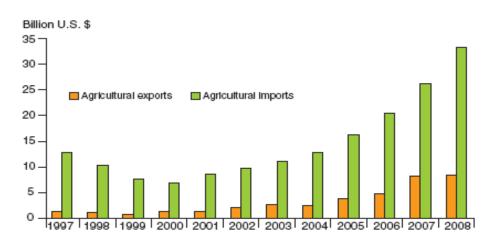


Figure 3.12 Russian agricultural imports have grown substantially since 2000

Source: Source: "Foreign investment in Russia" http://ec.europa.eu/economy finance/publications/publication10969 en

Highly imported products are in order: grain, beverages, fruit, vegetables, nuts, and meat. On the other hand, the exports of agriculture also increased. Even though the overall picture looks positive, it is important to note that the values are measured in U.S. dollars. Between 2000 and 2008, the dollar depreciated against the euro by a third. As a result, measuring the imports in U.S. dollars can exaggerate the volume terms. If done in euros, in 2000 they would rise from 7.4 billion euros to 22.7 billion in 2008, a 200% increase, compared to a 380% increase in dollars.

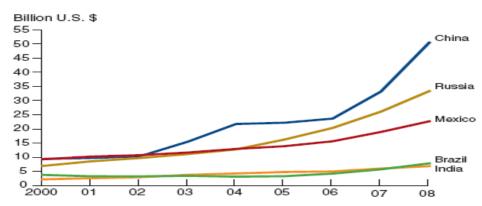


Figure 3.13 Agricultural imports by emerging markets, 2000-2008

Source: "Russia's Growing Agricultural Imports" http://ageconsearch.umn.edu/bitstream/124163/2/Russia

Figure 3.13 shows that imports of Russia have increased in value and volume among emerging markets. Although other countries, including Russia, had been affected by the inflation of world agricultural price, the country's imports were still growing and it was the second largest importer next to China. The reason for the growth was high GDP which averaged 7% between 2000 and 2008 and increased income of consumers. Another reason was the appreciation of the ruble, especially since 2000 after the high inflation which surpassed the nominal depreciation of the ruble.

Nevertheless, Russia implemented import quotas in response to the dumping prices of products sold by Western exporters in 2002, causing 12-13 billion worth of damage a year to domestic food producers. Even though it was financially sound for the Russia citizens, the Argumenty I Fakty source stated, "We are under the onslaught of cheap foreign food that our mercenary bureaucrats buy up for dumping prices and bring to this city... What they bring is such crap..., it only destroys people. All these preservatives, all the genetically modified ingredients which are so abundant in the West end up in our people's livers. (The Westerners) do not eat that stuff themselves; rather, they would send it to us. We are for them like Arica or a third-world country where anything can be dumped for profit." Out of 6 million tons of refined sugar produced in the country, 4 million were produced from imported raw sugar. 8

3. Agricultural Problems

Crop production is mostly produced in North Caucasus, the Central Black Earth Region and the River Volga areas. Dairy farming mostly takes place in Nechernozem zone. Beef cattle are brought up in Volga, Ural, Siberia, and parts of the North Caucasus. The production of pig can be found in Nechernozem zone, Central Chernozem oblasts, Volga Region, North Caucasus, Ural and Siberia. Approximately 7.7 million people worked for the agricultural sector, which amounted to 12% of the country's labor force. However, there were still many problems that had existed for many decades in Russia agriculture. The worn out and out of date equipment and machines which totaled 50% of the total resources had no value and caused no productivity in the agriculture. In addition, the low use of mineral fertilizers and lack of skills needed to exercise farming caused the potential of the matter to be highly unfulfilling. Tractors, grain harvesters, and fodder combines had also decreased substantially over these years.

⁸Sergey Kiselev and Roman Romashkin, *Possible Effects of Russia's WTO Accession on Agricultural Trade and Production*(Geneva: International Centre for Trade and Sustainable Development (ICTSD), 2012), pp.39-47.

The production in terms of tones per hectare is still low when compared to international standards. This is caused by underdeveloped technology which led to low input and subsequently low quality. For example, "saved seeds", or seeds from the previous year, are mostly used by farmers but they are not of good quality. The genetic situation of animals is poor and the increase in knowledge of animal husbandry is needed. Since 1999, the sector's finance has been improving gradually, as the number of insolvent farms was reduced and the net returns were higher.

In addition, knowledge development and its distribution can take place in universities or the industry itself. However, the development in this area has not been successful in the country. Developments in other areas could be enhanced such as agricultural commodities and its process, transport, and product distribution.

4. Foreign Investments

Two major investments took place in 1995 by the Mars factory and the Coca-Cola Plant at the value of USD150 million. Foreign investment went up from USD 1.5 to USD 1.8 million between 1998 and 2000. However, from 2000 to 2004, it decreased rapidly. In 2004, for example, the investment totaled only USD 1.1 billion and in 2005 the figure rose to USD 1.4 billion. Most of them contributed to the food industry, which has potential in growth. Nevertheless, when compared to other CIS countries the figure is still low. This was mainly caused by the Russian government which did not take sufficient interest in the matter.

Foreign investment increased consistently to USD 55 billion in 2006 and doubled to USD 121 billion in 2007. However, it decreased in 2008 and 2009 for the first time since 1999 amounted to USD 82 billion in 2009, as illustrated in Figure 3.14.

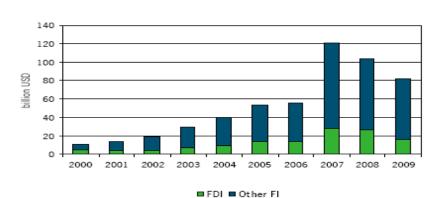


Figure 3.14 Foreign investment in Russia, 2000-2009

Source: "Invest in Russia" http://invest.gov.ru/en/why/reasons/

In 2009, the Netherlands was the second largest investor in Russia; next to it were China (12%), Cyprus (11%) and Germany (9%). Foreign investors invested in the food and agriculture sector at 4.7% and 3.4% respectively. Of the investments, 17% went to the primary sector and the rest were allocated to the food industry.

In order to ensure foreign investments, Russia must maintain its economic growth in the coming years. It needs to implement structural reforms in labor market, tax policies, and macroeconomic management, including fiscal and monetary policy, and the improvement of the banking system in order to sustain economic environment. The reforms would also help manage inflation and exchange rate. Government interventions and domination of bureaucrats should be reduced for agricultural development. It remains to be seen whether the government will listen to the OECD's advice and decrease regulations by the state.

5. Overall Budget

Even though budget for agriculture in the 2000s grew in current terms, a share of agricultural spending both in gross agricultural output and in total consolidated budget had been reduced, as indicated in Figure 3.15.

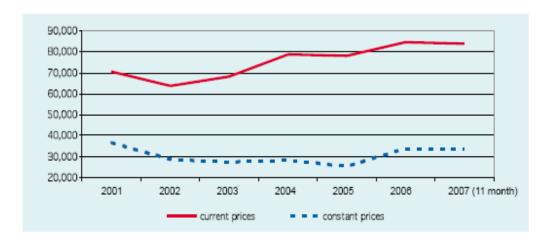


Figure 3.15 Consolidated budget expenditures in agriculture in Russia, million RUR

Source: "Russian Economic Report" http://www.worldbank.org/content/dam/Worldbank/document/rer-27-march2012-eng

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⁹ Ibid., pp.53-67.

Figure 3.16 shows the consolidated budget for agriculture in Russia

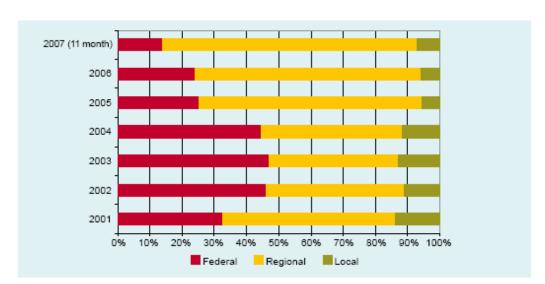


Figure 3.16 Structure of the consolidated agricultural budget in Russia

Source: "Russian Economic Report"

http://www.worldbank.org/content/dam/Worldbank/document/rer-27-march2012-eng

The new budget support for agriculture in turn caused income inequality between the northern and southern states; the northern areas benefited despite being less favorable for agriculture while the southern areas lost profits despite being rich in agriculture. Table 3.12 illustrates the budget spending on agriculture in 2008-2012.

Table 3.12 Budget spending for the Russia's State Program on Development of Agriculture in 2008–2012, billion RUR

Programme Divisions	2008	2009	2010	2011	2012	Total 2008- 2012	2012 as % of 2007
Rural development	7.34	19.03	25.12	29.6	31.28	112.37	570
General services for agriculture	9.86	12.92	13.78	14.66	15.33	66.55	330
Support of priority sectors in agriculture	13.73	15.41	14.11	14.37	15.04	72.66	180
Financial stability of farms	44	51.28	65.62	64.94	66.85	292.69	150
Market regulation	1.36	1.36	1.36	1.43	1.5	7.01	115.4
Tota1	76.3	100	120	125	130	551.3	200

Source: Foreign Agricultural Service, Production, Supply and Distribution Online, http://www.fas.usda.gov/psdonline/; World Trade Atlas, Global Trade Information Services

When the imports were restored after the economic crisis in 1998, the government tried to initiate many border measures and TRQs were introduced whereas the imports of cheese and alcohol were restricted. Trade protectionism was also limited by negotiations with the WTO. Table 3.13 shows the import tariffs in certain countries.

Table 3.13 Structure of bound import tariffs in selected countries

	Russia*	USA	EU	Japan	Brazil	Mexico	Kenya	India
Mean	13.5	11.9	20.5	80.1	35.6	44.4	100	116
Median	10	3.8	10.9	12	35	36	100	100
Minimum	0	0	0	0	0	0	100	10
Maximum	100	378.7	218.5	2,553.6	55	450.7	100	300
Standard deviation	14.0	33	29.4	203.3	11.2	42.1	0	52.5
No. of tariff lines	2,602	1,769	2,200	1,806	942	1,080	665	690

^{* -} actual import duties in 2004 z.

Source: "Russian Economic Report"

http://www.worldbank.org/content/dam/Worldbank/document/rer-27-march2012-eng

Before 2004 grain export did not cost anything. However, in 2004, due to the increase in bread prices, the government implemented temporary export taxes for wheat and rye and in 2007 taxes on grain export were initiated once again. This can be seen from Table 3.14.

Table 3.14 Cereal export taxes in Russia, %

	Since 16.01.2004	Since 01.05.2004	Since 12.11.2007	Since 29.01.2008
Wheat	0.025 euro/kg	0%	10%, but not less than 0.022 euro/kg	40%, but not less than 0.105 euro/kg
Rye	0.025 euro /kg	0%	0%	0%
Barley	0%	0%	30%, but not less than 0.07 euro/kg	30%, but not less than 0.07 euro/kg

Source: "Cereal production (metric tons) in Russia" http://www.tradingeconomics.com/russia/cereal-production-metric-tons-wb-data.html

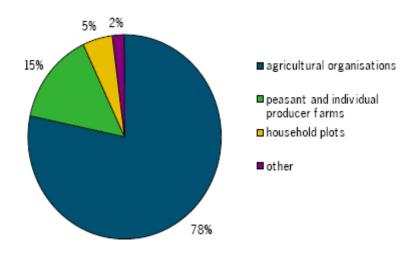
After agricultural crisis in 1998, the trend of protectionism of Russian products was reduced due to the negotiations with the WTO. Import duties in the sector were 13.5% in 2004; there were tariff rate quotas for beef and pork since 2003 and for poultry since 2006. Export duties of EUR25/ for wheat and rye were also implemented in 2004. Import duties on soy, some maize varieties and fish flour were taken down in 2005 for less expensive domestic breeding.

Regarding non-tariff trade barriers, companies that export their products to Russia often face inconsistent procedures concerning product registration, licenses of import, inspections of veterinary and phytosanitary. This includes products, such as Dutch flowers, Polish meat and Georgian and Moldovan wine.

6. Types of Agricultural Sectors

Key characteristics of Russia's primary agriculture included three types of agricultural sectors: agricultural organizations, individual household plots, and family farms. Only agricultural organizations and individual household plots were commercial. In 2006, there were 48,179 agricultural organizations. The large and medium organizations had almost 4,000ha of agricultural land and the small ones had 1,164ha per unit. This type of farm totaled almost 80% of agricultural land, as indicated in Figure 3.17. There were also 285,141 family farms which totaled 15% of total agricultural land with an average of 80-85ha of land.

Figure 3.17 Disposal of agricultural land per farm type (as % of all agricultural land)



Source: "Agricultural land" http://data.worldbank.org/indicator/AG.LND.AGRI.ZS

These organizations specialized in producing grain, sugar beet, sunflower seeds and eggs. On the other hand, household plots consisted of main produce such as potatoes, vegetables and milk. They produced a large share of total agricultural production, despite having only 5% of the total land.

The peasant farm sector provided only 3.7% of gross agricultural output in 2002, despite the increase of land which totaled 18 million hectares in 2003. Unfortunately, between 1990 and 2002 employment on corporate farms decreased to 3.8 million from 8.3 million. The use of land also declined to 150.4 million hectares from 209.8 million hectares, contributing to the overall decline of a factor of 2.3.

In 2005, there were 24,000 large corporate farms in the country, most of which were private farmers while only 3,000 state farms still existed. The corporate farms possessed 80% of the total land, or 6,000 hectares and more than 150 workers per farm. Super-large farms, which took over tens or hundreds of thousands of hectares with tens of thousands of workers employed, were also gaining popularity. In 2002, one fourth of corporate farms were categorized as best performers that provided 55% of sales while farms that did not make profits contributed 5%. Nevertheless, by 2005 liquidations were more apparent and resources could be distributed to owners.

During the same period, small agricultural sector saw its employment increase from 1.4 million to 3.9 million. Land of peasant farms increased by a factor of 20, which totaled 18 million hectares by 2003. In 2005, the plots of households and peasant farms produced 60% of gross agricultural output. Surveys also showed that household plot income was 4.7 times higher than corporate farm wages and Household plots used their land much more efficiently than other types of farms. This is obvious with crop production as household plots' specialty was in labor-intensive crops whereas corporate and peasant farms produced extensive crops.

The number of commercial farming thus decreased and more peasants produced food for their own consumption. Some have argued that what was happening was not a reform but rather a change of the economic system that had been implemented before. Although the measures taken had some merits, some believed that it was not enough. Regulations during that time included import quotas, purchases of grain by the state, farm subsidies, and export tariffs to protect domestic grain during hard times, all of which were the opposite to free market.

Out of 77 regions in Russia, corporate farms were responsible for only 9 of them while the individual sector dominated, regulating over 60% of output. The structure of corporate farm could be found in condition with developed economic environment.

Looking back when the government declared its reform, with the intention to provide support for every agricultural sector, we can see that the reality was a bit different, as large agricultural businesses remained the major player that received the most support. Small agricultural businesses were restricted and banks denied lending. Corporate farms received the most subsidies but there was also discrimination. The total of 15% of this sector were not provided with subsidies and 20% received only 45,000 rubles, while 1.4% of the largest agricultural businesses received 22.5% of subsidies, or over 10 billion rubles for each of the business.

In Russia, agricultural budget was used for benefits of large farms. However, compared to other countries like the United States, such practice did not take place and the country mainly supported small farms. In Russia, the 24,300 largest farms received almost 100% of subsidies while contributed 40% of the overall agricultural production, whereas the United States provided only 8% of subsidies to the 26,500 largest farms which contributed 42%.

Overall, the collective farm was the largest landholder, controlling 81.9% of farmland, compared to 11.3% owned by household farms and 6.8% by private farms. Unfortunately, out of the 27,000 farms controlled by the collective farming, 83-86% was de facto bankrupt and approximately 14,000 collective farms saw their bank accounts suspended by the government. By 2002, the debt of collective farms went up to 70 billion rubles and in 2003 it increased to 350 rubles. Only 5% of the collective farms were in a normal state capable of using bank credits while 15% of the total could still be improved. The remaining, however, would not be able to repay their debts in any circumstances.

7. Land Transactions

Land market transaction can be divided into 2 groups: purchase and sell transaction which transfers the ownership and leasing transaction which does not include the transfer of the ownership. However, the state does not record the transactions between individuals and corporations even though in principle they should be included in the official statistics. Thus, not many buyers or sellers are willing to get involved with a complex system for registering the transaction.

Due to the lack of official statistics, the 2003 BASIS survey was conducted to discover land transactions from interviews with 553 corporate farm managers, farmers, and household plot operators. For corporate and peasant farms, 60% of the overall farms were leased. In corporate farms, 75% of the farms were in the form of land shares and the remaining was in the form of land plots. Farmers tended to buy land more often than corporates.

Out of 553 respondents surveyed, 11% said that they were lessees while 7% were lessors. Of the lessors, 13% were corporate farms due to the lack of profit and

business opportunities. One of the reasons why farmers leased out their land was probably because of their inability to cultivate land. The price of leasing land per hectare per year ranged between 300-400 Rubles/ha for corporate farms and individuals. There were also no great differences in prices given to individuals for land leased in the form of plots. Leasing was for medium or long term use and approximately 50% reported that leasing lasted longer than 4 years.

There were three main factors which affected the higher result of land leasing. This includes the number of lessees by corporates and farmers in each region, the quality of land given, and the agricultural land available for leasing. Concerning the supply, the quality and availability of the land produced a very positive outcome on lease transactions while the number of corporates and farmers had a positive outcome on the transaction number.

In addition, land transactions were also affected by other factors, including the poverty of the owners who were forced to sell the land, the inability to pay competitive rates, and the rise of companies seeking to find new profits in agriculture. Furthermore, according to 2003 BASIS survey, no legal pressure to register, lack of information, high costs, and complex procedures all contributed to the reduced land registration rate. Many respondents did not know of the land tax rate and could not provide answer to land prices. This means that there was no established land prices to help the rural whether to purchase or lease land.

Farmers would have been more willing to engage in land transactions had it not been the high registration costs and complex procedures which prohibited them from doing so. The government sector responsible for such process had created complicated regulations and organizational restrictions to the registration. The bodies' internal structures did not comply with the law involved and thus more documents and expenses were required. Because the law did not specify documents, officials set up their own system. In Moscow Obblast, 9 out of the 10 procedures required were not indicated in the law and demanded additional documents. For large corporations, the whole process did not affect them, as they were able to use advisers and specialized staff to deal with the complication. On the other hand, poor farmers and regular corporations were the ones who suffer and had to waste more time and money to get the registration done. Because of this, they just gave up the rights or used unregistered land.

There were many new agricultural operators in Russia. APK Agros produced 20% of the world's nickel output. It was mainly responsible for grain, pork and poultry markets, buying chicken farms in Stavropol krai and creating grain-producing farms in the south.

RusAgro produced sugar beet and consistently expanded grain operations, investing \$500,000 in agriculture which was the equivalent of one-half of the federal aid to collective farms.

Razgulyai-Ukrros produced sugar and grain group and was responsible for sugar refineries in southern areas.

Planeta Menedzhment owned 5 meat-processing plants, 6 poultry farms and 11 milk processors.

APK Cherkizosky produced 11% of the country's sausages and was responsible for 9 meat-processing plants, 7 poultry farms, 2 pig farms etc.

There were two main problems the operators ran into. Firstly, the technocratic did not emphasize management control but believed that the production was 'in God's hands'. Secondly, the investment in vertical management was higher than one would have expected.¹⁰

8. Joining the WTO

Since 1992, Russia had been trying to break away from the socialist system and integrate the market economy through liberalization of domestic economy and through international integration. One of the most important integrations was the WTO which had been Putin's goal since he took administration in Russia. Before the development of negotiation in 2006, however, Russia had had many problems, using protectionist agricultural measures to limit competition.

Russia applied to be a member of the WTO in 1995. Questions were sent back to ensure that measures and policies of Russia would comply with international trade. In 2002, however, the United States and the European Union had some concerns over intellectual property rights of the country, which included the agricultural sector, energy pricing, sanitary regulations, service industry etc. There were also concerns that Russia had to inform its businesses about the significance of WTO and make foreigners feel comfortable in the market. This could be achieved through intellectual property rights protection, improvement of tax issues and accounting standards, contract protection etc.

Protectionism began to take place in Russia in 2002 which included import quotas, tariffs on agricultural goods, and regulations of veterinary. The measures aimed to protect domestic producers so that they had a chance to compete and be

¹⁰Lerman, Z. and N. Shagaida, *Land policies and agricultural land markets in Russia* [Online], 6 February 2006. Source http://www.eastagri.org/files/Land_Policies_Russia.pdf

prepared when Russia became a member of the WTO. This led to some tensions with the United States until 2006, where some agreements were reached.

In order to become a part of the WTO, Article IV (Market Access) clearly states that the participants are not allowed to initiate "quantitative import restrictions, variable import levies, minimum import prices, discretionary import licensing, non-tariff measures maintained through state-trading enterprises, voluntary export restraints, and similar border measure other than ordinary customs duties." Russia must then remove the barriers and convert non-tariff barriers into tariffs for the Agreement on Agriculture.

It was expected at the time that if Russia became a member, it could receive the following benefits: non-discriminatory treatment for its products, greater foreign investments, Russian investors having more opportunities in other member countries, increased domestic competition due to increased foreign investments and products, participation in international trade rules, and positive image of the country.

It could also access foreign markets, promote competition, create quality products and services, and expand investment opportunities for domestic investors. With the increase of exports from other WTO member countries, Russia could have a better chance to improve domestic goods and increase its productivity level. The bank sector would be more open, allowing foreign banks to operate in the country. This could boost the GDP growth, as the number of foreign banks would correlate with the over economic growth.

Vladimir Putin thus had main responsibilities to regulate political and socioeconomic policies. He could appoint the Chairman of the Government, Chairman's deputies, federal ministries, and plenipotentiary representatives. He aimed to create a market economy and cooperation of the government, the parliament, and regional authorities, showing his desire to the West that he wanted to join the WTO.

Putin believed that Russia's being a member of the WTO would receive great benefits from a competitive environment. According to RIA Novosti, a news agency, he said, "I expect that tighter competition will spur modernization of our economy. We won't be able to modernize our economy without accession to the WTO. Until they (Russian producers) feel real competition, they will not invest in modernization".

The Ministry of Agriculture and Food was mainly responsible for agriculture policies of Russia and consequently for handling the issue with the WTO. It pushed forward agricultural interests and budget to the cabinet for consideration. Because of the limited budget, the ministry had to try to exert its influence for greater allocation of resources to the matter. It worked with regional governments and the Ministry of Economic Development and Trade on the process of the WTO.

The Ministry of Economic Development and Trade's primary responsibility was national socio-economic policy. It worked with federal executive agencies, regional and local authorities, and non-governmental organizations. The ministry represented the country to the WTO, with the aim to tighten the following social and economic matters:

- Interregional integration,
- Freer access of products, services, and capital,
- Competitive environment in the economic market,
- The separation of powers between the national and sub-national authorities through stipulation of legislative.

Some questions arose, nevertheless, with regards to joining the WTO. Historically, Russia had been very rigid when it came to changes and radical reforms. The government had never favored the idea of shifting decision making power to anyone. Attempts to shatter the old regulations imposed for centuries had not been easy. The WTO demanded free trade and market and its members had to conform to the rules. There were also other possible drawbacks; this included the loss of agricultural sector's profits, reduction of domestic jobs, increased competition, unemployment rate, and fuel and energy prices which could eventually lead to social problems.

Some critics said that Russia did not comply with the WTO regulations as much as they were supposed to, neglecting piracy issues and protection of copyrights and trademarks. In addition, Russian agriculture was still weak and could not compete with the world market, requiring constant government support in order to be sufficiently competitive. Thus, it needed tariff-rate quotes on imports and agricultural goods for the protection of domestic farmers. With regards to sanitary issues, such as the safety of plants and meat, the country agreed to monitor them and improve food standards.

The service industry also needed improvement. One example would be the insurance industry which could not participate in foreign capitalization and participation. The financial banking sector also suffered, as it was underdeveloped, restricted, and monitored by the government.

The major problem which some criticized was President Putin's support of price regulations, ethnic discrimination, higher tariffs, state intervention etc. He also increased subsidiaries in the agricultural and automobile industry. Moreover, when Russia joined the WTO, it had to raise the tariffs in order to protect domestic producers first before lowering them a few years later. Other problems included

unclear agricultural subsidiary, protection of undeveloped service industries, and the unwillingness of Russia to reform energy policy.

In order to become a member, more than one hundred laws and regulations would have to be changed and more than one thousand international agreements would have to be reviewed. Taking everything into account, protective tariffs would be reduced in some industries and more industries would be opened up for foreign investments. Temporary job loss might not be evitable, and the government needed to find solutions before that occurred.

In the long term perspective, if all things go well, the overall economy as well as standard of living should become stronger due to liberalization of trade and regulations. It is important to note that some industries (telecommunications, metallurgy, footwear, garments, electronics, alcoholic beverages) would benefit more while some (pharmaceuticals, furniture, the insurance industry, retail) would face more competition.

9. SWOT Analysis of Russian agriculture

Figure 3.18 shows the strengths, weaknesses, opportunities, and threats of Russian agriculture.

Figure 3.18 SWOT analysis of the Russian agrifood sector

Strengths	Weaknesses
- Growing productivity within the agrifood	- Fragmented agrifood market and agricultural
sector	sector leading to weak competitiveness and
- Abundant availability of resources	lack of innovations
- Low energy and labour costs	- Underdeveloped and outdated related and
	supporting industries
	- Problematic logistics and infrastructure
Opportunities	Threats
- Higher living standards due to the economic	- Low oil prices slowing down economical
growth leading to higher demand for quality	growth
products and services	- Little diversification of the economy due to
- Modernisation and consolidation of the agri-	lack of economic reforms
food sector and infrastructure investments	- Dependent position in relation to retail by
- Improving efficiency	size difference
- Government support programmes	- Increasing administrative burden impeding
	entrepreneurship

The purchasing power expected to grow in the coming years will change the habit of food intake, with more livestock, processed and convenient food added into the population's diet. This will be a great opportunity for producers of livestock and especially for those producing milk, poultry meat and pork. The demand for fish, fruit and vegetables are expected to increase as well when the population has more income to buy more food.

Some say that it was Yeltsin who was responsible for the positive change in Russian agriculture, being the one who planted the seed of reform that would bring positive development in Russia. Regardless, the result only revealed itself in the beginning of the 21st century and Putin continued a more liberal policy by being more receptive to the West and changing the economic sector of the country. He might have flaws regarding corruption and restriction of democracy; however, looking at the big picture and comparing to Russian's standard, the situation has radically improved compared to a hundred years ago, when starvation and authoritarian prevailed.

CHAPTER IV

FUTURE PROSPECT OF AGRICULTURAL CONDITION BETWEEN THAILAND AND RUSSIA

After a long period of stagnant relation between Thailand and Russia, Putin's economic reform has signaled a change to increase trade relations. With increased economic output, especially agricultural production, in Russia, Thailand can find many ways to utilize the trading sector and raise its prosperity. Thus, this chapter talks about Thai-Russian trade relations (1) and the channels and opportunities for Thai agricultural products in the Russian market (2).

1. Thai-Russian trade relations

The relation of Thailand and Russia was reinitiated by the end of World War II through the establishment of advisory commerce institution in Bangkok, which marked the official bilateral trade relation. On 23 September 1999, there was an agreement to exempt the collection of double tax and in 2003 cooperation between the Russian Union and the Federation of Thai Industries was reached. The development of the bilateral agreement has also created an association of Thai businessmen. According to the Ministry of Commerce, Russia is considered to be one of the countries that are of great importance to Thailand in terms of trade. Unfortunately, due to the global financial crisis, the trade relation expansion has been affected. In 2008, the bilateral trade totaled 3,820,000,000 dollars while in 2009 the value decreased 52.5%. It was not until during the 10-month-period of 2010 when it expanded to 3,060,000,000. Main Russian's products exported to Thailand included iron and steel (793,500,000 dollars), crude oil and other hydrocarbon (635,200,000 dollars), fertilizer, machine, and equipment (36,200,000 dollars), electronic appliance (25,200,000 dollars), juice (21,200,000 dollars), and jewelry (18,400,000 dollars).

The number of Thai investors in Russia is still low. Thai companies that are currently investing include warehouse companies, Charoen Pakhand Foods Public Co.,Ltd (CPF) etc. Nevertheless, there are many companies that are considering

investment possibilities in Moscow industrial projects and Thai-Russia business center.¹

An important bilateral cooperation took place on 27 November 2009 as Deputy Prime Minister Sergei Sobyanin and Foreign Minister Kasit Piromya agreed on the cooperation of commerce, economy, energy, aerospace, science, agricultural technology, education, culture, and tourism.

Agricultural cooperation between Thailand and Russia can be seen from the following events:

- Federal Service for Veterinary and Phytosanitary Surveillance of Russia visited Thailand from 17 to 23 December 2007 to inspect agricultural products of LCFA and SGS, granting the exports of rice to Russia by these two companies. Record of Discussions was also signed by the Ministry of Agriculture and FSVPS.
- The Ministry of Foreign Affairs conducted the 4th Thai Russian Joint Commission on Bilateral Cooperation meeting on 27 November 2009. Working Group on Agriculture Cooperation between Thai and Russia was also conducted.
- The Ministry of Agriculture and Cooperatives hosted the 1st agricultural cooperation subcommittee under Thai Russian Joint Commission on Bilateral Cooperation in the early 2012.

From 2001 to 2007, Thailand's trade with Russia increased 82.6% annually, from 395 million dollars to 2,278 million dollars. Thailand, however, was the one with trade deficit. Despite the higher number, the significance of such trade relation is still comparatively low; Russia ranked 32^{nd} as Thailand's trading partner and Thailand 45^{th} as Russia's.

Table 4.1 Thailand's trade with Russia

Unit: million dollars

	2544	2550	Change (%)
Export	80.55	6115.62	86.92
Import	314.9	1662.64	81.06
Trade balance	-234.35	-1047.02	7.62
Value	395.45	2278.2	82.64

Source: "Trade Summary Between Thailand and Russian Federation" http://www.trcc.or.th/thai russian trade.php

¹Royal Thai Embassy, Moscow, *Thai-Russian Bilateral Relations* [Online], 19 May 2009. Source http://en.thaiembassymoscow.com/info/?section=d1&artid=47

Main products exported to Thailand included energy, metal, copper, aluminum, and fertilizer etc., all of which are in great demand in Thailand while main products exported to Russia included food, cars, and plastic etc.

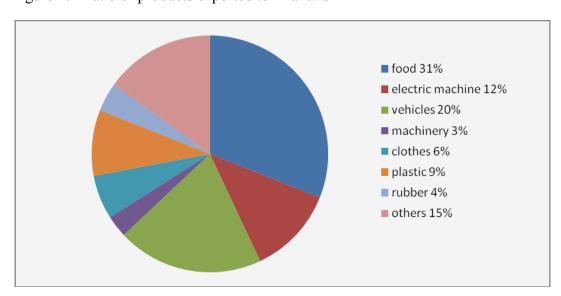


Figure 4.1 Ratio of products exported to Thailand

Source: "Growth in trade between Russia and Thailand reported" http://www.invest2russia.com/cgibin/headl.pl?id=411

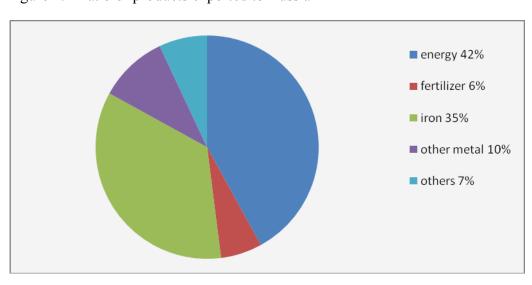


Figure 4.2 Ratio of products exported to Russia

Source: "Growth in trade between Russia and Thailand reported" http://www.invest2russia.com/cgibin/headl.pl?id=411

It should be noted that the export of machinery worldwide totaled 19% but in the Russian market the share of such exported product totaled only 3%. This is because Russia did not import many computers and components, office machinery, and air conditioners. This is the area which Thailand could give more attention into in order to penetrate the market. Considering the market segments, Thailand's shares in the Russian market are still low and more opportunities could be developed. In addition, trading with Russia could lead to CIS such as Ukraine, Uzbekistan, Belarus, Azerbaijan, and Georgia. These are the countries with positive economic growth. Thus, trade cooperation with Russia should in overall result in economic growth between the two countries.

Table 4.2 The shares of Thai market in Russia

Unit: million dollars

	Import from	Import from the	Market shares	Countries with
	Thailand	world		high market
				shares
Food	195.55	23,181.80	0.84%	Brazil, U.S.,
				Ukraine
Electrical	74.70	22,049.41	0.34%	China, Germany
appliances				
Cars	121.51	37,328.08	0.33%	Japan, Germany
Machinery	16.68	32,542.62	0.05%	Germany, China
Textile, clothing	35.32	8,485.84	0.42%	China
Plastic	54.17	6,740.35	0.80%	Germany, China
Rubber	23.74	1,859.93	1.28%	Japan, Germany
Others	93.95	46,132.01	0.20%	Germany, China

Source: Department of Trade Negotiations

Main regulations under Putin are as follows:

Tax. Originally, Russia's tax was very high and unstable. The authority had a lot of authorities and there were too many middlemen. The new tax system, on the other hand, reduced the 200 types of tax to only 33 types. Complexity and middlemen were reduced, hence the decrease of corruption and more income for the government to support trade and investment.

The government's expenditure. Initially Russia's budget went into great details, and extra budget from one activity was not allowed to be transferred to another activity. Thus, the new system of Putin allowed the transfer of the extra income and budget of the local was managed through the central.

Other changes. The changes included document certification and reduced fee and complexity of trade registration. There were more opportunities to sell and hold land

and new laws concerning copyright and standardization were created to coincide with the WTO's principles.

After Putin's reform, Russia has turned into one of the world's fastest growing economies, with a growth rate of 8.1% in 2008. Per capital income was around 14,600 dollars which doubled the amount of the Thai's. Thus, Russia is the second country next to the U.S. that is mostly inhabited by the very rich.

According to Table 4.3, Russia has enjoyed a rapid economic growth; the nominal GDP at market price increased from 345 billion dollars in 2001 to 1,286 billion dollars in 2008, tripling the number within 5 years. Looking through the list, it can be seen that the mine, coal, oil, and service sector increased and 95% of the national income was from the industrial and service sector. Nevertheless, the rapid growth was also caused by the increased inflation, which averaged around 12.6% from 2003 to 2007.²

Table 4.3 Nominal DGP at Market Price of Russia in various sectors

Unit: billion dollars

	2003	2004	2005	2006	2007	2008
GDP	345.47	431.49	591.66	764.58	988.59	1,285.61
Agriculture, hunting, forestry	19.63	23.79	29.52	34.03	40.31	49.73
Fishery	0.94	1.99	2.17	2.32	2.51	2.84
Mine (oil and Coal)	20.75	25.58	49.52	73.71	94.03	115.08
Industry	53.94	64.39	93.27	124.49	153.94	209.96
Electricity, gas, and water	11.47	13.95	19.66	22.36	27.76	34.54
Construction	16.67	23.34	29.95	35.78	44.55	65.12
Sells by retail and wholesale and consumer goods	70.42	84.37	105.51	129.03	175.13	227.64
Hotels and restaurants	2.84	3.10	4.91	6.03	7.33	10.01
Transportation and communication	31.70	41.11	57.68	68.06	83.94	104.04
Financial sector	9.51	12.95	17.75	26.83	38.62	52.53
Real estate	32.82	41.03	49.33	65.34	86.24	114.46
State's expenditure and defense	15.59	21.22	27.85	33.91	43.74	58.28
Education	8.94	10.38	13.91	17.47	22.87	30.79
Social welfare	10.28	12.27	16.45	20.02	28.33	37.76

 $^{^2}$ U.S. Library of Congress, $\it Topography$ and $\it Drainage$ [Online], 2008. Source http://countrystudies.us/russia/23.htm

As for international trade, Russia's trade value increased from 116,237 million dollars in 2003 to 469,343 million dollars in 2008. The export totaled 279,724 million dollars, or 21.78% of GDP, while the import totaled 189,619 million dollars. Thus the balance of trade was around 90,104 million dollars.

Table 4.4 International trade of Russia from 2003 to 2008

Unit: billion dollars

	2003	2004	2005	2006	2007	2008
Export	75,484	95,611	136,926	184,916	226,524	279,724
Import	40,754	50,546	68,125	91,481	128,151	189,619
Balance of trade	34,730	45,065	68,801	93,435	98,373	90,104
Trade value	116,237	146,157	205,052	276,398	354,671	469,343
Exchange rate	31.35	30.69	28.81	28.28	27.19	25.66

Source: World Trade Atlas and The Economists

a) Internal Communication System

Russia's internal transportation relies on train for 40% of the overall transportation as goods can be transferred in great amounts; remote areas can be more easily accessed compared to using cars, and the condition of the road is not good. Trans-Siberian Railway is the main route which connects Moscow, located on the west of the country, to Vladivostok city, located on the east of the country, with the total of 9,288 kilometres and 7 days of transportation. In addition, Moscow has a train channel which connects to St. Petersburg and the European continent.

Trans-Mongolian Railway is a train route which connects to Moscow and Manzhouli around the Chinese border, leading to Harbin city and Beijing.

Trans-Manchurian Railway can also connect to Moscow, Mongolia, and Beijing.

For water transportation, Russia has exits to the Black Sea around the western and southern side of the country, and to the Pacific Ocean around the eastern side of the country.

St. Petersburg, situated on the north western side of the country, is the biggest port city around the Baltic Sea area. The shipments in this area are mostly sent to America and Europe.

Novorossiisk, located on the western side near the Black Sea, is the most important port city of Russia. The shipments, mostly grain, can be transported to many parts of the globe by using this area.

Vladivostok, situated on the eastern side near the Pacific Ocean, is a modernized port city with standardized cargoes. Containers can be transferred from the port to train stations for further shipments to China, Japan, South Korea, and Mongolia.

Nakhodka, located on the eastern side, is also a modernized port and has services that ship goods via trains. The transportation route includes Australia, New Zealand, Japan, India, Thai and other Asian countries.

For Air transportation, Moscow Sheremetyevo International Airport and St. Petersberg Pulkovo Airport are the main airports with connections to different countries of the world and of domestic flights to important port cities.

b) Transportation route from Thailand to Russia

Most products shipped from Thailand are transported by boats via various routes; some transport products directly to Russia while some may arrive at port cities of other countries first before being shipped on land to Russia. As Russia is a very big country, it is important to consider whether the shipment is transported via the western or the eastern side of the country. This depends on the product's destinations.

Table 4.5 Transportation route to Eastern Russia

Port	Distance	Time duration	Note
Vladivostok Port, Russia. The route passes the South China Sea, the East China Sea, and the Sea of Japan.	3,900 miles	6 days	This is the shortest popular route to Russia. It focuses on the distribution of goods to Eastern Russia. Nevertheless, further transportation to Moscow and other cities in Western Russia can
			be made by using the Trans-Siberian route which is the main railway of the country. The route is not popular, though, because it is more time
			consuming than directly shipping goods via St. Petersburg, which is also more economical. Still, by using the railway, goods can be transferred to many countries in the CIS, for example Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.
			i urkiiciistan and Ozockistan.

Table 4.6 Transportation route to Western Russia

Port	Distance	Time duration	Note
St. Petersburg Port, Russia,passes through the Red Sea, the Mediterranean Sea, and the Baltic Sea.	10,300 miles	21 days	Even though it takes the longest time to transport goods and costs the most, St. Petersburg is equipped with readiness and modernization as well as safety. As a result, the port receives the most credibility.
Odessa Port, Ukraine, passes through the Red Sea, the Mediterranean Sea, and enters the Black Sea.	7,000 miles	14 days	The route is shorter and the transportation capital is lower than transporting goods to St. Petersburg Port. However, Odessa Port is in the process of development, and requires further transportation on land which creates difficulties due to the bad road condition.
Bandar Abbas Port, Iran, passes through the Persian Gulf.	4,200 miles	8 days	The port is still not widely demanded as it requires transportation through many countries and borders, which are difficult and unsafe routes. In addition, the goods must be inspected by the Customs in many countries. Nevertheless, it is one of the routes that must be closely monitored because it has the shortest distance and trucks are available for further transportation to CIS countries such as Armania, Kazakhstan, Kyrgyzstan, and Uzbekistan.
Northern Europe such as Humburg Port, Germany, Kotga Port, Finland, Riga Port, Latvia etc. Transportation through this route passes the Red Sea, the Mediterranean Sea, and the Baltic Sea.	9,500 miles	30 days	The port requires further land transportation to Russia which consumes more time than using the St. Petersburg Port. Nevertheless, many ship companies use this route because goods can be transferred to major ports along the way in Europe. In addition, it is the most economical route and has the greatest number of ships, facilitating the scheduling of freight charge. The ports also have ships that go to the Baltic Sea every day.

In conclusion, Russia and Thailand have had very long relations. However, after the radical reform during the beginning of the 20^{th} century, their relations were interrupted, and even though the past decade has seen a rapid economic growth of Russia which surpassed Thai's per capital income, the trade between the two

countries is still low. Russia has expertise in producing important products for Thailand such as oil, fertilizers, and metal while Thailand has expertise in products such as food, cars, machinery, and electric appliances. As a result, a bilateral agreement aimed to reduce trade obstacles concerning both tax and non-tax measures would further increase cooperation between the two.

2. The channels and opportunities for Thai agricultural products in the Russian market

1. Trade structure between Thailand and Russia

The following details show trade relations between Thailand and Russia in terms of tariff measures and non-tariff measures. Furthermore, the analysis of market and Russian customers' consumption is provided to clarify economic behavior in Russia

a) Tariff barriers between Thailand and Russia

Thailand and Russia have an average tariff rate of 10% and 11.4% respectively. This applies to agricultural products and other products of the two countries, meaning that they both use similar protective measures.

	Thailand		Russia			
	Overall	Agricultural products	Non- agricultural products	Overall	Agricultural products	Non- agricultural products
Simple average applied MFN	10.0	22.1	8.2	11.4	13.5	11.1

More than 25% of the 11 groups of products imported to Thailand are from the agricultural industry sector. On the other hand, there are only 4 types of products in Russia, including alcoholic drinks and tobacco, sugar, wood, and meat. Thailand regulated tariff to mainly protect the agricultural sector, whereas Russia's tariff protected only the production sector. On the other hand, tariffs on alcoholic drinks and tobacco are high in both countries.

Out of the top 10 exported products to the world from Thailand, products exported to Russia that had their shares in the top included rice, jewelry and precious

metal which ranked 1 and 5 respectively, at a rate of 37.36% and 2.96%. The level of tariff on rice is very high, at 17.4\$, but the product still has a big market share. There might be other factors affecting Thai products with small shares in the market segment, despite having high potential and low level of tariff which is at 15%, such as non-tariff protective measures, higher costs compared to the rivals, and Thai products not being widely known to Russian citizens.

Nevertheless, due to the high economic growth and increased oil price, Russia had a higher purchasing power. This increased domestic consumption and export import demand, reflecting great potential for the Thai exporters.

In addition, Russia authorized Special Economic Zone (SEZ) such as the Kaliningrad Special Economic Zone to support investments by exempting import

tariff for every product that is under the regulated quota. Products that were transformed in Russia and created value not less than 30% could be imported freely.

Table 4.8 Market share of top 10 Thai products exported to Russia 2007.

Unit: percent

HS	Products	Market share
84	Machinery	0.51
85	Electronic appliances	1.06
87	Cars	0,62
40	Rubber	1.07
39	Plastic	0.7
27	Fuel	0.03
71	Jewelry and precious metal	2.96
16	Processed food	7.57
10	Rice	12.5
29	Organic materials	1.65

Source: World Trade Atlas

On the other hand, top 10 exported products of Russia include nickel, metal, aluminum, fertilizers, and fuel, all of which ranked 3, 4, 5, 6, and 11 with the rate of 11.4%, 6.5%, 5.2%, 7.1%, and 2.5% respectively in the Thai market. This shows that Thailand imported a large number of materials used for industrial production. If tariff on aluminum and nickel were reduced then Thailand would gain benefits from the lower cost. Russia also had the potential in the wood industry but Thailand still imported a low number of the product mainly because it mostly imported from Burma, Lao, Malaysia, China, New Zealand, and Australia.³

b) Non-tariff barriers between Thailand and Russia

The openness of trade and service under WTO and FTA reduced trade obstacles in taxes. However, there was an increase of other non-tariff measures concerning SPS, food security, environment, labor, anti-dumping response, safeguard, and rules of origin.

Thailand also coordinated with Russia to reduce complicated procedures of health measures in Russia which covered agricultural products. Regarding trade obstacles, food products, non-food products, and medicine had to receive certification from the Federal Agency for Technical Regulations. Other items also had to pass the inspection of other agencies.

³Daniel Workman, *Top Russian Exports & Imports* [Online], 30 June 2008. Source http://suite101.com/article/top-russian-exports-imports-a25106

Table 4.9 Non-tariff measures of Russia in 2007

Measure	Product type	Product
SPS	Agriculture	Rice and fishery products such as frozen fish and seafood products such as frozen shrimps, canned tuna, surimi, and dried aquatic animals
	Industrial agriculture	Food products; canned and processed fruits
Technical measures	Agriculture	Rice
	Industrial agriculture	Food products; canned and processed fruit
	Industry	Non-food products, medicine and medical equipment, communication service products, electric appliances, radio and television receiver, cars and components
Import license	Industry	Alloy, carpet, colored television, explosive materials, medicines, soldier equipment, ciphering equipment, precious metal, radioactive material, self-defense equipment, rocks, tobacco, toxic chemicals, liquor, and vodka.

Source: Department of Foreign Trade, Ministry of Commerce

Non-tariff measures of Thailand included import license document to protect domestic agricultural products and industrial agriculture. The same principle also applied to medicines and chemicals to preserve the health of citizens.

Table 4.10 Overall picture of non-tariff measures of Thailand in 2007

Measure	Product type	Product
Technical measures	Agriculture	Live animals, fresh and frozen animals such as cows, pigs, lamb, goats, horses, poultry, shrimps, milk and cream, potatoes, fresh and frozen tomatoes, onions, dried coconuts, fruit, coffee, beans, tea, chilis, corn, rice, and vegetable seeds
	Industrial agriculture	Soybean, palm oil, coconut oil, processed food made of plants, flour, milk, spineless aquatic animals such as processed fish, shrimps, crab
	Industry	Clenbuterol, Albuterol or Salbutamol, medicines, medical equipment, toys, games, sports equipment, equipment used in surgery and dental room
Automatic import licensing	Industry	Benzine, high speed diesel oil, LPG, clothes, hydrocarbon material, thick jackets, coats, color copy machines
Non-automatic licensing	Agriculture	Sugar, processed spineless aquatic animals such as fish, shrimps, crab, oysters
	Industry	Caffeine, coins, used diesel engines, saws, motor and components, used private vehicles, motorcycles, antique objects, medicines and 16 chemicals, machinery, and components used to infringe copyright
TRQ	Agriculture	Milk and cream, fresh and frozen potatoes, onions, garlic, coconut, longan, tea, corn, coffee, cotton
	Industrial agriculture	Soybean oil, coconut oil
Prohibition	Industry	Used tires and bicycles, refrigerators, weapons, toys, games operated by coins, banks, coins

Source: Non-Tariff Measures Database, the Association of Southeast Asian Nations

Tariff and non-tariff barriers on important exported products of Thailand

Table 4.11 Tariff and non-tariff barriers on important exported products of Thailand

HS	Product	NTM Incid	lence (%)	MFN	(%)
		Thailand	Russia	Thailand	Russia
847170	Automatic information processing machine	0	100	0	5
854231	Overall circuit and micro assembly used via electronics	N.A.	N.A.	N.A.	N.A.
400122	Natural rubber	0	0	0	5
400121	Smoked tires	0	0	0	5
271019	Petroleum oil and oil extracted from Bituminous	N.A.	50	5	5
870421	Transportation vehicles	0	50	40	10
870323	Cars and other vehicles designed for transporting individuals	0	50	56.7	5
100630	Rice that has been partially or fully grazed; polished or not	100	100	N.A.	N.A.
870899	Components of vehicles	00	100	30	5
847330	Components of machinery	0	0	0	5
841510	Air-conditioner	0	50	30	15

Source: Trade Analysis and Information System, UNCTAD

According to 4.11, it can be seen that Russia's tax measures on Thai products are at low level, which is on the contrary to the non-tariff measures which average between 50% and 100%, except for rubber and machine equipment. It can be concluded that most of the Thai industrial products exported were obstructed by non-tariff measures of Russia. Despite the reduced tariff, Thai products still could not gain a greater access simply because of these measures. This is the matter which should be further improved upon.⁴

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⁴Royal Thai Embassy, Moscow, *Thailand's Economic Fact Sheet* [Online], 31 May 2010. Source http://en.thaiembassymoscow.com/news/?section=news&artid=78

Products that could gain many benefits and products that could lose much are divided into 5 main industries, including processed food, sugar, rice, rubber, and papers. The analysis of each industry depends on varying analysis to grasp accurate statement from each industry. The SWOT Analysis will be used to clarify the correlation of the matter even further.

Processed food industry

Processed food industry is very important to Thailand because not only did it create high export value compared to other agricultural industries, it also increased product value. This includes frozen seafood, processed vegetables and fruit, fruit juices, processed and frozen meat, processed seafood, animal food etc. For some items such as frozen vegetables and fruit and frozen seafood, Thailand used domestic materials but for some other products such as canned tuna, the tuna must be imported for production.

In 2007, the value of total food import in Russia was 5,726 million dollars whereas the export value totaled only 1,755 million dollars; a trade deficit of almost 4 million dollars. This shows that the country was very suitable for processed products. For Thailand, food export to Russia totaled only 113 million dollars, meaning that Thai producers could still expand this market in Russia to a great extent.

Table 4.12 Import of meat, processed fishery, vegetables, and processed fruit in Russia in 2007

: million dollars

Rank	Country	Value
1	China	277.91
2	Ukraine	107.44
3	Spain	97.92
4	Hungary	89.1
5	Poland	85.61
8	Thai	62.63

Source: Trade Map; UNCTAD

It can be seen that from the top 5 countries with the highest import value, 3 of them are from Eastern Europe, and one from Asia, and are located near Russia while Spain was the only one that was a bit farther. Transportation distance and products

demanded in Russia which Thailand did not produce are two factors which played a major role in the export and import of this type of product in Russia.

The top 10 processed food products imported by Russia shown in Table 4.13 consisted of only a few products from Thailand because most of the products such as tea, coffee, and cocoa were not major products in Thailand, except for only frozen shrimps. Nevertheless, most of the shrimps imported in Russia was cocktail shrimps which were smaller than Thai frozen shrimps produced in Thailand. Thus, the product did not have a large market share despite its being ranked the 4th in Russia's import. What should be noted is that among the top 10 products, vegetables and processed fruits were nowhere to be found. This shows that specialized Thai products did not coincide with popular products in Russia.

Table 4.13 Top 10 imported processed food of Russia in 2007

Unit: million dollars

HS	Products	Import value from the world	Import value from Thailand	Thailand's market share in Russia
210690	Unspecific processed food	440.04	5.9	1.34%
210111	Processed coffee	419.47	-	-
180690	Cocoa	326.08	-	-
230990	Animal food that is not for dogs or cats	279.17	0.03	0.01%
30613	Frozen shrimps	182.71	10.16	5.56%
170490	Snacks made of sugar without cocoa ingredient	155.74	-	-
230910	Dog and cat food	146.81	9.6	6.54%
30374	Frozen mackerel	145.69	-	-
180400	Cocoa butter	135.55	-	-

Source: Trade Map; UNCTAD and World Trade Atlas

Table 4.14 Top 16 processed food products exported from Thailand to Russia in 2007

Unit: million dollars

HS	Product	Import value from the world	Import value from Thailand	Thailand's market share in Russia
200820	Pineapple	30.82	22.45	75.85%
300559	Other dried fish	46.32	12.19	26.32%
200580	Sweet corn	54.65	11.47	20.99%
30613	Frozen shrimps	182.71	10.16	5.56%
230910	Dog and cat food	146.81	9.6	6.54%
160590	Other aquatic animals	30.7	7.23	23.56%
210690	Processed food	440.04	5.9	1.34%
200949	Pineapple juice	35.69	4.68	13.10%
110814	Starch made of cassava	6.7	4.29	63.97%
160414	Tuna and bonito fish	5.7	3.93	68.88%
350510	Dextrin and modified starch	53.88	3.87	7.18%
160419	Other types of fish	36.07	3.6	9.98%
160520	Shrimps	10.68	3.56	33.34%
30749	Banana squid	53.43	2.08	3.89%
200899	Rambutan, lychee, longan, banana, mango, papaya, and other kinds of fruit	18.79	1.6	8.53%
160415	Mackerel	3.47	1.43	41.18%

Source: World Trade Atlas

It can be seen that Russia did not collect a high tax rate on these types of products, as it was only at 17.2%, and the measure thus did not obstruct the trade between the two much. Free trade and the expansion of Russian market as well as the

import of some products in Russia should still impact positively on producers of processed food in Thailand. Nevertheless, the top 10 products with highest value such as salmon, caviar, and pasta could not be produced, or at least produced sufficiently, in Thailand. Producers could use FTA to import the products and use them as materials to create new products for the benefits of processed food industry.

Table 4.15 Top 10 products with highest balance of trade in Russia in 2007

Unit: million dollars

HS	Product	Balance of trade
180631	Stuffed chocolate	89.40
1101000	Wheat flour	83.95
030311	Frozen salmon	79.42
230320	Remains extracted from oil production	35.43
190230	Pasta	26.33
030319	Frozen Pacific salmon	24.95
180623	Chocolate without stuffing	19.94
160430	Caviar	17.04
030614	Frozen crab	14.02
190540	Bread toast	13.61

Source: Trade Map; UNCTAD and World Trade Atlas

According to the information described above, the conclusion is as follows:

- Main competitors in Russian market included China and Eastern Europe
- Distance played an important role in trading with Russia
- Popular imported items in Russia are different from products that Thailand specialized in and exported; Thai entrepreneurs were not familiar with Russian market

- Free trade agreement should facilitate the export and import of raw materials and turn them into processed products ⁵

Sugar industry

Between April and May 2008, Russia needed to consume 6.585 million tons but the domestic production of beet sugar totaled only 3.1415 million tons and the reserves only 1.572 million tons; the total amount of sugar produced was still insufficient for domestic demand. This forced Russia to be the world's top sugar importer due to the low production of beet, slow recovery of factories, obsolete technology, and the lack of fuel and machinery which posed a crucial problem. Furthermore, foreign investments were very few because of the high risk in the sector.

Table 4.16 The import of raw sand sugar in Russia between January and August

Unit: ton

2008	2007
165.50	423.49
75.41	360.07
143.90	344.70
230.30	160.47
220.16	188.30
419.01	477.09
508.70	287.335
150.00-200.00	142.85
	165.50 75.41 143.90 230.30 220.16 419.01 508.70

Source: Institute for Agricultural Market Structure (IKAR)

Even though Russia imported a large amount of sugar from other countries, it also initiated measures to protect domestic production, such as annual tariff and seasonal tariff. It also started quota of import tariff and provided documents for quota auction. Import tariff of sugar is as follows:

⁵Russian Federal Customs Service, *Customs Tariff Of The Russian Federation* [Online], 23 January 2004. Source http://www.russian-customs-tariff.com/

Table 4.17 Import tariff of sugar in Russia

HS	Product	Tariff rate
170111	Sugar extracted from sugar cane and pure chemical sucrose in the frozen form	140-270 dollars per ton
170112	Sugar extracted from beet and pure chemical sucrose in the frozen form	250-270 dollars per ton
170191	Sugar extracted from sugar cane or beet and pure chemical sucrose in the solid form with added smell or color	140-270 dollars per ton
170199	Sugar in the solid form without added smell or color	340 dollars per ton
170220	Other types of sugar; syrup without added smell or color; artificial honey; caramel and maple syrup	5%
170310	Leftover of sugar after extraction or purification process; import for trade or consumption such as bagasse	5%
170390	Leftover of other types of sugar after extraction or purification process; import for trade or consumption such as bagasse	5%

Source: Market Access Map; UNCTAD and WTO

As for the tariff of raw seasonal sand sugar between December 2007 and May 2008, the number was as high as 220 dollars per ton, an increase of 140 dollars per ton since March 2007.

Nevertheless, Russia had a policy to increase tariff of raw seasonal sand sugar to 280 dollars per ton in the future, despite its agreement with Thailand after becoming a member of the WTO that the increase would not be over 270 dollars per ton.

Furthermore, Russia used non-tarif measures to protect domestic industry. In the sugar industry it used tariff quota to limit import. For example, in 2002 the quota was set at 3.65 million tons and tariff quota was divided into 4 semesters:

- 1. Semester 1 and 2, the tariff quota was set at 3.35 million tons
- 2. Semester 3 (July to December), there was no tariff quota due to the harvest period
- 3. Semester 4, the tariff quota was set at 300,000 tons

After setting up the tariff quota, the government then opened quota auction. Companies that could participate had to be major sugar producers of Russia and western companies that played a major role in international sugar trading. However, the past auction had many problems and complexities, forcing Russia to adjust a new import system, such as First Come-First serve.

Rice industry

Russia had to import a large amount of rice as domestic consumption reached 700,000 tons with the value of 550-600 million dollars per year. It was able to produce only 250,000 tons due to the cold temperature and the suitable land being found only in the south of the country in Krasnoyarsk, forcing Russia to import rice for 450,000 tons a year. Rice exporters included Vietnam, China, India, and Thailand etc. Between January and July of 2008, Russia imported 91,941 tons from Thailand. This is a positive figure for Thai rice producers to further access the market.

Vietnam shared 30% of the Russian market in pearl rice, with Thailand, India, and Pakistan as followers. Russia also purchased long-grain rice from China (7%) and from Egypt (3%)

Russia tried to adjust import tariff to protect domestic agriculture during the harvest period. It increased the tariff from 70 euro a ton or 3,220 baht to 120 euro a ton or 5,500 baht. This adjustment highly affected the export of rice from Thailand to Russia

Table 4.18 Tariff and import value of Thai rice in Russia in 2007

Unit: million dollars

HS	Product	Tariff	Import value from Thailand
100630	Rice partially or fully grazed	19.43%	37.22
100640	Rice, broken milled rice	34.40%	0

Source: World Trade Atlas

Besides using tariff measures to protect domestic industry, Russia also used non-tariff measures such as the change of rice inspection system in order to improve the quality of imported rice. A document certifying the quality of food had to be acquired and chemicals used in the production had to be identified.

Thailand was the world's top rice exporter, having Vietnam, the U.S., India, China, and Pakistan as main competitors. Major consumers of Thai rice were from Africa, sharing 30% of the total export. The competitors had a higher production and a lower rate of export because they focused on domestic consumption, whereas 42% of the production in Thailand aimed for the export.

Table 4.19 Countries importing Thai rice between January and July in 2007 and 2008

Unit: ton

Country	Import (2008)	Import (2007)	Increase/decrease	% of change
1. Benin	570,208	476,219	+93,990	+19.74
2. Philippines	558,632	160,082	+398,550	+248.97
3. Malaysia	477,533	239,489	+238,004	+99.40
4. Iraq	428,870	131,922	+296,949	+225.09
5. Nigeria	405,928	107,518	+298,410	+277.54
20. Russia	91,941	47,702	+44,239	+92.74

Source: Thai Rice Exporters

According to table 4.19, Russia's import of Thai rice increased 92.74% in 2007, a good sign for Thailand because India, Vietnam, and Pakistan had problems with health measures, warehouse inspection, and production process. Russia allowed 2 Thai companies, LCFA and SGS, to analyze and issue rice certification for import to Russia, increasing Thailand's export ability. In the first 7 months of 2008, Thailand's export increased to 2,184,267.98 tons, or an increase of 46.78% with the value of 71,378.50 million baht.

Transportation cost was also another factor which affected the export of rice to Russia. Thailand mainly exported the product via land and sea which accumulated to a very high cost due to the far distance and indirect route. On the other hand, Vietnam asked Russia to open a route in Eastern Russia so that transportation of products, including rice, could be conducted via the Trans-Siberian Railway, reducing the cost of transportation and thus enhancing competition. As a result, distance between countries played a very important role in the import and export sector.

Furthermore, production per farm was an important variable for Thailand as the number was low, increasing the cost and making the overall price higher than some countries like Vietnam. Nevertheless, Vietnam's quality of rice was low and Thailand could focus on the high quality instead despite lower production.

From the above information, the conclusion is as follows:

- Main competitors in the rice industry sector included Vietnam, India, the U.S., Pakistan, and China
- Distance played an important part in trading with Russia, as shorter routes reduced cost
- Production per farm affected the cost of production greatly
- Free trade agreement should facilitate the export of rice to Russia because when the tariff is reduced, so is the price; hence greater domestic demand.

Rubber industry

Russia was expanding the vehicle industry rapidly and had increased and expanded the import and domestic production after establishing a joint investment between foreign and Russian companies. Factories producing tires fulfilled the standards of foreign producers such as Continental and Michelin. In 2010, Russia required 48,900 tons of natural tires, of which 6,156 tons were imported from Thailand (a market share of 12.6%), with the value of 594.9 million baht, signifying the continual growth of this industry. IRSG predicted that in 2015 Russia will be able to produce 20.48 million tires for commercial vehicles and 51.20 million tires for public vehicles. Because of the continual growth in the natural tire business, the state and the private sector should support more investments and positive relations between the countries.

Paper and publishing industry

Paper and publishing industry is very important for the country's development, assisting communication, human resources, and creating knowledge-based society. It is related to agricultural industry, using wood to create paper tissue. It also expands employment for the economy. The development of paper and textile industry was written in the 4th economic and social plan (1977-1981). The state tried to support paper tissue industry to reduce import, which totaled several billion bath. In the first quarter of 2008, the export of paper and printed matter totaled 751.25 million dollars, an increase of 150.07% compared to the same quarter in 2007, indicating a high growth in the industry with potential to be the leader of this market.

Table 4.20 Paper and printed matter exported from Thailand to Russia (2007)

HS	Product	Present tariff rate	Export value
			(million dollars)
481141	Coated papers	15.00%	0.86
482050	Notes; albums for collection	15.00%	0.25
480256	Papers not coated for writing or publishing	15.00%	0.24
490300	Photo books	0.00%	0.16

Source Trade Map; UNCTAD

Russia contains around 143 million people with a growth rate of 8.1%, indicating the spending power which is not only suitable for consumer goods but also paper and printed matters as shown in the table. This shows that with reduced import tariff in Russia, Thai entrepreneurs would have lower prices to compete with other countries, gaining more market shares for the paper and printed matter industry. However, Russian consumers are still not confident in paper products of Thailand; this is where the state comes in to further support the industry.

The industry's weaknesses, which could still be improved upon, are as follows:

- 1. The lack of unity and continual support from the state and the delay in policies, especially in the production of raw material such as the project supporting the growth of forests.
- 2. The lack of research and development, relying on production technology and machinery maintenance from westerners. The import of raw material and machinery increased the production cost of Thai producers, reducing competitive edge.
- 3. The lack of specialized technicians, such as in forestry faculty, to develop seeds as well as the lack of expertise in doing internal transactions among personnel.

c) Thai Exports to Russia: Opportunities and Strategy

Russia used to be Thailand's no.1 exporting country in the Eastern Europe in 2006, with the total of 1,657 million dollars, or 0.64% of Thailand's trading value. Main exported products included cars and components, canned and processed fruit, microwaves, and electric appliances, canned and processed seafood, rice, canned and processed vegetables, frozen shrimps, ready-made clothes, rubber trees etc. While imported products included crude oil, steel, metal, manure, jewelry, gold, silver, mineral, plant products etc.

The strengths, weaknesses, opportunities, and threats of the SWOT analysis are as follows:

Strengths Weaknesses -Thai products are accepted worldwide, -Russia is a new market and Thai products especially agricultural products such as rice, are not widely known. vegetables, fruit, canned food, frozen and processed food etc. -Thai entrepreneurs still lack accurate trading information and are not familiar with the -Such products are high in quality and are country. able to compete in the international market, gaining access in the European market which -Thai entrepreneurs are not informed of the is considered a market with high standards. trading channels in Russia and have no Thai products can access the middle product distribution network, which plays an incomers as well as the high incomers in important role in accessing to the market and Russia expanding its value. -There are 2 types of products with high export value. **Opportunities** Threats -Russia ranks 5th as one of the world's most -Russian entrepreneurs have limitations in populated countries, with the total of 142.8 speaking English, and Thai exporters cannot communicate in Russian. million people. -Thai entrepreneurs are not sure of the -Russia is one of the fastest growing reliability of financial institutions. economies and 10% of the population is high incomers. -Russia changes many regulations constantly, lacking clarity in business practicality. -The attitudes of Russian people towards Thailand and Thai products are positive. -Regulations of the Customs Department in -The openness of the country correlates with Russia are still complicated and lack positive growth of the economy. Citizens transparency. causing unnecessary have more purchasing power, expanding expenditure and the loss of time. domestic trade. It can support more products from other countries, including Thailand, signifying an opportunity for Thailand to invest in the country. -Russia has policies to expand trade with ASEAN, its members of which are major agricultural exporting countries. Russia is weak in the sector and requires high import rate of agricultural products, Thailand can use this as an opportunity to export food products to Russia.

After the various conflicts Russia had with many countries, its relations with Thailand has been resuscitated. This can be seen from the increased economic output between the two, brining closer various sectors, including agricultural production. Many events have been held for to straighten their economic relation, and both Thai and Russian entrepreneurs are more inclined to start investments. Most importantly, the analysis shows that there are still opportunities to be exploited through cooperation between the two, signifying a bright future ahead if Russia remains its current policy.

CHAPTER V

CONCLUSION

Agriculture in Russia has gone through many changes over the past decades. When Stalin started the collectivization process, things went horribly wrong: farmers were either evicted or executed if they were not following the leader's instruction. Those who participated in the collectivization then suffered from its inefficiency; they did not have enough necessities to function properly and agricultural profits were nowhere to be found. Eventually, many starved to death, succumbing to physical and mental diseases. This policy was to be continued for many years to come by the succeeded leaders who refused to abandon the old system. Thus, those suffering the most were peasants whose liberty and opportunity for a better future were severely Not surprisingly, agricultural production produced very little, if at all, benefits compared to the size and abundance of natural resources in Russia. Having only obsolete equipment to work with, farmers had no choice but had to make use of it as much as possible. This guaranteed that nothing of significance, or anything remotely close to the production of international standard, would be produced under the system. In response to this, there were many policies implemented by the leaders to change the system. Khrushchev focused on heavy industries and weapons, not concentrating enough on agricultural production, which enormously failed whereas Brezhnev's policy was as strict of Stalin's, prohibiting change in the political and economic sector. The one major problem still remained: they did not create changes drastic enough to lay out a new economic structure of the Soviet Union. When other systems failed, they were not able to see that the only way to get out of all the troubles was capitalism. Without leaders who were willing enough to implement a significant change, the Soviet Union could not prosper, signifying how influential the roles of the leaders actually were. This is why Russia always had a negative balance sheet until Putin became President.

In terms of ideology and politics, Russia started to change since 1989 when the Soviet Union dissolved and Gorbachev favored democracy and openness. Yeltsin then took charge, implementing drastic economic reforms, breaking away from the old practice for a new future. Unfortunately, the economy as a whole was still finding a rough time adjusting to the new changes, producing negative results and creating widespread protests from citizens. When Putin stepped into power in 2000, nevertheless, domestic production increased very positively for the first time; production of grain, meat and pork gained a high level of growth percentage. The country was also more suitable for foreign investments, gaining more confidence from outsiders. This clearly shows that agriculture had been reemphasized and revived

during Putin's era. Peasants started to receive more income; employment and the shares of peasant lands increased. There was also more liberty concerning agricultural organizations and land transactions. Most importantly, Russia, after 18 years, was finally able to join the WTO in 2012, sparkling new economic opportunities with other countries, especially Thailand.

Among the CIS, Russia has been Thailand's main trading partner since 2000. Trading value between the two countries increased nine fold, totaling 1,932 million dollars. In 2010 the overall trade was 3,996.02 million dollars, an increase of 90.5% compared to the year before. It ranked the 26th as Thailand's trading partner. Even though Thailand suffered a loss of 2,453 million dollars, products imported were necessary for the use of energy and material, such as natural gas, oil, metal etc. On the other hand, Russia required the import of products, such as automobiles, electronics, and food. Russia also had the potential to invest in energy, natural gas, heavy industry, and tourism in Thailand, whereas Thailand had the potential to invest in agricultural industry, beverages and food.

Both countries have expertise in different kinds of products and one country's specialization responds to the demand of the other. Nevertheless, the trade between the two has not been sufficient. Analysis of trade obstacles should be further conducted to support more investments between Thailand and Russia. After an initial study, it can be found that Russia's tariff barriers against Thailand was not high and most of the problems arose from non-tariff measures, complicated regulations, business alliance, Thai businesses unable to access Russian market, and financial system.

Potential of entrepreneurs was also another important factor besides regulations and tariff measures which played a major role in trading. The analysis of potential of products between the 2 countries found that :

- Products from both countries were from different types and supportive to each other. While Thailand specialized in consumer goods, Russia specialized in oil, metal, and raw leather; products which were demanded in Thailand and vice versa.
 - Investments rate between the 2 was very low

Overall, support of trade should be a better option than competition. There are 5 main obstacles: language, business transactions, transportation route, complicated trading procedures, and corruption.

The main obstacle is non-tax barriers, such as complicated trading procedures, culture, language etc. Transportation might not pose a serious problem and Thai entrepreneurs had potential in Russian market. Thai exporters could not export the products directly to Russia and had to go through European countries, such as

Germany first. If this problem could be eliminated, export of Thai products to Russia would be faster and less costly.

Entrepreneurs from the fishery industry said that Thai products are accepted in the Russian market. The problem is the delay of transportation and finding a suitable and trustworthy investor. Other obstacles are that most management is up to the local authority and taxes had to be paid to local officials. EXIM Bank was opened in Moscow to take care of payment problems and Russian Cultural Center was established to provide assistance in culture and language. The two new establishments are, however, still in the pilot process.

Information about Russia is still fragmented. A meeting agreed to have an integration and set up a business information center to provide data for entrepreneurs and interested parties. The meeting also agreed that bilateral negotiation should produce a better result than negotiation in ASEAN. Nevertheless, the latter should give Thailand more negotiating power and interests. Thus, Thailand could utilize the bilateral negotiations with Russia, and the meeting urged for a bilateral agreement without having to wait for ASEAN's decisions, as it did not give importance to Russia under the FTA agreement. The meeting also agreed to set up a Thai-Russia industrial zone, improve transportation and logistics, especially the creation of land bridge, and emphasize eastern Russia due to increased support of Russia in the eastern zone.

Nevertheless, the import of Thai products to Russia continually expanded, despite positive signs of Putin's economic reform. The reform has also made Russia the world's exporter of wheat, barley, and sunflower. Further analysis found that Russia and Thailand specialized in different types of products; a factor which should create mutual benefits. Many meetings have been initiated to enhance their relation. This includes an important bilateral cooperation on 27 November 2009 as Deputy Prime Minister Sergei Sobyanin and Foreign Minister Kasit Piromya agreed on the various cooperations, including agriculture. The meetings also consisted of the 4th Thai Russian Joint Commission on Bilateral Cooperation meeting on 27 November 2009 and the 1st agricultural cooperation subcommittee under Thai Russian Joint Commission on Bilateral Cooperation in the early 2012.

Opportunities of Thailand after Russia joined the WTO in 2012

Russia is a very important trading partner of Thailand. Its businesses have potential and are interested in investing in energy, natural gas, heavy industry, and tourism in Thailand while Thailand could invest in agricultural industry, beverages, spas, and restaurants. By becoming the WTO member, Russia had many changes to adjust, including the reduction of tax ceiling from 10% to 7.8%, agricultural products

from 13.2% to 10.8%, and industrial products from 9.5% to 7.3%. The country has also made agreements with 11 main service sectors and 116 small service sectors, providing benefits for foreign investors by canceling the limit of shareholding not exceeding 49% if they have become a member for 4 years. Foreign insurance companies can also open their operations in Russia in the next 9 years after becoming a member.

After two decades of negotiations, Russia has officially become a member of the WTO on 22 August 2012, a great leap of Russia in the world market. This could lead to economic development as well as changes in many dimensions. Having become a member of the WTO, Russia is obliged to follow what is agreed under WTO conditions as follows:

- The decrease of customs tax ceiling from 10% to 7.8%, taxes on agricultural products from 13.2% to 10.8%, and taxes on industrial products from 9.5% to 7.3%.
- TRQ would be applied to certain products, such as veil and pork.
- Cancellation of support in industrial products.
- The support of agricultural products would be less than 9 billion dollars in 2012 and continually decrease to 4.4 billion dollars by 2018.
- Cancellation of tax exemption on some domestic agricultural products.
- SPS was to correlate with the WTO's regulations.
- The cancellation of any regulations that conflicted with Agreement on Trade-Related Investment Measures Agreement: TRIMs.
- The transparency in the trading of products and services and in intellectual property rights would be adjusted to correlate with the WTO's standard.

ASEAN+8 consists of 8 trading countries: the U.S., China, Russia, Japan, South Korea, India, Australia, and New Zealand. Because Russia is one of the members, it also emphasized on its development in the organization. On 21 August, the Thai cabinet agreed with ASEAN-Russia Trade and Investment Cooperation Roadmap, as suggested by the Ministry of Commerce. This is another mechanism to expand trade and investment relations between ASEAN and Russia, supporting more trade with Thailand. The Ministry of Commerce has also aimed to double the trading value by 2015. As Russia has fully stepped into the world trade and welcomed foreign investments as well as reduced obstacles, it is predicted that the country would expand 11% in the long term (2012-2021). This creates incentives of Thai businesses

to find potential in market, such as vehicles, frozen chickens, granulated sugar, canned fruit, and jewelry.

It was also estimated that Thai export value to Russia would increase from 1,149.51 million dollars in 2011 to 2,200 million dollars in 2015. The main driving force behind this is that in 2015 Russia will have to reduce import tariff quota on one fourth of the total products. Presently, the tariff has already been reduced by 30%. The cooperation with the AEC that will occur in the next 3 years will also push forward negotiation about trade and investment between ASEAN and Russia. In addition, Russia is about to host many international events, such as APEC meeting in September 2012, the Winter Olympic Games in 2014, and the Soccer World Cup in 2016, which would stimulate Russian market even further.

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