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Bigger Than Grain: Soviet-American Agricultural Exchange, 1918-1928

A dissertation submitted in partial satisfaction of the  
requirements for the degree Doctor of Philosophy  
in History

by

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June 2019

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Bigger Than Grain: Soviet-American Agricultural Exchange, 1918-1928

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by

Maria Fedorova

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To my parents, Amélie, and Sasha – my eternal gratitude.

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## ABSTRACT

Bigger Than Grain: Soviet-American Agricultural Exchange, 1918-1928

by

Maria Fedorova

This dissertation examines the history of agricultural exchange between the United States and Soviet Russia from 1918 to 1928. It shows that Soviet and American agricultural specialists and policymakers sought solutions to the looming global farm crisis of the 1920s through visits, the organization of reconstruction projects, and seed exchange. In doing so, this work advances three arguments. First, the development of post-World War I agriculture, including concepts of large-scale farming, industrialization of agricultural, and rationalization of food production, should be understood within an international context. As the First World war reshaped patterns of agricultural production and showed the inextricable link between food and political stability, experts and policymakers from many countries began to search for solutions to the farm problem not only through national policies but also abroad. As this dissertation shows, this search would take different shapes and forms: from the use of international food aid programs to help domestic food production to the usage of another country's space to conduct large-scale farming experiments. These experiences in agricultural exchange allowed its participants to acquire new knowledge, technologies, and expertise.

Second, by examining post-WWI patterns of agricultural exchange, this dissertation reconsiders the relationship between the United States and the Soviet Union with regard to



the flow of technology and expertise. Rather than considering a one-directional movement of American technology and expertise to Soviet Russia and perceiving the latter as a passive recipient, this work portrays an active multi-directional exchange. It shows that both countries perceived each other as research laboratories that were capable of giving solutions to farm problems in their respective countries. Moreover, both American and Soviet agricultural experts believed that this exchange would benefit the reconstruction of international agriculture.

Finally, this dissertation expands the definition of “agricultural exchange.” Scholars have demonstrated that, historically, agricultural exchange, including the movement of plants, seeds, and agricultural knowledge and expertise, is not a new event. The flow of people and animal species brought new plant varieties and agricultural technologies to new places, thus, changing existing environments, economic and social structures. While these transfers knew no borders, since the late nineteenth and early twentieth centuries, they had become more institutionalized and regulated by the international community of scientists and policymakers. During this period, many national governments introduced new laws and regulations that controlled the import and export of agricultural commodities. What is often left out in this historiography is the political nature of agricultural exchange. This dissertation shows that participants of agricultural exchange used their experience and expertise that they cultivated through visits and travel to achieve more powerful positions with local and central state institutions. Yet, this experience came at a price. By the late 1920s, with the shifting political climate in the Soviet Union, the participation in agricultural exchange became one of the tools for the ostracization of these experts from powerful positions.

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## Introduction

For four days in June 1919, representatives of Canada, China, France, Belgium, Great Britain, and the United States gathered in Beaune, France to debate the future of world agriculture.<sup>1</sup> Organized parallel to the post-First World War Paris Peace Conference, the World Agriculture conference aspired to bring attention of the international community to the key role of agriculture in the “establishment and maintenance of the world’s peace.” In his memorandum, Kenyon Butterfield, President of the World Agriculture organization and President of the Massachusetts Agricultural College, claimed that international cooperation went beyond trade and politics. Butterfield declared: “No question before the Peace Conference is more fundamental to world welfare than the rural question.”<sup>2</sup> Peace, in his view, was possible only if the world food problem was solved. Like many of his contemporaries, Butterfield argued that “a hungry nation” formed “a breeding ground for discontent and revolt; a hungry world means chaos.”<sup>3</sup> To avoid chaos and political instability, Butterfield suggested international cooperation in agriculture that would promote agricultural exchange of ideas, technology, and expertise. For him, this agricultural

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<sup>1</sup> Among the attendees were prominent agricultural policymakers and “several thousand soldier-students from the College of Agriculture and the Allerey Farm.” The full list of attendees includes H.M. Tory (President University of Alberta, Canada), Dr. Wen Pin Wei (Secretary of the Chinese Delegation to the Peace Conference), Paul DeVuyst (Director General of the Department of Agriculture, Belgium), Henri Hitier (Professor of the Agricultural Institute, Head of the Society of French Agriculturalists), J. Nugent Harris (former General Secretary of Agricultural Organizations, Society and Secretary Joint Committee Board of Agriculture and Ministry of Food). “The Beaune Conference,” *World Agriculture* 1, no. 2 (June 1920): 8.

<sup>2</sup> Kenyon L. Butterfield, “World Agriculture Principles,” *World Agriculture* 1, no. 2 (June 1920): 9.

<sup>3</sup> Butterfield, “World Agriculture Principles,” 9.

exchange was bigger than a simple collection and interpretation of agricultural data. It was a politically, socially, and economically significant moment that would define world's peace.

Butterfield's ideas about international agricultural cooperation resonated with postwar anxieties about the state of the world food supply, particularly the disruption of the farm sector and the signs of famine conditions in Europe. Numerous European and American organizations voiced concerns about the importance of farm modernization, rationalization of food production, and the significance of agricultural education to avoid hunger and famine. Among these groups were the International Institute of Agriculture (IIA), agricultural colleges, international agricultural unions and associations (International Congress of Agriculture). All of these institutions called on policymakers, scientists, experts, and farmers to promote international agricultural cooperation to formulate new principles for the disrupted post-WWI agricultural order.<sup>4</sup>

The First World War, indeed, left a striking mark on global agricultural economy.<sup>5</sup> In Europe, the war led to labor shortages in the countryside, increased the movement of populations from rural to urban areas, reduced agricultural production, and disrupted international trade. European countries directly involved in military actions, particularly Central and Eastern European countries, including Russia, suffered the most.<sup>6</sup> In Russia, more than 12 million peasants were called into the army between 1914-1919; in Italy, 2.6

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<sup>4</sup> Niccolo Mignemi, "David Lubin and the International Institute of Agriculture," in Food and Agriculture Organization, *The Story of the FAO Library: 65<sup>th</sup> Anniversary, 1952-2017* (Rome: Food and Agriculture Organization of the United Nations, 2017): 5-22.

<sup>5</sup> Avner Offner, *The First World War: An Agrarian Interpretation* (New York: Oxford University Press, 1989), 1. For a work on the U.S. experience of the postwar farm depression, see: James Shideler, *Farm Crisis, 1919-1923* (Berkeley: University of California Press, 1957).

<sup>6</sup> Gerd Hardach, *The First World War, 1914-1918* (Berkeley: University of California Press, 1981), 108-138.

millions of 4.8 million men employed in agriculture were drafted; 30 percent of the German army had been involved in agriculture prior to the war.<sup>7</sup> This loss of agricultural labor was accompanied by the growing migration of remaining rural population in urban areas.

Women and rural youth were moving to cities to find jobs in wartime industries. This process inevitably led to the decline of agricultural production. Historians have established that, by 1916-1917, European agricultural output, particularly in Central Europe and imperial Russia, declined by 20 percent.<sup>8</sup> As a result, many urban and rural areas began to experience food shortages and even first signs of hunger by 1916.

Food shortages during the war were further exacerbated by the collapse of international food trade networks. On the one hand, the Allies, except imperial Russia, quickly established new food trade routes that allowed them to compensate declining agricultural production and the lack of effective trade networks with India, Australia, and New Zealand. North and South American countries became major suppliers of foodstuffs, particularly grains. While the majority of foodstuffs were shipped from the United States, the Allies received grain crops from Argentina, Uruguay, and Brazil as well. Available on the opposite seasonal cycle from the supplies from North America, these crops helped to fill supply gaps in the early months of each year.<sup>9</sup> Yet, even those supplies did not entirely

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<sup>7</sup> Peter Gatrell, "Poor Russia, Poor Show: Mobilising a Backward Economy for War, 1914-1917," in Stephen Broadberry and Mark Harrison, eds., *The Economics of World War I* (Cambridge: Cambridge University Press, 2005), 251; Matteo Ermacora, "Rural Society," in Ute Daniel et al., eds., *1914-1918-online. International Encyclopedia of the First World War*, issued by Freie Universität Berlin, Berlin 2015-01-06, doi: [10.15463/ie1418.10530](https://doi.org/10.15463/ie1418.10530).

<sup>8</sup> Gerd Hardach, *The First World War, 1914-1918* (Berkeley: University of California Press, 1981), 108-138.

<sup>9</sup> Phillip Dehne, "How Important was Latin America to the First World War?" *Iberoamericana* 14, no. 53 (2014), 161; Dehne, "The Resilience of Globalisation during the First World War: The Case of Bunge & Born in Argentina," in Christof Dejung and Niels

alleviate the unstable food situation in France and Britain. As farmers and consumers struggled with pressures and demands of the war, these governments had to introduce some forms of food control to ameliorate the situation.<sup>10</sup>

On the other hand, the Central Powers, particularly Germany, faced harsher food instability. In 1914 the Allies imposed the trade blockade that prevented Germany from getting enough food supplies for the army and its population even from neutral countries, including Latin America. Despite German government attempts to address these issues, the food crisis led to numerous uprisings and disturbances that took place during and after the war.<sup>11</sup> While German state food policies might have prevented a major uprising in the last year of the war, the dissatisfaction with the food situation and the government inability to deal with the crisis of food production contributed to the unrest among soldiers, sailors and civilians. These processes would ultimately result in the German November Revolution of 1918.<sup>12</sup>

Similar wartime unrest due to food shortages led to one of the most important revolutionary uprisings of the twentieth century – the February Revolution of 1917 in

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P. Petersson, eds., *The Foundations of Worldwide Economic Integration: Power, Institutions, and Global Markets, 1850-1930* (Cambridge: Cambridge University Press, 2013): 228-248.

<sup>10</sup> For selected works on British wartime food policies, see: Peter Dewey, *British Agriculture in the First World War* (London: Routledge, 1989); Margaret L. Barnett, *British Food Policy in the First World War* (Boston: Allen & Unwin, 1985).

<sup>11</sup> Belinda Davis, *Homes Fires Burning: Food, Politics, and Everyday Life in World War I Berlin* (Chapel Hill: University of North Carolina Press, 2000).

<sup>12</sup> Belinda Davis, “Food and Nutrition (Germany),” in Daniel Ute et al., eds., *1914-1918-online: International Encyclopedia of the First World War*, [https://encyclopedia.1914-1918-online.net/article/food\\_and\\_nutrition\\_germany](https://encyclopedia.1914-1918-online.net/article/food_and_nutrition_germany).

Russia.<sup>13</sup> Since the beginning of the First World War, feeding the army and civilian population became a problem for the Russian imperial government. While, like other countries, the mobilization of peasant population into the army and the collapse of international trade adversely affected Russian agriculture, it was the issue of wartime food distribution that undermined domestic food economy. Due to the underdeveloped nature of the railway system even before the war, it could not sustain the volume of military traffic. Military food shipments took priority over provisions for urban centers. As cities received less food and food prices soared, the imperial government did little to nothing to alleviate food shortages among the civilian population prioritizing army needs.<sup>14</sup> By late 1916, food crisis reached its apogee in largest urban centers, including Moscow and Petrograd. Workers, particularly female workers or the so-called *soldatki*, protested high food prices, speculation, and the inability of the government to provide urban centers with food. In their protests, they linked food instability to the political weakness of the imperial government and positioned themselves as an opposition to the official authority - the tsar whom they saw responsible for the subsistence crisis.<sup>15</sup> As the unsuccessful war continued and food shortages worsened in early 1917, the distrust of Russian people in the relevance of the old imperial system was completely undermined.

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<sup>13</sup> For selected works on food instability in Russia, see: Barbara Alpern Engel, "Not by Bread Alone: Subsistence Riots in Russia during World War I," *The Journal of Modern History* 69, no. 4 (1997): 696-721; Thomas Fallows, "Politics and the War Effort in Russia: The Union of Zemstvos and the Organization of Food Supply, 1914-1916," *Slavic Review* 37, no. 1 (March 1978): 70-90; Lars T. Lih, *Bread and Authority in Russia, 1914-1921* (Berkeley: University of California Press, 1990).

<sup>14</sup> Fallows, "Politics and the War Effort in Russia," 72.

<sup>15</sup> Engel, "Not by Bread Alone," 715-717.



The Provisional Government and later the Bolshevik Party that came to power in October 1917 inherited the food problem and the disrupted agricultural economy of the imperial government. While the Bolsheviks nationalized the land and gave peasants an opportunity to redistribute their former landlords' (*pomeshchiks*) land, early Soviet policies of food requisition in rural areas undermined peasants' trust in the new regime. Moreover, despite the fact that Soviet Russia withdrew from the First World War after the Treaty of Brest-Litovsk in March 1918, the Civil War (1918-1920) further weakened the agricultural sector. Coupled with the drought of 1919-1920, these developments led to severe famine conditions in 1921-22. The Volga region that had been historically one of the most productive agricultural areas suffered the most. More than five million people died of starvation and disease during the two years of famine. To fight the consequences of the Volga famine, the Bolsheviks had to abandon its requisition policies and adopt the New Economic Policy (NEP) that allowed free trade in food and consumer goods and employed proportional tax on food surpluses.<sup>16</sup> Yet, even those policies were not enough to alleviate hunger. In the summer of 1921, Maxim Gorky, a renowned Russian writer, appealed to the international community on behalf of the Russian people as the Bolshevik state struggled to aid the hungry.

These wartime and postwar food shortages had tremendous economic and environmental impact not only on European but also on global agriculture. With regard to the latter, wartime agricultural practices in North and South America left distinct ecological impact on farm landscapes. Due to the fact that these regions became major suppliers of foodstuffs to Europe, they sought to increase their profits. To do so, many farmers stopped

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<sup>16</sup> Zhores Medvedev, *Soviet Agriculture* (New York: Norton, 1987), 32-39; Jonathan Dekel-Chen, *Farming the Red Land: Jewish Agricultural Colonization and Local Soviet Power, 1924-1941* (New Haven: Yale University Press, 2005), 12-13.

rotating crops preferring to grow only most profitable varieties: wheat and corn. As a result, combined with overproduction, these practices led to excessive soil depletion.<sup>17</sup> For instance, due to overproduction of wheat in Canada, average crop yields were less than half of their pre-war levels by 1918.<sup>18</sup> This disturbing effects of environment raised questions about the rationalization of production on the farm and soil conservation during the times of emergency.<sup>19</sup>

As for the economic impact of the First World War, North and South American agricultural markets grew rapidly as the European demand in foodstuffs increased over the course of the war. American consumers and farmers in the Midwest, in particular, felt immense pressure from the U.S. government to participate in the war effort. The former were encouraged by the U.S. Food Administration (USFA), a wartime food agency, to comply with voluntary food rationing. The USFA called on American consumers to “eat less” to save food for the American army and the Allies.<sup>20</sup> The latter group (farmers) responded to the call of the U.S. Department of Agriculture (USDA) and the USFA to produce more grain to feed Europe. This pressure from the state encouraged many

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<sup>17</sup> Andrew P. Duffin, *Plowed Under: Agriculture and Environment in the Palouse* (Seattle: University of Washington Press, 2007), 96.

<sup>18</sup> Ermacora, “Rural Society.”

<sup>19</sup> During the Second World War, American soil conservationists would look back at the detrimental effect of overproduction on soil in the Midwest and Canada during the First World War. Duffin, *Plowed Under*, ch. 5.

<sup>20</sup> For more on the U.S. Food Administration, see: Helen Zoe Veit, *Modern Food, Moral Food: Self-Control, Science, and the Rise of Modern American Eating in the Early Twentieth Century* (Chapel Hill: University of North Carolina Press, 2015); William C. Mullendore, *A History of the U.S. Food Administration, 1917-1919* (Stanford: Stanford University Press, 1941). The USFA and its successor, the American Relief Administration, will be discussed in the first chapter that focuses on famine relief to Europe as a lens to examine agricultural exchange through the process of humanitarian aid.

American farmers to increase their crop acreage and introduce new agricultural machinery into the production process.

While growing agricultural prices during the war benefited American farming as during the war and the first post-war years they enjoyed immense profits, long-term consequences of the increased agricultural production were much more dangerous. The first farm crisis hit the American agricultural market in 1920-1921, as U.S. government price guarantees on grain ended and European markets returned to pre-war level of food production. While grain prices were slowly climbing up until the mid-1920s, many American farmers in wheat and corn regions could not keep up with paying off wartime loans that they took to purchase land and machinery. The result was the farm crisis that, while not as severe as the Great Depression, affected American farmers in profound ways.<sup>21</sup>

Not only did the farm crisis of the 1920s in the United States shake the economic foundations of farmers' lives, but it also undermined contemporaries' beliefs in the future of modern agriculture. Farmers, bankers, and policymakers – all those who were involved in wartime agricultural production – raised questions about the modernization and rationalization of agricultural production. Bankers and lenders who provided loans to farmers during the war held hundreds of bankrupt farms without tenants; farmers had to vacate their properties as they could not pay their debts or even if they stayed their properties turned into the state of disrepair because they did not have enough capital to repair them. Many blamed farmers for the farm crisis, using xenophobic language and

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<sup>21</sup> Deborah Fitzgerald, *Every Farm a Factory: The Industrial Ideal of American Agriculture* (New Haven: Yale University Press, 2003), ch. 1; William Winders, *The Politics of Food Supply: U.S. Agricultural Policy in the World Economy* (New Haven: Yale University Press, 2009); ch. 1; Theodore Saloutos, *Agricultural Discontent in the Middle West, 1900-1939* (Madison: University of Wisconsin Press, 1951).

stereotypes about illiteracy. Others argued that farms should have less farm hands. While others argued that farmers did not have efficient methods of production and were stuck in old-fashioned practices and attitudes.<sup>22</sup> Thus, the eyes of farm leaders, the USDA, and policymakers in the cities as well as in the countryside locked onto possible solutions to the farm crisis through new approaches to agriculture. Deborah Fitzgerald characterizes this period as a time of soul-searching and reflection, by people with different perspectives and roles within and outside of agriculture.”<sup>23</sup> Many of them, indeed, were interested in finding new approaches not only at home but also abroad.

Thus, if one considers the situation of the agricultural market and state of farms and agricultural practices both in Europe and the United States after the First World War, it becomes apparent that the war significantly impacted patterns of food production and consumption. First, the military conflict caused food instability that lasted not only during the years of the war but also during the first years after the conflict. This food instability led many policymakers to consider the relationship of food instability and radical ideologies, perceived threats to liberalism and democracy. Thus, this period witnessed the birth of international state-sponsored humanitarianism that served as a weapon to contain food instability and, thus, radicalism. Next, the First World War shifted the economic power on the agricultural market to North America, particularly the United States, that replaced Russia as the dominant agricultural exporter to Europe. However, despite this shift, the American farm sector still experienced problems with overproduction and the use of

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<sup>22</sup> Fitzgerald, *Every Farm a Factory*, 20-21.

<sup>23</sup> Fitzgerald, *Every Farm a Factory*, 20; Fitzgerald, “Accounting for Change: Farmers and the Modernizing State,” in Catherine McNicol Stock and Robert D. Johnston, eds., *The Countryside in the Age of the Modern State: Political Histories of Rural America* (Ithaca: Cornell University Press, 2001): 189-212.

monoculture crops. With regard to Soviet Russia, its agricultural situation was the precarious one. As the Bolsheviks continued to ascertain their power on the territory of the former Russian empire during the first years after the First World War, they grappled with the problem of existing food supply networks and efficient food production. However, the Soviet experiment pushed policymakers and agricultural experts to consider new forms of agricultural organization and rationalization of food production. Within this context of shifting discourses of world food production, many agricultural policymakers, experts, and scientists searched for possible solutions both at home and abroad. The latter is the subject of this dissertation.

#### *A. Agricultural Exchange: Conceptualization and Historical Significance*

This dissertation examines the history of agricultural exchange between the United States and Soviet Russia from 1918 to 1928. It shows that Soviet and American agricultural specialists and policymakers sought solutions to the looming global farm crisis of the 1920s through visits, the organization of reconstruction projects, and seed exchange. In doing so, this work advances three arguments. First, the development of post-World War I agriculture, including concepts of large-scale farming, industrialization of agricultural, and rationalization of food production, should be understood within an international context. As the First World war reshaped patterns of agricultural production and showed the inextricable link between food and political stability, experts and policymakers from many countries began to search for solutions to the farm problem not only through national policies but also abroad. As this dissertation shows, this search would take different shapes and forms: from the use of international food aid programs to help domestic food production to the usage of another country's space to conduct large-scale farming

experiments. These experiences in agricultural exchange allowed its participants to acquire new knowledge, technologies, and expertise.

Second, by examining post-WWI patterns of agricultural exchange, this dissertation reconsiders the relationship between the United States and the Soviet Union with regard to the flow of technology and expertise.<sup>24</sup> Rather than considering a one-directional movement of American technology and expertise to Soviet Russia and perceiving the latter as a passive recipient, this work portrays an active multi-directional exchange. It shows that both countries perceived each other as research laboratories that were capable of giving solutions to farm problems in their respective countries.<sup>25</sup> Moreover, both American and Soviet agricultural experts believed that this exchange would benefit the reconstruction of international agriculture.

To analyze the multi-directional nature of the aforementioned processes, this dissertation employs the term “agricultural exchange” rather than “agricultural transfer.” The latter term carries the notion of a one-directional process and highlights fixed national categories which participate in the transfer – as in, the transfer of agricultural technologies

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<sup>24</sup> Antony Sutton, *Western Technology and Soviet Economic Development, 1917 to 1930* (Stanford: Stanford University Press, 1968); David Joravsky, “The Perpetual Province: ‘Ever Climbing up the Climbing Wave,’” *Russian Review* 57, no. 1 (1998): 1-9.

<sup>25</sup> In his article “Barriers to East-West Technology Transfer: Iu. V. Lomonosov and Diesel Railroad Engineering in the Interwar Period,” Anthony Heywood offers a study of the opposite movement of technology and expertise from the Soviet Union to the United States in the 1920s. While his article makes an important contribution by uncovering and challenging historians to look beyond the transfer of American technology to the Soviet Union, the question of technological exchange and interactions is left beyond the scope of this work. Anthony Heywood, “Barriers to East-West Technology Transfer: Iu. V. Lomonosov and Diesel Railroad Engineering in the Interwar Period,” *The Russian Review* 70, no. 3 (July 2011): 440-459.

between the United States and the Soviet Union.<sup>26</sup> This conceptualization, as Benedicte Zimmerman and Michael Werner argue, only “reinforce[s] the [national] prejudices that” it seeks “to undermine.”<sup>27</sup> In doing so, it imposes the “sender-recipient” framework that underscores the inequality of relationship. In contrast, by utilizing the term “exchange,” this dissertation seeks to overcome this methodological problem.<sup>28</sup> Particularly, it is significant with regard to the U.S.-Soviet example in that for a long time the interwar relationship between these countries has been considered within the antagonistic “communism vs. capitalism” perspective. Only recently have scholars addressed the issue of crossing borders between communist and capitalist countries by highlighting transnational and trans-systemic

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<sup>26</sup> The most recent critique of the concept “transfer” has been offered by the advocates of “*histoire croisée*.” See: Michael Werner and Benedicte Zimmerman, “Beyond Comparison: Histoire Croisée and the Challenge of Reflexivity,” *History and Theory* 45 (2006): 30-50. For works of historians of Russia who have applied this approach, see: Yves Cohen, “Circulatory Localities: The Example of Stalinism in the 1930s,” *Kritika: Explorations in Russian and Eurasian History* 11, no. 1 (Winter 2010): 11-45; Susan Gross Solomon, “Circulation of Knowledge and the Russian Locale,” *Kritika: Explorations in Russian and Eurasian History* 9, no. 1 (2008): 9-26. On the transnational history of technology, see: Erik van der Vleuten, “Toward a Transnational History of Technology: Meanings, Promises, Pitfalls,” *Technology and Culture* 49, no. 4 (October 2008): 974-994.

<sup>27</sup> Werner and Zimmerman, “Beyond Comparison,” 37.

<sup>28</sup> For works on the history of technological transfer and agricultural transfer, see: V.W. Ruttan and Yujiro Hayami, “Technology Transfer and Agricultural Development,” *Technology and Culture* 14, no. 2, part 1 (April 1973): 119-151; Deborah Fitzgerald, “Exporting American Agriculture: The Rockefeller Foundation in Mexico, 1943-1953,” *Social Studies of Science* 16, no. 3 (1986): 457-483; Antony Sutton, *Western Technology and Soviet Economic Development, 1917 to 1930* (Stanford: Stanford University Press, 1968), ch. 7; Kendalle E. Bailes, “The American Connection: Ideology and the Transfer of American Technology,” *Comparative Studies in Society and History* 23, no. 3 (1981): 421-448; Jonathan Coopersmith, “Technology Transfer in Russian Electrification, 1870-1925,” *History of Technology* 13 (1991): 214-233; A.E. Ioffe, *Mezhdunarodnye sviazi sovetskoi nauki, tekhniki i kul'tury, 1917-1932* (Moscow, 1975). For more on the transfer of American tractor technology, see: Dana Dalrymple, “The American Tractor Comes to Soviet Agriculture: The Transfer of a Technology,” *Technology and Culture* 5, no. 2 (Spring 1964): 191-214; Dalrymple, “American Technology and Soviet Agricultural Development,” *Agricultural History* 40, no. 3 (1966): 187-206.

histories of socialist projects.<sup>29</sup> The idea of choosing the United States and the Soviet Union to explore questions of interwar agricultural exchange furthers this trend.

Despite the dissimilarities in the American and Russian/Soviet agricultural development during the early twentieth century, these countries shared post-WWI concerns about competition on the world agricultural market, farm modernization, and the prevention of future famines through effective food production. Moreover, the geographical areas of these countries (the Midwest in the United States and the Volga region in Russia) that would be a subject of this dissertation are quite similar in terms of climate and soil. Both regions grew wheat and corn as main crops; both were susceptible to droughts; both required innovative dry farming methods; both focused on implementing ideas of large-scale agriculture.

In addition to demonstrating the effectiveness of using the term “agricultural exchange” to understand the international dimension of interwar agriculture, this dissertation seeks to expand the definition of “agricultural exchange.” Scholars have demonstrated that, historically, agricultural exchange, including the movement of plants, seeds, and agricultural knowledge and expertise, is not a new event.<sup>30</sup> The flow of people and animal

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<sup>29</sup> On bridging the communist-capitalist divide, see: György Péteri, “Sites of Convergence: The USSR and Communist Eastern Europe at International Fairs Abroad and at Home,” *Journal of Contemporary History* 47, no. 1 (January 2012): 3-12; Michael David-Fox, “The Implications of Transnationalism,” *Kritika: Explorations in Russian and Eurasian History* 12, no. 4 (Fall 2011): 885-904; Michael David-Fox, *Showcasing the Great Experiment: Cultural Diplomacy and Western Visitors to the Soviet Union, 1921-1941* (Oxford: Oxford University Press, 2014); Cadra Peterson McDaniel, *American Soviet Cultural Diplomacy: The Bolshoi Ballet’s American Premiere* (Lexington Books, 2014); Kiril Tomoff, *Virtuosi Abroad: Soviet Music and Imperial Competition During the Early Cold War, 1945-1948* (Ithaca: Cornell University Press, 2015).

<sup>30</sup> Alfred Crosby, *Columbian Exchange: Biological and Cultural Consequences of 1492* (Greenwood Publishing Company, 1972); Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (New York: Cambridge University Press, 1986). On the development of American agriculture from a global perspective, see: Courtney Fullilove, *The Profit of the Earth: The Global Seeds of American Agriculture* (Chicago: University of Chicago Press, 2017).



species brought new plant varieties and agricultural technologies to new places, thus, changing existing environments, economic and social structures. While these transfers knew no borders, since the late nineteenth and early twentieth centuries, they had become more institutionalized and regulated by the international community of scientists and policymakers. During this period, many national governments introduced new laws and regulations that controlled the import and export of agricultural commodities.<sup>31</sup> What is often left out in this historiography is the significant political nature of agricultural exchange. This dissertation shows that participants of agricultural exchange used their experience and expertise that they cultivated through visits and travel to achieve more powerful positions with local and central state institutions. Yet, this experience came at a price. By the late 1920s, with the shifting political climate in the Soviet Union, the participation in agricultural exchange became one of the tools for the ostracization of these experts from powerful positions.

### 1. Interwar Agriculture: Historiography

By advancing the aforementioned arguments, this dissertation aims to uncover a neglected international dimension to the history of post-WWI and interwar agriculture and to demonstrate an overlooked component of the U.S.-Soviet relations of the 1920s with regard to agriculture. Profound and troubling questions about the effects of the First World War on food production and consumption remain a historical problem worthy of investigation. In the recent years, historians have explored ways in which military conflicts

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<sup>31</sup> Stéphane Castonguay, "Creating an Agricultural Order: Regional Plant Protection Problems and International Phytopathology, 1878-1939," *Agricultural History* 84, no. 1 (Winter 2010): 46.

impact patterns of food production, distribution, and consumption. Some historians have shown the vital importance of food in instigating wars and shaping military strategies. For instance, in her work *The Taste of War*, Lizzie Collingham demonstrates how, for Germany and Japan, the demand for food resources during the Second World War became one of the major reasons these countries invaded the Soviet Union and China respectively.<sup>32</sup> Another group of historians have explored the growing role of the state and scientists during wartime and their involvement of formulating food policies on the home front. These processes, as Helen Zoe Veit shows in her work *Modern Food, Moral Food*, fundamentally changed ways consumers perceived and thought about food.<sup>33</sup> If Veit considers these processes from the perspective of the state and scientists, other scholars have concentrated on the role of consumers and their power in shaping food policies during the war.<sup>34</sup> Yet, another group of works linked the history of food instability during wartime with radicalism and revolutionary movements.<sup>35</sup> This scholarship offers illuminating perspectives on how different actors, including the state, scientists, and consumers, debated the significance of food and shaped wartime food policies both on the front and at home. However, the

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<sup>32</sup> Lizzie Collingham, *The Taste of War: World War II and the Battle for Food* (New York: Penguin Press, 2012).

<sup>33</sup> Helen Zoe Veit, *Modern Food, Moral Food: Self-Control, Science, and the Rise of Modern American Eating in the Early Twentieth Century* (Chapel Hill: University of North Carolina Press, 2013).

<sup>34</sup> Belinda Davis, *Home Fires Burning: Food, Politics, and Everyday Life in World War I Berlin* (Chapel Hill: University of North Carolina Press, 2000) ; Rose Hayden-Smith, *Sowing the Seeds of Victory: American Gardening Programs of World War I* (Jefferson, NC: McFarland & Company, Inc., 2014); Frank Trentmann and Flemming Just, eds., *Food and Conflict in Europe in the Age of the Two World Wars* (London: Palgrave Macmillan, 2006).

<sup>35</sup> Lars Lih, *Bread and Authority in Russia, 1914-1921* (Berkeley: University of California Press, 1990).

question of food production, in other words what happened on the farm and how wars affected this link of the food chain, remains beyond the scope of food historians.

The topic of wartime and postwar agriculture has been examined extensively in European and American historiography, particularly by agricultural and economic historians.<sup>36</sup> This scholarship pays particular attention to considering wars as both historical moments of continuity and discontinuity in the development of agricultural production. Much historiography has been devoted to the analysis of the Second World War and post-WWII period with regard to wartime agriculture and postwar agricultural reconstruction. In fact, in the recent years, the interest in agricultural development in the 1940-60s has been growing exponentially.<sup>37</sup> These works have demonstrated the post-WWII agricultural development as a contested space where ideologies, politics, and economic interests clashed.

While the Second World War agriculture has received more scholarly attention, the last years have witnessed a renewed interest in the history of interwar agricultural development. For instance, historians who examine American agricultural development during the 1920s have explored the development of mass markets, patterns of industrialization, mechanization, irrigation, and social structures of farms, as well as cultural practices in the

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<sup>36</sup> The most recent work that explores this subject is: Paul Brassley, Yves Segers, and Leen Van Molle, eds., *War, Agriculture, and Food: Rural Europe from the 1930s to the 1950s* (London: Routledge, 2012).

<sup>37</sup> For recent works on WWII and postwar agriculture of this period, see: Carin Martin, Juan Pan-Montojo, and Paul Brassley, eds., *Agriculture in Capitalist Europe, 1945-1960: From Food Shortages to Food Surpluses* (London: Routledge, 2016); Brian Short, *The Battle of the Fields: Rural Community and Authority in Britain During the Second World War* (London: Boydell & Brewer, 2014). For a more global approach, see: Lizzie Collingham, *The Taste of War*. For works on agricultural development projects, see: Nick Cullather, *The Hungry World: America's Cold War Battle Against Poverty in Asia* (Cambridge: Harvard University Press, 2010); David Engerman, *The Price of Aid: The Economic Cold War in India* (Cambridge: Harvard University Press, 2018);

interwar period.<sup>38</sup> As for European historians, new scholarship has explored rural policies and attempts to modernize the farm sector and how different groups of people were engaged in debates about the future of modern agriculture and how they tried to solve it through planning and engineering models that created effective rural models of development.<sup>39</sup>

Although much of this historiography still focuses on national histories of interwar rural policies, a noticeable shift towards the inclusion of global and transnational perspectives has recently taken place. By engaging ideas of the transnational turn scholarship and global history methods, agricultural historians have uncovered political and economic comparative and transnational stories of agriculture.<sup>40</sup> Particularly, this approach is apparent in Tore Olsson's work *Agrarian Crossings* that offers the methodological foundation for this dissertation. *Agrarian Crossings* deals with the notion of crossing borders and transnational frameworks in agricultural history. By focusing on agrarian exchange between the United States and Mexico in the 1930s and '40s, this work argues against the established

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<sup>38</sup> Fitzgerald, *Every Farm a Factory*; Bruce L. Gardner, *American Agriculture in the Twentieth Century: How It Flourished and What It Cost* (Cambridge: Harvard University Press, 2002); Paul K. Conklin, *A Revolution Down on the Farm: The Transformation of American Agriculture Since 1929* (Lexington: University Press of Kentucky, 2008); Alan L. Olmstead and Paul W. Rhode, *Creating Abundance: Biological Innovation and American Agricultural Development* (Cambridge: Cambridge University Press, 2008); Tore Olsson, *Agrarian Crossings: Reformers and the Remaking of the US and Mexican Countryside* (Princeton: Princeton University Press, 2017).

<sup>39</sup> Paul Brassley, Yves Segers, and Leen Van Molle, eds., *War, Agriculture, and Food*; Liesbeth van de Grift and Amalia Ribí Forclaz, eds., *Governing the Rural in Interwar Europe* (New York: Routledge, 2018); Lourenzo Fernandez Prieto, Juan Pan Montojo, and Miguel Cabo, eds., *Agriculture in the Age of Fascism: Authoritarian Technocracy and Rural Modernization, 1922-1945* (Turnhout, Belgium: Brepols Publishers, 2014).

<sup>40</sup> Fullilove, *The Profit of the Earth*; Curry, Helen Anne, *Evolution Made to Order: Plant Breeding and Technological Innovation in Twentieth-Century America* (Chicago: University of Chicago Press, 2016); Rebecca Egli, "The World of our Dreams: Agricultural Explorers and the Promise of American Science, 1890-1945," Ph.D diss., University of California, Davis (2018).

dichotomy of American and Mexican histories. Olsson demonstrates the convergences of these histories within the agricultural discourses and shows how American and Mexican governments sought solutions to remake their farm sectors “in the name of agrarian justice and agricultural productivity.” Olsson shows the entanglement of these agrarian histories. This work provides a methodological framework for agricultural historians to move away from comparative history by studying history of “interactions and exchanges.”<sup>41</sup> Moreover, it offers important insights into how national rural policies and agricultural development are shaped through agricultural exchange.

While Olsson’s work raises important questions about the nature of agricultural exchange and the nature of borders, his work primarily focuses on agricultural policymaking and development in the United States and Mexico in the 1930s and ‘40s. This dissertation, however, takes a different approach. Rather than focusing on the history of agricultural policies, it utilizes five analytical lenses to examine agricultural exchange between the United States and Soviet Russia in the 1920s. Among them are famine relief, seeds, tractors, agricultural schools, and travel. Each lens offers an opportunity to highlight important aspects of Soviet-American agricultural exchange, including the organization, practices, and power relations, as well as political dimensions of the exchange.

Thus, in the last twenty years, both American and European historiography has raised important questions about the effects the First World War on agriculture. Yet, there remains a decisive gap in our understanding of the international dimension of debates that occurred after the war with regard to the modernization of the farm sector and to possible solutions to the agricultural crisis. Unlike works that consider these debates within the national

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<sup>41</sup> Olsson, *Agrarian Crossings*, 4.

framework, this dissertation analyzes how solutions to domestic problems were sought abroad through the practices of agricultural exchange.

## 2. U.S.-Soviet Relations in the 1920s

To understand international agricultural exchange of the 1920s, its mechanisms and practices, within the framework of one dissertation project is an impossible task. To narrow down the historical focus, this work examines the interactions between the Soviet Union and the United States. When considering early Soviet-American relations, historians have shown productive and multi-dimensional interactions between the countries. Despite the fact that during the 1920s, the attempts to achieve a diplomatic recognition from the United States through foreign policy failed, intensive economic relationships, as well as cultural and intellectual exchange between two countries, existed. For instance, in *Loans and Legitimacy*, exploring the economic side of American-Soviet relations, Katherine Siegel shows that despite the absence of a formal diplomatic recognition, Soviets, who actively sought foreign investments, received them from American businessmen in a form of technical-aid agreements and concessions. In Siegel's view, these contacts not only paved a way to a formal recognition of the Soviet Union but also demonstrated that relations between two countries flourished between 1917 and 1933.<sup>42</sup>

Besides businessmen and trade representatives, American intellectuals demonstrated remarkable interest in the Soviet Union.<sup>43</sup> While pre-1980s historiography argued that

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<sup>42</sup> Katherine A.S. Siegel, *Loans and Legitimacy: The Evolution of Soviet-American Relations, 1919-1933* (Lexington, KY: University Press of Kentucky, 2014).

<sup>43</sup> Michael David-Fox, *Showcasing the Great Experiment*; David Engerman, *Modernization from the Other Shore*; Paul Hollander, *Political Pilgrims: Western Intellectuals in Search of the Good Society*, 4<sup>th</sup> ed. (New Brunswick: Transaction Publishers, 1998); A.V. Golubev, et al., *Rossia i Zapad: Formirovanie vneshepoliticheskikh*

westerners' fascination with the Soviet Union was a product of their leftist views, a new generation of historians argues that it was a multi-faceted nature of communism that appealed to the West. In *Modernization from the Other Shore*, David Engerman shows that during 1920s, America's Russian experts found Soviet Russia and its aspirations for industrialization "alluring," as they endorsed Soviet model of modernization regardless of their sympathies for the Bolshevik regime. He argues, "The way Americans understood the process of social change shaped the way they envision their own nation."<sup>44</sup> Engerman's work constructs an intellectual framework of American-Soviet foreign relations, by showing the interrelationship of international politics, knowledge production, and modernization ideas. *Modernization from the Other Shore* offers a model for examining American-Soviet intellectual exchange which will be used in this dissertation to analyze work of American agricultural experts who travelled to the Soviet during the Russian famine and afterwards and came back to the United States eager to apply their knowledge to solve American farm problems.

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*stereotipov v soznanii rossiiskogo obshchestva pervoi poloviny XX veka* [Russia and the West: The Formation of Foreign Policy Stereotypes in the Mind of Russian Society of the First Half of the 20<sup>th</sup> century] (Moscow: Institut Istorii RAN, 1998); Ludmila Stern, *Western Intellectuals and the Soviet Union, 1920-1940: From Red Square to Left Bank* (London: Routledge, 2007). In addition to intellectuals, many workers and experts immigrated to the Soviet Union during this period. For works on workers' immigration, see: S. V. Zhuravlev, "Malen'kie liudi" i "bol'shaia istoriia:" inostrantsy moskovskogo Élektrozavoda v sovetskom obshchestve 1920-kh--1930-kh gg. ["Little" people and "Big" History: Foreigners of the Moscow Electric Factory in Soviet society of the 1920s-30s] (Moscow: ROSSPĖN, 2000); Alexey Golubev and Irina Takala, *The Search for a Socialist El Dorado: Finnish Immigration to Soviet Karelia from the United States and Canada in the 1930s* (East Lansing: Michigan State University Press, 2014); Seth Bernstein and Robert Cherny, "Searching for the Soviet Dream: Prosperity and Disillusionment on the Soviet Seattle Agricultural Commune, 1922-1927," *Agricultural History* 88, no. 1 (2014): 22-44.

<sup>44</sup> David Engerman, *Modernization from the Other Shore: American Intellectuals and the Romance of Russian Development* (Cambridge: Harvard University Press, 2004).

While historians have examined stories of companies, intellectuals, and workers who travelled to the Soviet Union, a study of American agricultural experts and their interest in the Soviet Union has received little scholarly attention.<sup>45</sup> The only American historian who has explored this topic is Deborah Fitzgerald. Examining the transformation of American agriculture in the 1920s and its effects on farm families, Fitzgerald argues that during this period, a new industrial ideal of agriculture emerged. She emphasizes the industrial character of changes that happened to American farms by exploring the rise of agricultural expert knowledge, the emergence of large-scale farms, and a growing belief in efficiency of farm production. In the last chapter of her work *Every Farm a Factory*, Fitzgerald brings an international dimension to this process and examines how some American agricultural ideas found their application in the Soviet Union. Providing a brief overview of the early 1920s agricultural exchange between the United States and the Soviet Union, she pays particular attention to the late 1920s visits of American agriculturalists to large-scale farms. In accord with Engerman, Fitzgerald argues that for American agricultural experts, a visit to the Soviet Union was an alluring opportunity as it allowed them to expand their experiments in large-scale wheat farming.<sup>15</sup>

With regard to Russian-language historiography, scholars have acknowledged the role of foreign agricultural expertise in the 1920s Soviet economic development.<sup>46</sup> Some

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<sup>45</sup> On the interwar period, see: Fitzgerald, *Every Farm a Factory*, ch. 6. For works on earlier periods of Russian history, see: Rachel Koroloff, "Seeds of Exchange: Collecting for Russia's Apothecary and Botanical Gardens in the Seventeenth and Eighteenth Centuries," Ph.D. diss., University of Illinois at Urbana-Champaign (2014).

<sup>46</sup> One of the leading agricultural historians in Russian historiography is Olga Elina who has contributed significantly to the development of this field. While her work focuses predominantly on the nineteenth century, her two-volume work on the development of Russian agricultural experiment stations has informed this dissertation: Olga Elina, *Ot tsarskikh sadov do sovetskikh polei: istoriia sel'skokhoziastvennykh opytnykh uchrezhdenii*



historians, such as V.V. Bulatov and M.M. Zagorulko, have explored this process within the discourse of the early Soviet concession policies. They argue that, oftentimes, foreign agricultural communes were mistakenly placed in the category of concessions. This mistake prevented them from effectively organizing the process of agricultural reconstruction and establishing productive relations with local Soviet authorities. Another group of scholars, including Irina Suponitskaya, have examined the work of American agricultural experts as a part of the 1920s Soviet fascination with the West.<sup>47</sup> Ultimately, these histories demonstrate the failure of many foreign agricultural concessions to achieve their goals in reconstructing Soviet agriculture.

Rather than considering agricultural exchange between the United States and Soviet Russia as a success/failure story, this dissertation considers practices and mechanisms of interactions that both Soviet and American agricultural experts formed during travels, visits, and agricultural projects. In a way, this dissertation responds to Michael David-Fox's 2011 call to integrate transnational history into the Russian and Soviet field and to place Russian history back in the global space. In his now seminal article "The Implications of Transnationalism," David-Fox emphasizes the immense potential of transnational history for Russian studies as, in his view, it is "still very much an unfinished scholarly revolution."

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*XVIII – 20-e gody XX v.* [From tsar's gardens to Soviet fields: A history of agricultural experiment stations from the 18<sup>th</sup> century to the 1920s], 2 vols. (Moscow: RAN, 2008).

<sup>47</sup> Among the recent works are: V.V. Bulatov and M.M. Zagorulko, "Nekapitalisticheskie' inostrannye kontsessii v SSSR," [Non-capitalist foreign concessions in the USSR], *Vestnik Volgogradskogo gosudarstvennogo universiteta* 21, no. 1 (2012): 51-55; Irina Suponitskaia, "Amerikanizatsia Sovetskoi Rossii v 1920-1930-e gg.," [The Americanization of Soviet Russia in the 1920s-30s], *Voprosy istorii* no. 9 (September 2013): 46-59; Alexander Nikulin, *Agrarniki, vlast' i selo. Ot proshlogo k nastoyashchemu* [Agrarians, power, and village. From the past to the present] (Moscow: Litres, 2017). For the earliest mentioning of American agricultural experts in the Soviet Union, see: G.Ia. Tarle, "Harold Ware – drug sovetskoi Rossii," [Harold Ware – a Soviet Russia's Friend], *Istoriia SSSR* no. 4 (1961): 123-126.

By highlighting cross-national interactions, David-Fox places the analysis of interrelationships between Russia/the Soviet Union in a more global context. In doing so, he demonstrates how Soviet Russia, for instance, was viewed as “a vast playground for unrealized plans and fantasies.”<sup>48</sup> This dissertation shows that Soviet agricultural experts also viewed the United States as a “playground” or laboratory for their vision of modern agriculture.<sup>49</sup> By organizing the Russian Agricultural Bureau in New York and by travelling across the United States, for instance, Soviet experts observed and selected the best and most appropriate agricultural technologies, seeds, and other innovations that were appropriate for Soviet agriculture.

### ***B. Participants of Agricultural Exchange: Who are They?***

At the core of this dissertation is a series of archival collections that contain personal materials, notes, plans, and reflections of those who traveled back and forth between the United States and Soviet Russia to observe agricultural practices and experiments in the 1920s. Rather than purely focusing on the institutional history of interwar agricultural exchange and taking the history of the International Institute of Agriculture, for instance, as a focal point, this dissertation seeks to bring up personal experiences and struggles of people who were involved in this process. It examines experiences through the analysis of

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<sup>48</sup> David-Fox, “The Implications of Transnationalism,” *Kritika: Explorations in Russian and Eurasian History* 12, no. 4 (Fall 2011): 891.

<sup>49</sup> On reconsidering Russia and the Soviet Union as a place of scientific innovations and a contributor to international science, see: Jan Arend, “Russian Science in Translation: How *Pochvovedenie* was Brought to the West, c. 1875-1945,” *Kritika* 18, no. 4 (Fall 2017): 683-708; Jonathan Oldfield, Julia Lajus, and Denis J.B. Shaw, “Conceptualizing and Utilizing the Natural Environment: Critical Reflections from Imperial and Soviet Russia,” *Slavonic and East European Review* 93, no. 1 (2015): 1-15; Solomon, *Doing Medicine Together*;

their travels, organization of reconstruction projects, and interactions with different groups, including authorities, experts, and peasants/farmers.

The majority of those who participated in Soviet-American agricultural exchange were in some way or another involved in agriculture or were at least concerned with the problem of food production. Among them were scientists, policymakers, experts, social workers, political activists, and farmers. With regard to the latter group, multiple American-organized agricultural communes traveled to Soviet Russia in the 1920s to aid the Bolshevik state with the reconstruction of agriculture.<sup>50</sup> As these groups' goal was to settle and establish permanent agricultural units in the Soviet Union, their history remains beyond the scope of this work. This dissertation uncovers stories of those who constantly traveled between the two countries crossing national boundaries multiple times in the search for approaches to modern agriculture. Those featured here include Harold Ware, Nikolai Vavilov, Nikolai Kondratiev, and Nikolai Tulaikov. The list of participants is incomplete but these people played an important role in fostering Soviet-American agricultural exchange.

### ***C. Chapter Organization***

The five chapters are organized in a chronological order that follows the story of agricultural exchange from its reinstatement after the First World War to its transformation in the late 1920s. Each chapter represents a case study that focuses on a specific aspect of

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Nikolai Kremetsov, *International Science between the World Wars: The Case of Genetics* (London: Routledge, 2004).

<sup>50</sup> On the most recent work on agricultural immigration to the Soviet Union in the 1920s, see: Seth Bernstein and Robert Cherny, "Searching for the Soviet Dream: Prosperity and Disillusionment on the Soviet Seattle Agricultural Commune, 1922-1927," *Agricultural History* 88, no. 1 (Winter 2014): 22-44.

agricultural exchange and addresses one of the following questions: 1) How does famine relief foster agricultural exchange? (Chapter 1); 2) How was agricultural exchange practiced? (Chapters 2 and 4); 4) What can the study of agricultural exchange of technology tell us about the interaction of foreign expertise, local and central authorities? (Chapter 3); 5) How could agricultural exchange function as a political instrument to gain power, on the one hand, and an instrument of purge, on the other hand?

Chapter 1 focuses on contested definitions of famine relief and expands our understanding of famine relief by showing that famine relief alleviated not only food shortages but also facilitated agricultural exchange, including the shipment of technology and expertise. It investigates American food aid to Soviet Russia in 1921-23 by examining the history of the state-sponsored American Relief Administration and its privately-funded rivals, the Friends of Soviet Russia and the Society for the Technical Aid to Soviet Russia. In doing so, this chapter illuminates two diverse interpretations of what famine aid constituted. This chapter reveals the contested nature of famine relief and the ways we can understand agricultural exchange through . In addition, this chapter demonstrates that agricultural exchange occurs even during the turbulent times of famine because it stimulated agricultural exchange.

Chapter 2 uses seeds to examine the international institutional framework that facilitated agricultural exchange between the countries. Specifically, it focuses on the establishment and development of the Russian Agricultural Agency in New York City (1921-1927). This agency served as an organizational link between the U.S. Department of Agriculture and American agricultural colleges, companies, and individuals, on the one hand, and Soviet agronomists and Soviet institutions, on the other hand. To examine the work of this agency, this chapter utilizes seeds as an analytical lens. It demonstrates how the RAA facilitated

purchasing, shipment, and distribution of American seeds in the Soviet Union for research purposes. Moreover, this chapter reveals how changing priorities in agriculture in the late 1920s curtailed the research work of the Russian Agricultural Agency in New York.

Chapters 3 and 4 explore the experiences of the American tractor unit in the Russian region of Perm (1922-23) and the Russian Reconstruction Farms in the North Caucasus (1925-27). In Chapter 3, I consider tractors beyond their mechanical utility, reconceiving them also as instruments of new ideas, policies, and cultural frictions. Chapter 4 analyzes the organization and implementation of Harold Ware's Russian Reconstruction Farms reconstruction project as a laboratory for social and agricultural change, paying particular attention to the establishment of agricultural schools. It investigates the varying means by which progressives, urban planners, and communists as well as local Soviet administrators and peasants defined "modern" agricultural practices.

Finally, Chapter 5 follows the travels of Soviet agricultural economists and scientists to the United States from 1921-28. It explores how Soviet agrarians used international travel not only to learn about modern agriculture but also to validate their expertise in the eyes of the Soviet state. While, initially, they were able to leverage this experience to procure prominent positions within the Soviet bureaucracy, in the end, their foreign experience shifted from a precious commodity to an offense punishable by exile and, ultimately, death.

## **I. Famine Relief: Competing Visions of American Aid to Soviet Russia, 1921-23**

In August 1921, the Near East Relief Commission (NERC) was headed from New York to Transcaucasia to conduct relief work in Armenia when it was diverted north to investigate rumors of severe famine in the Volga region of Soviet Russia.<sup>51</sup> Upon arrival their worst fears were realized. After its twenty-seven-day trip across famine-stricken districts of Samara, Penza, and Tsaritsyn, the NERC concluded recurring droughts between 1919-1921, voluntary reductions of crop production by peasants, as well as the destabilizing effects of the First World War and the October Revolution caused the famine. Ignoring the detrimental impact of War Communism's food requisition policies on the peasant population, the NERC praised the Bolshevik efforts to introduce new technology and educate peasants about modern agricultural ideas, including crop rotation and dry farming.<sup>52</sup> Reiterating the stereotype of the ignorant and illiterate peasant, the commission further applauded Soviet efforts to battle peasants' backwardness by equipping "agricultural education" trains which "contained special cars for lectures, practical demonstrations of

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<sup>51</sup> For works on the history of famine and genocide in Armenia, see: Merrill D. Peterson, *"Starving Armenians: America and the Armenian Genocide, 1915-1930"* (Charlottesville: University of Virginia Press, 2004), ch. 3; Keith David Watenpaugh, *Bread from Stones: The Middle East and the Making of Modern Humanitarianism* (Berkeley: University of California Press, 2015).

<sup>52</sup> What this report failed to mention is the disastrous effect of Bolshevik policies that requisitioned grain from peasants. For more on the policies of war communism, see: Lars Lih, *Bread and Authority in Russia, 1914-1921* (Berkeley: University of California Press, 1990).

agricultural machinery of modern type, and a certain amount of seed for distribution for experimental purposes.”<sup>53</sup>

Recognizing the situation was beyond the scope of their organization, the NERC reached out to Herbert Hoover, then U.S. Secretary of Commerce and unofficial head of the American Relief Administration. Hoover’s pet project, the ARA was established in order to organize relief operations in post-war Europe. Tellingly, Hoover never responded to their missive. Though the ARA would go on to establish a dominant presence in the Soviet region, it sought to prosecute relief on its own terms. For while groups such as the Near East Relief Commission and the Friends of Soviet Russia sought to buttress the fledgling Soviet state and reconstruct Russian agriculture, the ARA was not interested in uplift. According to the NERC, the ARA’s exclusive focus on feeding children, sending clothing, and providing medicine did not “insure Russia against an immediate return of famine conditions” in the future. In their eyes, the “permanent rehabilitation” of Russia necessitated the implementation of new technologies and widespread agricultural education.<sup>54</sup> Thus, in addition to the shipment of food, clothing, and medicine, the NERC sought to provide seeds, agricultural implements, draft animals, tractors, and improvements in transportation.<sup>55</sup>

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<sup>53</sup> *An American Report on the Russia Famine: Findings of the Russian Commission of the Near East Relief*, published by *The Nation* (1921), 3-4, 10. The commission included Johnson (chairman), Paxton Hibben (secretary), E.A. Yarrow (Treasurer), Frank Connes (Interpreter; an official interpreter of the Supreme Court of the State of NY who had served in the American Red Cross in Russia during the war, NYC), and John R. Voris (Associate General Secretary of the Near East Relief, Yonkers, NY). “Trades with Soviet Urged on Hoover,” *New York Times*, October 28, 1921, p. 18.

<sup>54</sup> *An American Report on the Russia Famine*, 31.

<sup>55</sup> *An American Report on the Russia Famine*, 31-40.

The disparity between the mission of organizations, like the NERC and the ARA, provide insights not only into competing visions regarding Russian famine relief, but into larger debates about humanitarianism and famine relief from the post-World War I period onward. The First World War was a watershed moment in the rise of a new network of international humanitarian organizations that sought to develop systematic responses to the unprecedented social and economic crises caused by the war. In different parts of the world, millions of war victims, including veterans, disabled soldiers, starving refugees, and homeless children required assistance from these new agencies.<sup>56</sup> Yet, many organizational questions about types of relief, distribution networks, roles of relief workers, among others, became points of discussion and open confrontation ensued among different organizations. Motivated by economic, ideological, and political ideas, these groups shaped diverse visions of famine relief that continue to frustrate humanitarian efforts to this day.

In contrast to previous historiography that has evaluated Russian relief in terms of quantifiable successes and failures, this chapter focuses on how competing visions for relief played out on a transnational stage. While scholars have noted the ulterior motives of the ARA, they have erred in dismissing the efforts of so-called “radical” relief organizations as inconsequential.<sup>57</sup> In highlighting this disparity of vision and the ARA’s attempts to

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<sup>56</sup> Bruno Cabanes, *The Great War and the Origins of Humanitarianism, 1918-1924* (New York: Cambridge University Press, 2014); Michelle Tusan, *The British Empire and the Armenian Genocide: Humanitarianism and Imperial Politics from Gladstone to Churchill* (London: I.B. Tauris, 2017); Matthew Hilton et al., “History and Humanitarianism: A Conversation,” *Past & Present* 241, no. 1 (November 2018): e1-e38; Tehila Sasson, “From Empire to Humanity: The Russian Famine and the Imperial Origins of International Humanitarianism,” *Journal of British Studies* 55, no. 3 (July 2016): 519-537.

<sup>57</sup> Harold Fisher, *Famine in Soviet Russia, 1919-1923: The Operations of the American Relief Administration* (1927); Benjamin Weissman, *Herbert Hoover and the Famine Relief to Soviet Russia, 1921-1923* (Stanford: Hoover Institute Press, 1974); Bertrand Patenaude, *The Big Show in Bololand: The American Relief Expedition to Soviet Russia in the Famine*



undermine its “radical” rivals in consequence, the motivations of the ARA come into sharper focus. For the ARA, the Russian famine was an opportunity to ameliorate America’s own agricultural crisis. Subsidizing relief efforts to the Volga region would be a boon for American farmers facing a post-war grain surplus while concomitantly providing the U.S. with the means to undermine the nascent Soviet state through a display of power and opulence. In this light, the ARA’s insistence on limiting the scope of Russian famine relief as well as regulating, or even restricting the participation of smaller independent humanitarian organizations, functioned as an expedient means to accomplish these ends. Thus, the ARA’s policies amount to a weaponization of humanitarian aid, deployed in an attempt to both preserve American hegemony on the world grain market and undermine communism.

More than merely an examination of the ARA and its motives, this chapter explores the insistence of “radical” relief organizations on technological and educational aid in their attempt to reconstruct Russian agriculture. In particular, it focuses on the movement of peoples, ideas, and technology that occurred in spite of the ARA’s tactics, both in terms of public defamation and in denying access to proprietary transportation and distribution channels. The perseverance of “radical” relief organizations was instrumental in opening channels for future exchange after 1923 as will be discussed in the following chapters. In doing so, it also contributes to existing scholarship on foreign labor migration from the United States to the Soviet Union during the early 1920s. Previous scholarship has predominantly focused on the migration of American industrial labor to the region and its

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*of 1921* (Stanford: Stanford University Press, 2003); George Kennan, “Our Aid to Russia: A Forgotten Chapter,” *New York Times Magazine*, July 19, 1959.

economic, social, and cultural impact on Soviet Russia.<sup>58</sup> Agricultural migration, in the meantime, has received comparatively less attention. The works that do address it have interpreted it within a framework of administrative organization or success versus failure, highlighting the disappointment American agricultural immigrants expressed with their Soviet experiences.<sup>59</sup> In contrast, this chapter focuses on their role as experts and demonstrates that their migration contributed to the exchange of agricultural knowledge and technology between the Soviet Union and the United States.

### ***A. World War I, Food, and Humanitarianism***

During the First World War, food production, distribution, and consumption shifted dramatically from a concern of national economies to an international issue. At the beginning of the war, Russia had enough grain to feed its population and, therefore, did not prioritize questions of food supply. Yet, this situation changed in 1916 with a series of military defeats that forced continuous retreats that shifted the front eastward. The subsequent loss of Poland, Western Ukraine, and the Baltic region robbed the empire of the most well developed grain-producing areas. Furthermore, the underdeveloped transportation

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<sup>58</sup> Andrea Graziosi, "Foreign Workers in Soviet Russia, 1920-40: Their Experience and Their Legacy," *International Labor and Working-Class History* 33 (Spring 1988): 38-59; Zhuravlev, "Malen'kie liudi" i "bol'shaia istoria"; John Scott and Stephen Kotkin, *Behind the Urals: An American Worker in Russia's City of Steel* (Bloomington: Indiana University Press, 1989); Graziosi, *A New, Peculiar State: Explorations in Soviet History, 1917-1937* (Westport, Conn.: Praeger, 2000), 223-256; Ben Sawyer, "Shedding the White and Blue: American Migration and Soviet Dreams in the Era of the New Economic Policy," *Ab Imperio* 14, no. 1 (2013).

<sup>59</sup> Bernstein and Cherny, "Searching for the Soviet Dream," 45; Moshe Lewin, *The Making of the Soviet System: Essays in the Social History of Interwar Russia* (New York: Pantheon, 1985), 78-85; Richard Stites, *Revolutionary Dreams: Utopian Vision and Experimental Life in the Russian Revolution* (Oxford: Oxford University Press, 1991), 167-189.

network caused food shortages in industrial areas, such as Moscow and St. Petersburg. To make things worse, although food prices began to rise in 1916, the government refused to raise “the procurement prices for agricultural products” making peasants reluctant to sell their grain. As a result, by the end of 1916, Russia, the world’s leading grain exporter pre-World War I, found itself faced with food shortages that led to major disturbances and strikes relating to food that eventually led to the February revolution.<sup>60</sup>

In 1917, then U.S. Food Administration director Herbert Hoover, or as the press labeled him “world food dictator,” declared, food had “assumed a larger place in the economics, the statesmanship and the strategy of warfare.” During wartime, Hoover had helmed the U.S. Food Administration (USFA), representing the largest food relief effort in the world to date. To achieve this feat, the USFA had to mobilize Americans to voluntarily regulate their food consumption to fuel the war effort and feed European Allies. Through the USFA more than seven billion dollars worth of foodstuffs and medical equipment were shipped to European nations. This aid was instrumental in ameliorating food shortages experienced due to the destruction of European agricultural sectors and the disruption of food imports from their colonies. The United States profited immensely from Europe’s food insecurity and the allied war effort owed its victory to that exchange. For, as the First World War revealed, victory on the battlefield depended as much on who could better regulate food production, distribution, and consumption as it did on the strength of armies and the technologies they employed.<sup>61</sup>

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<sup>60</sup> Zhores Medvedev, *Soviet Agriculture* (New York: W.W. Norton & Company, 1980), 17-28; Peter Holquist, *Making War, Forging Revolution: Russia's Continuum of Crisis, 1914–1921* (Cambridge: Harvard University Press, 2002), 45.

<sup>61</sup> “Food Big War Factor,” *The Washington Post*, September 20, 1917; “Hoover for Food Dictator of World,” *The Washington Post*, July 21, 1918.

From its inception in August 1917, the USFA promoted the idea of an integral connection between food conservation and the preservation of the capitalist democracy that buttressed the free world. In one of its first bulletins, the USFA proclaimed that food would be “the deciding factor” in winning the war. The bulletin argued, by complying with voluntary food regulations Americans could fuel the allied war effort and, thus, make “the world safe for democracy.” Eating less meat, sugar, and wheat meant more than merely consuming less calories or even winning the war. Voluntary food conservation was a manifestation of democratic consciousness that relied on individual efforts by everyday Americans exercising self-control and self-sacrifice to overcome regimes that relied on compulsion and governmental authority. It was the epitome of everything that democratic capitalism purportedly stood for. Through a wide network of women’s clubs, lectures, demonstrations, and public meetings, the USFA delivered this message to every American household. While individual conservation was important, the primary aim of these campaigns was to shape an American citizenry that perceived personal sacrifice as an obligation towards the preservation of democracy both at home and abroad.<sup>62</sup>

Despite the fact that the USFA was a temporary wartime agency, it actively prepared the American public for the postwar mission of continuing international food aid. In his speech “Fighting with Food,” delivered in May 1918, USFA administrator Ray Wilbur argued that food conservation was “a remarkable thing in the democratic history of the world.”<sup>63</sup> Moreover, he declared that the “coming of peace” would not “solve the food problem.” In addition to providing food to the Allies after the war, the USFA planned to feed the

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<sup>62</sup> *Ten Lessons in Food Conservation* (Washington: Government Printing Office, 1917), 3.

<sup>63</sup> Raymond Wilbur, “Fighting with Food,” Speech by Wilbur, May 8, 1918, U.S. Food Administration, Box 8, Folder 1, Hoover Archive & Library.

vanquished enemies, demonstrating the superiority of its ideology and peoples.<sup>64</sup>

Positioning America as the breadbasket of the world, the USFA, as well as the Department of Agriculture, encouraged American farmers to maintain wartime production levels in the postwar period of European reconstruction. Such pronouncements were not revolutionary. The legacy of agricultural exports and American democracy can be traced back to Thomas Jefferson's republican notions of an empire of liberty. Yet, while Jefferson envisioned an agricultural nation as a means to engender self-sufficiency and to avoid foreign entanglements, the USFA focused on America's obligation to the free world. The USFA declared that as the "greatest food-producing country" and the "big brother of the world," the United States "assumed tremendous responsibilities."<sup>65</sup>

The USFA also warned the American public about the dangers of revolutions and their threat to world democracy. In his speeches, Wilbur explained that food instability constituted the major cause of the March and October Revolutions in Russia. He emphasized the irresponsibility of the Kerensky regime to feed its own people, which, in turn, led to the fall of the Provisional Government. Wilbur stated, "Russia collapsed, not because of the Germans on her borders; but the failure to organize and feed her own citizenship. Russia had a large army, and it went to pieces, and its government went to

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<sup>64</sup> "Food Lessons Issued," *The Washington Post*, July 19, 1917; *Ten Lessons in Food Conservation* (Washington: Government Printing Office, 1917).

<sup>65</sup> Raymond Wilbur, "Food and the War," Speech, Columbus, Ohio, December 3, 1917 in FA Papers, Box 7, Folder 16, Hoover Archive & Library; Wilbur, "Fighting with Food," Speech by Wilbur, May 8, 1918, FA Papers, Box 8, Folder 1.

pieces, because the food problem went to pieces.”<sup>66</sup> Thus, Wilbur’s perspective, efficient food production and distribution were at the center of a democracy’s political stability.

Wilbur’s rhetoric also showcased how October Revolution served as an excellent worst-case-scenario of what might happen in Europe and eventually in the United States if Americans failed to provide adequate food aid to its Allies. In his appeal to Spokane Food Administrators in May 1918, Wilbur warned his listeners that even the long-established democratic tradition would not survive under the threat of hunger. Hungry people, he declared, “fight only for food. Revolutions are born in breadlines.”<sup>67</sup> “Whether it is Petrograd, Moscow, New York, Chicago, Seattle or Spokane,” he continued, “it makes no difference under starvation conditions. Men gather together and they tear down the government.”<sup>68</sup> As a result, Wilbur concluded, Russian people fell victim to the promises of the Bolsheviks and submitted to their communist ideas out of sheer desperation. In his view, European countries and even the United States were not that far away from a similar scenario. Wilbur predicted, “another eight months like that, and this country as we know, disappears; our democracy goes and liberty vanishes.”<sup>69</sup>

In its postwar mission, the USFA enlisted the USDA in its efforts to increase agricultural production. According to the *Farmer’s Review*, the USDA asked farmers “to

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<sup>66</sup> Wilbur, Address at Conference of County Food Committee of Ohio in Senate Chamber, Columbus, December 3, 1917 in FA Papers, Box 7, Folder 16.

<sup>67</sup> Wilbur, “Fighting with Food,” Speech delivered to the County Food Administrators, State of Washington, May 8, 1918 at Spokane, WA, in FA Papers, Box 7, Folder 21, page 10.

<sup>68</sup> Wilbur, “Fighting with Food,” 10.

<sup>69</sup> Ray Wilbur, “Food in the War Today,” *American Federationist*, 25, no. 8 (September 1918): 794.

make three blades of grass grow where one grew before.”<sup>70</sup> Farmers responded in kind, as the 1917 harvest was almost 25% more than 1916. Clarence Ousley, the Assistant Secretary of Agriculture in 1917, argued that this responsibility to increase crop production was “the greatest privilege and the greatest task any man or any class of men have ever known.” The war effort, Ousley continued, rested on the shoulders of the American farmer and his ability to “sustain the fighting forces.” It was up to the American farmer, Ousley concluded, to decide whether the forces of “autocracy or democracy” would win in the world war, as the war would be won in “the fields, gardens, orchards, pastures, and hog lots of the American farmer.”<sup>71</sup>

The majority of American farmers supported the war effort and eagerly embraced their new role. But it was not exactly a selfless enterprise. Fixed prices on some agricultural commodities and continuous government orders boosted agricultural production and lined farmers’ pockets, encouraging them to increase acreage, take credit, and buy new machinery. When, in January 1918, the leading agricultural magazine *Wallace’s Farmer* declared its uncompromising support of the war effort, the majority of its readers approved this position sending hundreds of supportive letters and telegrams.<sup>72</sup> As one American agriculturalist noted, the American farmer took on the responsibility of being the only supplier of foods as “revolution-torn Russia [could not] do what she ha[d] done in the past.”<sup>73</sup>

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<sup>70</sup> “The Farmer’s Patriotism,” *Farmers’ Review*, 24 November 1917.

<sup>71</sup> “Farmers’ War Responsibility,” *Banker Farmer*, December 1, 1917.

<sup>72</sup> “Farm Papers and the War,” *Wallace’s Farmer*, March 1, 1918.

<sup>73</sup> Eugene Davenport, “Food the Vital Problem of War,” *Daily Illinois*, March 6, 1918.

For American farmers, however, fear about the possible return of Russia to the European grain market dampened enthusiasm. According to J. Ralph Pickell, a Chicago grain trader who toured Europe in 1919, American farmers had to be aware of the coming competition.<sup>74</sup> In January 1920, *Wallace's Farmer* noted that Russia was recovering from the revolution and the Civil War and would soon increase its agricultural production. As long as Russia was “down and out,” editors warned, “the American wheat farmer should continue to make a fair profit.” But “as soon as Russia recovers there is every prospect that the American wheat farmer” would face “a period of unusual[ly] hard times.”<sup>75</sup>

Anxiety about the return of Russia to the world grain market had no real foundation in reality. World War I and the Civil War had a tremendously detrimental affect on the Russian agricultural sector. Further, coupled with Bolshevik requisition policies, several years of drought in the Volga region—the major grain-producing area—brought a devastating famine to Russia. More than six million people died of starvation and diseases caused by hunger. More people would have perished if not for the American food aid, sent by the American Relief Administration (ARA), the successor of the U.S. Food Administration. As the ARA was presided over by the former members of the USFA, the rhetoric of food instability and revolutions carried over within food aid policies in Europe and Soviet Russia.

***B. Bolshevism “can be stopped by food”: The American Relief Administration, Postwar Relief, and Agricultural Interests***

At war's end, the American Relief Administration (ARA), led by Herbert Hoover,

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<sup>74</sup> “Foreign Competition,” *Wallace's Farmer*, December 5, 1919.

<sup>75</sup> “Agricultural Exports and Prices,” *Wallace's Farmer*, January 23, 1920.



continued the USFA's work by shipping American food aid to postwar Europe. Established by Congress in February 1919, Hoover unofficially presided over the ARA during his tenure as Secretary of Commerce. By raising \$200 million through official and private donations, the ARA projected it could feed over 250 million in Post-War Europe.<sup>76</sup> In doing so, it became one of the most important instruments of American foreign policy in Europe. The inability of many European states to feed their populations increased people's dissatisfaction with current political regimes. Food shortages had sparked riots in many cities across Europe and made American policymakers anxious about the spread of radical ideas such as communism in postwar Europe.<sup>77</sup> Not only was it responsible for sating the revolutionary appetites of starving Europeans, but it was also charged with preventing the spread of Bolshevism in the process. In his 1919 address to Congress, Woodrow Wilson declared that Bolshevism was "steadily advancing westward" and though it could "not be stopped by force," Wilson assured the American public, "it can be stopped by food."<sup>78</sup>

From June to September 1919, American newspapers were flooded with reports about food riots in Berlin, Hamburg, Munich, and other German cities.<sup>79</sup> Troubling news about German food protests were exacerbated by speculations that these disturbances would lead

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<sup>76</sup> Hearings before the Committee on Foreign Affairs, House of Representatives, Sixty-Seventh Congress, Second Session on H.R. 9459 and H.R. 9548 for the Relief of the Distressed and Starving People of Russia, December 13 and 14, 1921, Russian Relief, 37.

<sup>77</sup> "The Food Riots in Italy," *Chicago Daily Tribune*, July 7, 1919; "Majorcans in Food Riots," *Washington Post*, February 20, 1919; "Food Riots Grow in Northern Italy," *New York Times*, July 6, 1919.

<sup>78</sup> "Votes Big Food Fund," *Washington Post*, January 14, 1919.

<sup>79</sup> "Troops Called in German Food Riots," *New York Times*, May 7, 1919; "Soldiers Intervene in Berlin Food Riots," *Los Angeles Times*, June 25, 1919; "Food Riots in Berlin," *New York Times*, June 24, 1919; "Food Riots in Berlin; Reds Active Again," *New York Times*, September 19, 1919.

to a larger communist revolution. In June 1919, when the Communist party and the Spartacists took over Hamburg city hall, American reporters declared that the communists utilized “food riots as an excuse for their attempt to gain control.”<sup>80</sup> Three months later, when food protests broke out in Westphalia, the American media again linked this turmoil to opportunities for communists to spark a “revolution... under the leadership of Russian Bolsheviki.”<sup>81</sup> While the Communist Party failed to gain power in Germany, in March 1919, communists, under the leadership of Bela Kun, established the Hungarian Soviet Republic.

Bela Kun’s revolution sent shockwaves through France, Britain, Italy, and the United States, whom immediately recognized its potential danger to European democracy. While the French, British, and Italians demanded military intervention; the United States suggested placing a blockade on ARA food relief efforts as long as communists were in power there. To do so was effectively weaponizing humanitarian aid. Despite some hesitance, Hoover accepted the blockade as a necessary evil, hoping that restricting aid would exacerbate tensions between Kun’s party and the countryside. When Kun was overthrown the some members of the ARA were quick to take credit. In his 1921 article “Stemming the Bolshevik Tide,” Captain T.T.C. Gregory, the head of the ARA in Central Europe, boasted that the organization gave a “significant check” to Bolshevism in Hungary “a handful of Americans, employing only economic weapons, brought down the government of Bela Kun, and put a sudden end to the dreams of Lenin for immediate

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<sup>80</sup> “185 Are Reported Killed in German Seaport; Soviet to Be Set Up,” *Washington Post*, June 27, 1919; “Spartacans Riot in Hamburg,” *San Francisco Chronicle*, June 27, 1919.

<sup>81</sup> “Food Riots in Berlin; Reds Active Again,” *New York Times*, September 19, 1919.

European domination.”<sup>82</sup>

While the organization eventually walked back Gregory’s remarks, issuing a public statement that it did not “wholly agree” with his assessment, it was clear that the blockade, alongside allied involvement and the invasion of the Romanian army, had accomplished what it set out to achieve. Coupled with Bela Kun’s poor farm policy, the ARA’s weaponization of humanitarian relief further escalated tension between Hungarian Soviet Republic and its hinterlands. Though USFA administrator Ray Wilbur stated a few years earlier, “revolutions are formed in breadlines,” Hoover and the ARA demonstrated they could be quashed there as well. For, this time, it was the Bolsheviks who fell victim to the might of a hungry citizenry.<sup>83</sup>

### ***C. American Agricultural Overproduction and the Search for New Relief***

#### ***Opportunities***

The ARA policies and food relief in Europe led to sizable growth in the agricultural sector of the American economy. During wartime, the United States began its domination international commerce, as its exports to the French and British had increased from \$40 million in 1914 to nearly \$2 billion a year by the end of the war. After cornering European markets, American private banks and the federal government loaned European Allies \$3.3

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<sup>82</sup> T.T.C. Gregory, “Stemming the Red Tide,” *World’s Work* 41 (June 1921): 153-164; Tibot Glant, “Herbert Hoover and Hungary, 1918-1923,” *Hungarian Journal of English and American Studies* 8, no. 2 (2002): 95-109.

<sup>83</sup> Jacob Hartmann, “Famine Relief in Russia,” *The Toiler*, October 15, 1921; “Mr. Hoover’s Way,” *The Freeman*, August 31, 1921.

billion in postwar aid on top of the nearly \$7 billion lent during war-time.<sup>84</sup> The sector of the U.S. economy that profited most from European relief during and after the war was American agriculture. During the war and the immediate postwar period, American farmers enjoyed the golden age of agriculture, as a sizable portion of that \$3.3 billion went to purchasing agricultural products that would have otherwise amounted to unprofitable surpluses. The 1919 *Yearbook of Agriculture* showed a crop price index averaging about 32 percent above 1866-1908 prices. While farm prices dipped in 1915, in 1916 they recovered, increasing almost 60 percent over the period of 1914-1920.<sup>85</sup> However, despite this safety valve for American agricultural surpluses, overproduction was rampant and demand could not keep pace.

By 1920, American agriculture found itself in a financially difficult position. The decreasing European demand for American agricultural products threatened to undo the financial gains American farmers had made in the immediate postwar period. In late 1920, the U.S. government ended its policy of price guarantees on agricultural commodities and let the market dictate values. By November 1920, wheat prices had dropped by 33 percent from 1919. By July 1921, prices had fallen 85 percent below pre-war levels.<sup>86</sup> This freefall in prices meant that farmers who purchased land, machinery, livestock, and fertilizers at highly inflated prices during the war could not pay their debts. Taxes also emerged as a significant burden for American farmers as they were heavily based on land ownership

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<sup>84</sup> John M. Rothgeb, Jr., *U.S. Trade Policy: Balancing Economic Dreams and Political Realities* (2001), 29.

<sup>85</sup> *Yearbook of the United States Department of Agriculture* (Washington, D.C.: Government Publishing Office, 1919).

<sup>86</sup> Ralph Hurlin, "Changes in Agricultural Prices," *World Agriculture* 126. (Ralph G. Hurlin worked in the Department of Statistics, Russell Sage Foundation).

rather than merely income.<sup>87</sup> Lamenting the state of American agriculture, the Secretary of Agriculture, Henry C. Wallace, warned that the farm crisis was the result of rampant overproduction brought on by the government's insistence "a hungry world waiting to be fed" would provide a sufficiently "strong demand for all they could produce."<sup>88</sup>

Rather than accept the financial fallout of a decline in production, the American government sought to ameliorate the plight of its farmers by finding new markets for agricultural surpluses. As European agriculture had gradually recovered by 1921, news of famine in the Volga region offered new hope. In providing food aid to Soviet Russia, the ARA could achieve two important goals. First, the ARA food aid to Russia provided a temporary answer to the American farm crisis. By shipping agricultural surplus to Soviet Russia, the ARA gave American farmers additional time to adjust to the postwar economic climate. In doing so, American food aid to Russia managed to tone down rising radical voices on American farms. Second, said aid would function as a demonstration of the superiority of the capitalist system and its ability to feed not only its own people but the hungry world as well. It was a theme that played out in a number of propagandist avenues, including ARA posters distributed in Russia that depicted impoverished, undernourished, and destitute Russian peasants dwarfed in its foreground against the backdrop of a Titanic-esque American freighter carrying food aid looming off shore. The artist's use contrast, depicting the strength of American industrial power and the weakness of the Bolshevik regime, was starkly apparent.

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<sup>87</sup> Elizabeth Hoffman and Gary D. Libecap, "Institutional Choice and the Development of U.S. Agricultural Policies in the 1920s," *The Journal of Economic History* 51, no. 2 (1991), 397; Deborah Fitzgerald, *Every Farm a Factory*, 18.

<sup>88</sup> Henry Wallace, "Report on the State of Agriculture to the President of the United States, November 15, 1921," *Yearbook of Agriculture* (Washington, D.C.: Government Publishing Office, 1922): 5.

What is more, American interest in cornering the Russian market preceded news of the famine. In January 1921, the Committee on Foreign Affairs discussed the opportunities that the Russian market presented. A.W. Kliefoth, a regional economist on Russia at the Foreign Trade Adviser's Office of the State Department, reported that "Russia represents a gigantic economic vacuum" and that the opportunities for the United States there were "unparalleled." "The upbuilding of the industries of Russia," he continued, "will not only be a great humanitarian work, but will render a patriotic service to the United States." Comparing the present Soviet Russia with the "development of our own great West," Kliefoth saw incredible opportunities for American products and companies.<sup>89</sup>

Farm lobbyists, who witnessed rapidly deteriorating status of American agriculture, could not agree more with Kliefoth's recommendations. As James R. Howard, the President of the American Farm Bureau Federation, and Gray Silver organized what we today call the Farm Bloc in early 1921. Their lobbying efforts were directed to relieving agricultural depression through the increase of farmers' purchasing power and finding outlets for accumulated agricultural surpluses. In November 1921, after word of the famine had become widespread, James Howard declared in his address that, while the American farmer was burdened by 670 million bushels of surplus corn, "central Russia is experiencing the worst famine of her history. It would help the American farmer, American industry and

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<sup>89</sup> *Conditions in Russia. Hearings before the Committee on Foreign Affairs, House of Representatives, Sixty-sixth Congress, 3rd. sess., on H. Res. 635 requesting the Secretary of State to furnish the House of Representatives Certain Information as to the Conditions in Russia. January 27, 29, 31, February 1, 9, 10, 11, 15, 16, 17, 18 and March 1, 1921. Page 147-148.*

American shipping if 20,000,000 bushels of this surplus needed for European relief could be immediately purchased by our Government.”<sup>90</sup>

The pressure of the Farm Bloc, the dire state of American agriculture, the fear of losing the Russian market to rival and recovering European capitalist economies, and the ARA’s successful experience in Western Europe gave President Harding the leverage he needed to appeal to Congress to appropriate funds for the Russian relief. On December 5, 1921, President Harding asked U.S. senators to provide the ARA with “10,000,000 bushels of corn and 1,000,000 bushels of seed grain.”<sup>91</sup> Following Harding’s message, Joseph W. Fordney, Congressman from Michigan, an active agricultural lobbyist, introduced the bill to the Committee on Foreign Affairs. Unsurprisingly, the strongest support of this bill came from Hoover. He assured U.S. senators that by sending famine relief, the United States would help American farmers ship surplus “food supplies” that were “without a market in any quarter of the globe.” Hoover stated of the present surplus, “we are ... feeding milk to our hogs; burning corn under our boilers. From an economic point of view there is no loss to America in exporting those foodstuffs for relief purposes.”<sup>92</sup>

Representing the interests of American midwestern farmers, Ralph Snyder, the president of the Kansas Farm Bureau Federation, agreed with Hoover and testified that farmers, in

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<sup>90</sup> J.R. Howard, “The Purchasing Power of the Farmer,” *Berkshire World and Cornbelt Stockman*, January 1, 1922.

<sup>91</sup> “Ask \$20,000,000 for Famine Relief,” *New York Times*, December 14, 1921.

<sup>92</sup> Hearings before the Committee on Foreign Affairs, House of Representatives, Sixty-Seventh Congress, Second Session on H.R. 9459 and H.R. 9548 for the Relief of the Distressed and Starving People of Russia, December 13 and 14, 1921, Russian Relief, 39.

particular corn producers, wholeheartedly supported the idea of the Russian relief.<sup>93</sup> In accord with Snyder, Carl Vrooman, a former Secretary of Agriculture under Woodrow Wilson, emphasized that the corn surplus was “a liability, not an asset” because there was “no domestic demand.”<sup>94</sup> To find a market for the nation’s corn surplus, according to Vrooman, benefited not only farmers but also “the whole country and the businessmen alike.”<sup>95</sup> However, not all farm interests were content with the emphasis placed on corn exports to Russia. The flagship of the northwestern farm magazines, *The Northwestern Miller*, published a harsh critique of the measure. While applauding the “apparently generous act,” the editor, William C. Edgar, criticized the bill for sending corn rather than wheat to Soviet Russia. Experienced in organizing famine relief for Russia in 1891, Edgar argued that sending corn was a poor solution.<sup>96</sup> Not only was corn unsuitable for undernourished people, but also the Russians did not have necessary equipment to grind it

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<sup>93</sup> Hearings before the Committee on Foreign Affairs, House of Representatives, Sixty-Seventh Congress, Second Session on H.R. 9459 and H.R. 9548 for the Relief of the Distressed and Starving People of Russia, December 13 and 14, 1921, Russian Relief, 48.

<sup>94</sup> Hearings before the Committee on Foreign Affairs, House of Representatives, Sixty-Seventh Congress, Second Session on H.R. 9459 and H.R. 9548 for the Relief of the Distressed and Starving People of Russia, December 13 and 14, 1921, Russian Relief, 49-50; Candace Summers, “Carl Schurtz Vrooman and Julia Scott Vrooman,” McLean County Museum of History (2008) <http://mchistory.org/research/resources/carl-and-julia-vrooman.php> (accessed: November 10, 2015).

<sup>95</sup> Hearings before the Committee on Foreign Affairs, House of Representatives, Sixty-Seventh Congress, Second Session on H.R. 9459 and H.R. 9548 for the Relief of the Distressed and Starving People of Russia, December 13 and 14, 1921, Russian Relief, 49-50.

<sup>96</sup> Richard G. Robins, Jr., *Famine in Russia, 1891-1892* (New York: Columbia University Press, 1975), 171. More on the Russian famine of 1891-1892, see: Charles Emory Smith, “The Famine in Russia,” *North American Review* 154, no. 426 (May 1892): 541-551; George S. Queen, “American Relief in the Russian Famine of 1891-1892,” *Russian Review* 14, no. 2 (April 1955): 140-150; Merle Curti, *American Philanthropy Abroad*, 100-103.



and knowledge of how to prepare it.<sup>97</sup> Instead of corn, Edgar insisted that the ARA should ship wheat that was also in surplus on the American market. Yet, his voice was not strong enough to undermine the power of the corn lobby.

Proponents of Soviet recognition evoked other criticisms of the Russian famine relief bill. For instance, William Edgar Borah emphasized that while he did not oppose the bill, he voted for it because he did not have “the heart to refuse it.” An avid proponent of Soviet recognition, Borah condemned how the Allies and the United States treated Russia. He argued that “recognition of the Russian de facto Government would in itself tend to stabilize conditions in that country and keep its people from starvation.” For Borah, the food relief measure was a temporary solution to the Soviet famine and agricultural depression in the United States.<sup>98</sup> These criticisms aside, the U.S. House overwhelmingly passed the bill by a vote 181 to 71 on December 20, 1921. What is more, Congress doubled the initial requisition sought from \$10,000,000 to \$20,000,000 and ordered the ARA to expand its work in Soviet Russia.<sup>99</sup> Three days later, on December 23, Harding signed the legislation - an early Christmas present from capitalist Americans to communist Russians.<sup>100</sup>

#### ***D. Bread or Iron?: Critiques of the ARA and the “Radical Relief” Concept of Technical Aid***

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<sup>97</sup> Harold F. Smith, “Bread for the Russians: William C. Edgar and the Relief Campaign of 1892,” *Minnesota History* 42, no. 2 (Summer 1970): 54-62.

<sup>98</sup> “Senate Passes Bill for Russian Relief,” *New York Times*, December 21, 1921.

<sup>99</sup> “Senate Passes Bill for Russian Relief,” *New York Times*.

<sup>100</sup> Benjamin D. Rhodes, *James P. Goodrich, Indiana’s “Governor Strangelove”: A Republican’s Infatuation with Soviet Russia* (1996), 87.

To say that the ARA's food relief program did not go smoothly would be an understatement. In addition to dealing with delayed shipments, the inadequate Russian railroad system, it was also forced to deal with uncooperative Soviet authorities. What has been less reported are the criticisms the ARA received domestically and abroad. First, despite the efforts of the Farm Bloc to satisfy farmers with government purchases of crops for relief purposes, some farm groups perceived the ARA food aid to Russia as not extensive enough to help the American farmer. Individuals like Director Benjamin Marsh of the Farmers' National Council pressed the federal government to reinstitute wartime price regulations: a request that Hoover strongly opposed.<sup>101</sup> Finally, supported by various pro-communist organizations, what Hoover dubbed as the "radical relief" movement criticized the ARA for its shortsightedness, self-interestedness, and anti-communist position. These groups advocated more extensive forms of relief that included agricultural machinery, education, and experts to reconstruct Russian agriculture. Thus, the ARA had to formulate its mission, policies, and actions taking into consideration not only the Russian situation but also radical opposition it faced at home.

While Hoover and the ARA were battling the expectations of American farmers, multiple independent relief organizations sprang up across the United States to help fight the Russian famine. Among them were ethnically-oriented groups, such as the Volga Relief Society for Germans and the American Jewish Joint Distribution Committee; religious organizations such as the National Lutheran Council and the Russian Church Relief

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<sup>101</sup> Marsh lobbied for the resurrection of the Grain Corporation which Hoover fiercely opposed. Hoover perceived it as a wartime institution which was necessary only in military conditions. Hearings on Stabilizing Prices of Certain Agricultural Products, 128. 1922 January; Letter from Herbert Hoover to Benjamin Marsh, January 25, 1922, in Hearings on Stabilizing Prices of Certain Agricultural Products, 138. Box 92, Folder 1, ARA Papers, Hoover Archive & Library.

Corporation; representatives from the labor movement, such as the Amalgamated Clothing Workers of America, the United Cloth Hat and Cap Makers of North America, and the International Ladies' Garment Workers' Union); as well as nonpartisan organizations such as the American Committee for Russian Famine Relief, the Russian Non-Partisan Famine Relief Committee; and, finally, pro-Soviet organizations such as the American Committee for the Relief of Russian Children, the Friends of Soviet Russia, the American Federated Russian Famine Relief Committee, and the Soviet Russia Medical Relief Committee.<sup>102</sup> The number and diversity of these groups and their missions put immense pressure on the ARA to effectively organize and control the relief effort to Russia. Viewing these organizations as potential threats, capable of disrupting the ARA food aid to Russia and undermining its authority in the eyes of the American public, the ARA openly derided them in the press, declaring them “radical.”

In light of this opposition, these groups faced two choices: to relinquish their autonomy and, possibly, compromise their beliefs in order to collaborate with the ARA or draw its ire by retaining their independence. As the ARA was the largest relief organization in Europe at that time, its contacts, distribution centers, and contracts with shipping companies meant it could provide aid to famine-stricken regions faster and more efficiently. This was enough to entice a number of independent organizations to look past ideological differences.

Prominent among them, was the Volga Relief Society (VSR). In letters to the organizers of

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<sup>102</sup> Amalgamated Clothing Workers of America, *Proceedings of the Fifth Biennial Convention of the Amalgamated Workers of America*, Chicago, May 8 to 13, 1922, 272-282; Jonathan Dekel-Chen, *Farming the Red Land: Jewish Agricultural Colonization and Local Soviet Power, 1924-1941* (Yale University Press, 2005); Merle Curti, *American Philanthropy Abroad*; Emma Schwabenland Haynes, *A History of the Volga Relief Society* (Lincoln: American Historical Society of Germans from Russia, 1982); on unions: see Curti, 288; materials on different committees are in Box 91, ARA Papers, Hoover Archive & Library.

the VSR, John Miller, the VSR representative in Portland, Oregon, was among the early advocates for joining forces with the ARA, noting the organization would receive favorable rates on supplies through the ARA's contacts, as well as having access to the organization's "transportation privileges."<sup>103</sup>

Yet, collaboration with the ARA came at a price. To join the ARA independent organization had to raise a certain amount of funds before it would be allowed to send representatives to Russia. In the case of the VSR, the society had to raise \$15,000. The ARA also enforced other restrictions, including what types of foods could be sent and requiring that all potential representatives be vetted by the ARA before they could travel to the region.<sup>104</sup> In addition to administrative requirements, the ARA enforced specific ideological principles that smaller relief organizations had to comply with. When some independent relief groups, like the Near East Relief Commission, expressed a desire to expand the ARA mission, including collaborating with the Soviet government, Hoover flatly refused, insisting that their efforts had to be offered as an act of "charity."<sup>105</sup>

For Hoover, the emphasis on "charity" was particularly significant. First and foremost, it determined the temporality and mission guidelines of the ARA operations in Russia. Outwardly, the ARA purported it sent relief only to avert humanitarian disaster. Inwardly, by refusing to send agricultural machinery and experts, it did little to protect Russian

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<sup>103</sup> John Miller to Volga Relief Society, Portland, August 28, 1921, American Volga Relief Society Papers, Box 3, Folder 9, Nebraska Historical Society; John Miller to Volga Relief Society, Portland, September 24, 1921, American Volga Relief Society Papers, Box 3, Folder 9, Nebraska Historical Society.

<sup>104</sup> Correspondence between CRVS/AVRS and the ARA, Collection 1, Series 1, Box 1, Folders 1-4, the American Historical Society of German Russians.

<sup>105</sup> Hearings on Stabilizing Prices of Certain Agricultural Products, 222, Box 92, Folder 1, ARA Files, Hoover Archive & Library.

peasants from future famines. ARA understood that reconstructing Russian agriculture would only buttress the Soviet regime and help an old rival on the grain market back to its feet. What was more, anything beyond “charity” was effectively collaborating with a communist state and would only serve to legitimize the Soviet government and its communist ideology. These outcomes were unacceptable for Secretary of Commerce Hoover, whose anti-communist ideology and economic vision for American agriculture were well known both in the United States and worldwide.<sup>106</sup>

While some independent relief organizations complied with the ARA requirements, sending only food, clothing, and medicine to Russian famine victims, other private groups insisted on a broader scope of relief. Some, like the Russian Non-Partisan Famine Relief Committee, utilized the Russian Red Cross to circumvent ARA involvement. Represented by the Russian intellectuals who fled the Soviet regime, the Committee worked to unite all “Russian elements of the United States” to help fight famine and reconstruct Russian agriculture. The committee also took issue with the ARA’s refusal to ship personal parcels to the Volga region, as many Russians in America expressed interest in sending care packages to friends and relatives in the region. To this end, the Committee promised to utilize its connections with the Russian Red Cross in order to “organize gathering and shipment of parcels to Russia.”<sup>107</sup>

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<sup>106</sup> For Hoover’s anti-communist food policy, see works on the American food aid in Hungary in 1919 when the ARA stopped shipping relief to Hungary because the communists took over the Hungarian government: Tibor Glant, “Herbert Hoover and Hungary, 1918-1923,” *Hungarian Journal of English and American Studies* 8, no. 2 (2002): 95-109.

<sup>107</sup> Find citation. The members of the Russian Non-Partisan Famine Relief Committee were V.N. Bashkirov, V.V. Buimistrov, D.I. Vinogradov (professor), Dr. S.M. Ingerman, A.G. Malakhov, K.M. Oberuchev, and E.I. Somov. Also the committee was joined by N.K. Rerikh, S. Rakhmaninov, baletmaster M.M. Fokin, professor A. Petrunkevich, prof. S.A. Korf.

Groups that chose to work through other relief channels came under severe attack from the ARA. Among them was the American Committee for Russian Famine Relief organized by a Chicago journalist, Walter Liggett, in early 1922. During its first weeks, Liggett's Committee secured the support of prominent politicians, including fourteen governors, and clergy, as well as establishing offices in twenty midwestern states.<sup>108</sup> When the question of relief distribution came up, Liggett chose to ship food through the Russian Red Cross (RRC), arguing that the RRC had "units in every part of Russia" and could "place the supplies in the hands of the people" in need.<sup>109</sup> Liggett's decision to use the RRC brought the ire of the ARA. The ARA publicly defamed Liggett for associating with communists, asserting that he had misled American politicians, clergymen, and ordinary citizens into bolstering the Soviet state rather than feeding hungry Russians.<sup>110</sup>

Hoover attempted to downplay the role that anticommunism played in the ARA's restrictive policies. In one of his letters to Liggett, Hoover declared: "I feel that aid by Americans should be distributed by well-known American organizations in Russia as a matter of national pride."<sup>111</sup> Moreover, he explained that the work of the RRC on American soil and the distribution of American food by the Russians undermined the position of the

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<sup>108</sup> Letter from A.B. Martin, February 11, 1922, Russian Archive of Socio-Political History (RGASPI), f. 538, op. 2, d. 9, list 7.

<sup>109</sup> Letter from Walter W. Liggett to Lauritz Larsen, February 6, 1922, Box 92, Folder 2, ARA Papers.

<sup>110</sup> The correspondence of the Friends of Soviet Russia members indicates that this pro-Soviet organization was not aware of the Liggett Committee at first and, thus, was unlikely to have any ties with "this bourgeois committee." Letter from A.B. Martin to Carr, February 11, 1922, RGASPI, f. 538, op. 2, d. 9, l. 7.

<sup>111</sup> Letter from Herbert Hoover to Walter W. Liggett, January 16, 1922, Box 473, Folder 1, ARA Papers.

ARA and its food aid policy. In his letters to Liggett, Hoover claimed it did not matter whether it was Soviet Russia or Great Britain that organized relief on American soil—he was critical of any foreign group or government that operated on American soil.<sup>112</sup> Given the rhetoric employed by the ARA and its predecessor, the Food Administration, it is difficult to accept Hoover’s claims at face value. Regardless, the term “radical relief” became a convenient label that resonated with the American public and allowed the ARA to further undermine the work of small private relief groups.

While the Liggett Committee and the Russian Non-Partisan Famine Relief Committee fell under the umbrella of “radical relief” due to their alleged connection with communists, the Friends of Soviet Russia (FSR) was outspoken in its support of the Communist Party of America and the Bolsheviks in Russia. The FSR propagated its own brand of Russian famine relief. Established in August 1921, the FSR was one of the friendship societies that belonged to the International Workers’ Famine Relief Committee (IWFRC).<sup>113</sup> In the United States, it served as an umbrella organization for over two hundred pro-communist groups, in particular, the Society for Technical Aid to Soviet Russia, the Famine Scout Group, the American Labor Alliance, and the Soviet Russian Medical Relief Society. According to the magazine *Humanité*, the organization had branches “in nearly all the towns in the United States.”<sup>114</sup> Through advertisements in pro-communist and left-leaning magazines and newspapers, as well as through meetings and conferences, the FSR raised

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<sup>112</sup> Letter from Herbert Hoover to Walter W. Liggett, January 23, 1922, Box 473, Folder 1, ARA Papers.

<sup>113</sup> The FSR groups were all over the world: South Africa, Argentina, Belgium, Brazil, Bulgaria, Denmark, Germany etc. The whole list is in the State Archive of the Russian Federation (GARF), f. 1064, op. 6, d. 97, Moscow.

<sup>114</sup> ARA Papers, Box 91, Folder 2.

money to buy food, medical supplies, and clothing to Russia. By February 1922, the organization had raised \$300,000 for famine relief, noting that these funds came from citizens across the United States.<sup>115</sup>

In contrast to the ARA that envisioned the Russian relief as a short-term solution to the famine and an opportunity for U.S. agricultural interests, the FSR focused on long-term efforts to end the famine by developing Soviet agriculture and organizing Soviet farmworkers. In the words of the IWFRC's official history, friendship societies, including the FSR in New York, did not offer only "philanthropic" charity that included only the shipment of food, clothing, and medicine. Rather, their famine relief was a manifestation of "class solidarity."<sup>116</sup> In one of its appeals to American workers to participate in an international tool drive, the FSR declared that the "relief should consist not alone of bread, but also of tools and machinery to enable the Russian workers and peasants to help themselves and prevent future famines."<sup>117</sup> In doing so, the ideas of famine relief, the importance of technology and expert knowledge, as well as the desire to save communism combined into a single program.

Encouraging American workers, farmers, and agricultural experts to demonstrate their solidarity with the Soviets, the FSR collaborated with the Society for the Technical Aid to Soviet Russia (STASR). Established in June 1921, the STASR was an American-based Soviet agency set to cooperate with the Soviet Department of Industrial Migration: part of the New Economic Policy to facilitate foreign immigration to Soviet Russia. The Soviet

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<sup>115</sup> ARA, Box 91, Folder 2.

<sup>116</sup> *Official History of the International Workers' Famine Relief Committee*, GARF, f. 1064, op. 6, d. 97.

<sup>117</sup> "Here is Our Chief Danger," *Soviet Russia*, June 15, 1922, p. 344.



plan rested on the idea of bringing North Americans to Soviet Russia, luring them with the prospects of agricultural or industrial opportunities at various levels.<sup>118</sup> Within six months of its establishment, the STASR opened seventy-five branches across the United States and Canada. By early 1922, its membership reached six thousand regular members, primarily made up of Slavs, Jews, and Finns from the former Russian Empire.<sup>119</sup> Ludwig Martens, a founder of the STASR and Head of the unofficial Soviet embassy in the United States, may have exaggerated when he claimed that the “number of workers organized in such societies in America is not less than ten thousand.”<sup>120</sup> Nevertheless, it was clear the society’s message was gaining traction outside of the scope of the ARA. Counting on these members participation, it hoped to organize two hundred agricultural communes and send them to reconstruct the Soviet countryside.<sup>121</sup>

Despite the fact that the STASR welcomed any and all membership, it paid particular attention to attracting former citizens of the Russian empire. In his letter to the STASR, Aleskandr Eiduk, a Soviet representative of the Council of People’s Commissars, stated that one of the key goals for American agricultural communes was to “introduce peasants and

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<sup>118</sup> Benjamin Warren Sawyer, “American ‘know-how’ on the Soviet frontier: Soviet Institutions and American Immigration to the Soviet Union in the Era of the New Economic Policy,” Ph.D. dissertation (Michigan State University, 2013): 5-9.

<sup>119</sup> Vadim Kukushkin, *From Peasants to Labourers: Ukrainian and Belarusian Immigration from the Russian Empire to Canada* (Montreal: McGill-Queen’s University Press, 2007), 184.

<sup>120</sup> Ludwig Martens, “Russian Workers from America,” *Ekonomicheskaya Zhizn’*, June 22, 1921.

<sup>121</sup> Fedor Vilga, “Dokladnaia zapiska. Tsentralnoe Biuro OTPSR v Sovet Truda i Oborony SSSR. Russkaia kolonia v Amerike i ee sovremennoe polozenie,” RGASPI, f. 515, op. 1, d. 250, l. 5-9.

the population, as a whole, modern methods of agriculture.”<sup>122</sup> To do so more effectively and not relying on translators, the STASR gave preference to Russian-speaking immigrants. The STASR believed their fluency and knowledge of the Russian reality, alongside their expertise in American agricultural technology acquired during their stay in the United States, made them the most “suitable persons” for agricultural work in Russia.<sup>123</sup> Lenin himself approved this policy, knowing that non-Russians would not fully realize what they were getting themselves into. In response to the organizational meeting of the Society of Technical Aid in July 1921, Lenin warned the group that it “must bear in mind the hardships existing in Russia” and caution future re-immigrants about “the difficulties in connection to the food supply problem, and other obstacles which would have to be faced.”<sup>124</sup>

There was also an issue of finances. These members had to be able to support themselves financially during the first years, yet they could not be so wealthy as the STASR feared that there was “a danger” of them “becoming kulaks.”<sup>125</sup> As a result, the STASR actively recruited the estimated three million former citizens of the Russian Empire who had immigrated to North America before the October Revolution to return to their

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<sup>122</sup> Letter from Aleksandr Eiduk to the Central Bureau of STASR, February 23, 1923, RGASPI, f. 515, op. 1, d. 250, l. 14.

<sup>123</sup> A. Gorelik and A. Finkelberg, “Report on the present situation in the Technical Aid of the USSR, and on the reasons of our resignation from the Central Bureau,” RGASPI, f. 515, op. 1, d. 250, l. 51.

<sup>124</sup> “Lenin to American Workers,” *Soviet Russia*, October 1921, 158.

<sup>125</sup> Letter from Schneider to Smolianinov (KOMSTO), November 3, 1923, RGASPI, f. 515, op. 1, d. 250, l. 56-62. Kulaks were a class of peasants that ascended to the ranks of landowners and hired out other peasants to labor for them. This went against the ideal of the collective commune in which these members were to assimilate amongst the existing population.

homeland to help starving fellow Russians.<sup>126</sup> During the first eighteen months of its work, the STASR sent approximately 600 people to Soviet Russia as members of organized agricultural communes. Besides their skills and knowledge, they brought agricultural machinery worth of more than \$500,000.<sup>127</sup>

In order to ensure these individuals were properly equipped to educate their fellow workers in Russia, in 1922 the STASR announced the opening of the Russian Institute of Technology in New York City. Receiving support from the American Fund for Public Service (Garland Fund), a philanthropic organization that funded multiple left-wing projects from 1922 to 1941, the Society rented a five-story building which was large enough to house tractors, farm machinery, and other instruments for educational purposes. With regard to its mission, the Russian Institute of Technology announced that it would “teach the theory and practice of the modern science of agriculture” and “help those desirous to acquire and use modern agricultural knowledge in as short a time as possible.”<sup>128</sup> As a result, the Russian Institute of Technology became the clearing house for suitable and non-suitable agricultural relief workers. Not every member of the STASR could enroll into a three-month program. Only those who were “sufficiently trained to undertake Institution studies” could attend. Others had to begin at a preparatory school attached to the New York Branch of the STASR. With regard to non-members, the STASR was willing to enroll them only if there were vacancies.<sup>129</sup>

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<sup>126</sup> Sawyer, “American ‘know-how’,” 8-9.

<sup>127</sup> Reichel, “Obshestvo tekhnicheskoi pomoshchi Sovetskoi Rossii i Tsentralnyi Komitet Kommunisticheskoi Partii Ameriki,” [No date], RGASPI, f. 515, op. 1, d. 86, l. 7.

<sup>128</sup> “Farming School to Aid Soviet Russia,” *Soviet Russia*, October 15, 1922.

<sup>129</sup> “Farming School to Aid Soviet Russia,” *Soviet Russia*, October 15, 1922.

Within its walls, the Russian Institute of Technology offered two types of technological programs. The shortened version was designed for those who sought to join agricultural communes and who were leaving for Soviet Russia within a short period of time. The second option offered a three-month program that included six core courses: Bases of Agriculture, Tractors, Agricultural Implements, Agricultural Structures and Roads, Practical Physics, and Elements of Chemistry. For instance, the “Bases of Agriculture” and “Elements of Chemistry” courses focused on the fundamental interactions of biology, botany, and chemistry. Students learned about soils, draining and irrigation of land, seeds and the systems of agriculture, as well as about plants and fertilizers.

In addition to theoretical courses, students took courses where that facilitated hands-on experience with agricultural machinery. Within the framework of the “Tractors” and “Agricultural Implements” courses, students learned how to operate tractors, plows, and harrows, as well as sowing, reaping, and threshing machines. Moreover, they were taught how to troubleshoot, perform maintenance and repairs, as well as install new parts. Lastly, the Russian Institute of Technology offered a course on “Agricultural Structures and Roads” that the Institute described as a course “of special importance” due to the infrastructural deficiencies that plagued “Russia’s present reconstruction problem.”<sup>130</sup> All in all, the six courses offered comprehensive preparation for future specialists, giving them a well-rounded set of technical skills and basic knowledge about agriculture. Short descriptions of these courses reveal that the STASR and the Russian Institute of Technology in NYC took the technical preparation of re-immigrants seriously.

It remains unclear how many students went through the Russian Institute of Technology program in NYC before they went to Soviet Russia. STASR archival records indicate that it

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<sup>130</sup> “Farming School to Aid Soviet Russia,” *Soviet Russia*, October 15, 1922.

established similar schools, though of a smaller size, in other cities in the United States.<sup>131</sup> What is more important was that the STASR created this special program to equip future agricultural immigrants with an up-to-date set of skills and knowledge of modern farming. In doing so, it sought to establish control over the quality of agricultural expertise that would be transferred to the Soviet Union. Moreover, the school's standard of a suitable expert reveals much about the agricultural exchange between Soviet Russia and the United States at this time.

To Lenin and the STASR, the ideal expert represented a hybrid of Western and Eastern ideas, experiences, and knowledge. Their travel to Soviet Russia and eventual return to the United States represents the beginnings of a decade of agricultural and technological exchange. For despite the ARA's best attempts to regulate relief, these organizations, in cooperation with the Soviet state, began the arduous task of reconstructing Russian agriculture. This is not to say their efforts succeeded, for despite being the largest nation in the world, Russia still relies heavily on food imports to this day. What can be gleaned from this experience, however, is the centrality of technological and educational exchange to period reconstruction efforts: evidenced both by the ARA's refusal to indulge it and the insistence of its inclusion by so-called "radical" relief organizations.

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<sup>131</sup> "Shakily," Bulletin of the STASR, October 23, 1923, RGASPI, f. 515, op. 1, d. 250, l. 48; "T[technical] A[id] Report," RGASPI, f. 515, d. 250, l. 68-69.

## II. The Seeds of Scientific Soviet-American Agricultural Exchange, 1921-1926

An article in the July 13, 1922 issue of *Pravda* called on its readership to rethink the place of seeds in Soviet agricultural modernization. “It is essential to perceive seeds,” the correspondent claimed, “as one of those instruments [*orudii*] that, depending on its quality, would either make a significant step towards modern agriculture or stop its development.”<sup>132</sup> The quality of seeds, according to the author, depended on the quality of work conducted at agricultural experiment stations. Perceiving seeds as a valuable technology that could propel Soviet agriculture into the modern era, Soviet state officials and agricultural scientists sought to create favorable conditions for the development of seed science and cultivation in the Soviet Union. In pursuing these goals, the People’s Commissariat of Agriculture (Narkomzem) and Soviet scientists modeled their efforts after the rapid development of American seed science since the late-nineteenth century.

This chapter examines seed exchange through the Russian Agricultural Agency in New York City between Soviet Russia and the United States from 1921 to 1925.<sup>133</sup> It argues that Soviet agricultural scientists and state officials viewed seeds as one of the key agricultural technologies in alleviating the desperate conditions of the Volga famine (1921-23) and, more important, in modernizing the Soviet countryside. Established in 1921 by world-famous geneticist Nikolai Vavilov and funded by the Narkomzem, the Russian Agricultural Agency in New York sent seeds, plants, and agricultural literature from the United States to

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<sup>132</sup> “Semennye kontrol’nye stantsii,” *Pravda*, no. 154, July 13, 1922, 1.

<sup>133</sup> The most comprehensive account of Agency’s work is written by Truskinov. Yet, his main focus is on the correspondence between Nikolai Vavilov and Dmitrii Borodin. Ernst Truskinov, *Russkoe sel’skokhoziastvennoe predstavitel’stvo v Amerike (v svete perepiski N.I. Vavilova i D.N. Borodina)* (St. Petersburg: VIR, 2012).

Soviet Russia. Additionally, it facilitated Soviet agrarians' travels to the United States where Soviet scientists hoped to acquire up-to-date knowledge about modern agricultural organization and technologies. Finally, the Bureau facilitated the exchange of seeds and plants not only between American and Soviet scientists, but also with scientists from South America, Africa, and the Middle East. In doing so, the Russian Agricultural Bureau engaged Soviet agricultural scientists in global professional networks where they became participants in an international dialogue about the future of plant breeding and the development of modern agriculture.

While historians have addressed the desire of the Soviet state to improve agriculture by importing agricultural technology from the West in the 1920s, much of their focus has been devoted to the role of "tractorization" in the Soviet countryside.<sup>134</sup> The history of seeds and seed exchange, however, has received little attention. What has been addressed largely focuses on two issues; the role of leading Soviet botanists and geneticists, such as Vavilov, in developing the field of genetics and botany and the establishment and development of plant breeding within local experiment stations in Soviet Russia. In contrast to previous scholarship, this work places the history of seeds within a transnational framework. It raises the question of how seeds connected Soviet Russia to the global scientific community.

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<sup>134</sup> Antony Sutton, *Western Technology and Soviet Economic Development, 1917 to 1930* (Stanford: Stanford University Press, 1968), Ch. 7; Kendalle E. Bailes, "The American Connection: Ideology and the Transfer of American Technology," *Comparative Studies in Society and History* 23, no. 3 (1981): 421-448; Jonathan Coopersmith, "Technology Transfer in Russian Electrification, 1870-1925," *History of Technology* 13 (1991): 214-233; A.E. Ioffe, *Mezhdunarodnye sviazi sovetskoi nauki, tekhniki i kul'tury, 1917-1932* (Moscow, 1975). For more on the transfer of American tractor technology, see: Dana Dalrymple, "The American Tractor Comes to Soviet Agriculture: The Transfer of a Technology," *Technology and Culture* 5, no. 2 (Spring 1964): 191-214; Dalrymple, "American Technology and Soviet Agricultural Development," *Agricultural History* 40, no. 3 (1966): 187-206.

Grounded in the history of science and technology, this work reconsiders the role of seeds and regards transnational seed exchange between the Soviet Union and the United States, as well as other countries, as an important component of the agricultural modernization of Soviet Russia in the 1920s.

Recently, historians have shown the significance of agricultural science in modernization efforts of the late-nineteenth and early-twentieth century.<sup>135</sup> Particularly, they illuminate the transfer of plants across regions, institutions, and cultures through colonial expansion, collection, and preservation.<sup>136</sup> Several scholars of Russian/Soviet history have applied these concepts when examining the movement of scientific ideas within transnational frameworks.<sup>137</sup> These studies show the impact of Russian and Soviet science, in particular soil science and ecology, on the development of international knowledge.<sup>138</sup> In

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<sup>135</sup> Sigrid Schmalzer, *Red Revolution, Green Revolution: Scientific Farming in Socialist China* (Chicago: University of Chicago Press, 2016); Courtney Fullilove, *The Profit of the Earth: The Global Seeds of American Agriculture* (Chicago: University of Chicago Press, 2017); Tiago Saraiva, *Fascist Pigs: Technoscientific Organisms and the History of Fascism* (Cambridge: MIT Press, 2016).

<sup>136</sup> On botanical gardens and botanical sciences: Richard Harry Drayton, *Nature's Government: Science, Imperial Britain, and the 'Improvement' of the World* (New Haven, CT: Yale University Press, 2000); Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism, 1600-1860* (New York: Cambridge University, 1995); Stuart McCook, *States of Nature: Science, Agriculture, and Environment in the Spanish Caribbean, 1760-1940* (Austin: University of Texas Press, 2002). On plant movements and human migration: Alfred Crosby, *Ecological Imperialism: The Biological Expansion of Europe, 900-1900* (New York: Cambridge University Press, 1986); Judith Carney and Richard Rosomoff, *In the Shadow of Slavery: Africa's Botanic Legacy in the New World* (Berkeley: University of California Press, 2011).

<sup>137</sup> On agricultural, ecological, and botanical studies in Russia, see: Lloyd T. Ackert, "The 'Cycle of Life' in Ecology: Sergei Vinogradskii's Soil Microbiology, 1885-1940," *Journal of the History of Biology* 40, no. 1 (2007): 109-145; Jan Arend, "Russian Science in Translation: How Pochvovedenie was Brought to the West, 1875-1954," *Kritika* 18, 4 (2017): 683-708.

<sup>138</sup> Susan Gross Solomon, "Circulation of Knowledge and the Russian Locale," *Kritika* 9, no. 1 (2008): 9-26; Susan Gross Solomon, *Doing Medicine Together: Germany and*



addition, Russian historians, such as Olga Elina, have paid particular attention to networks of experiment stations from their establishment in the late-nineteenth century to the loss of their autonomy at the hands of central authority during the 1920s.<sup>139</sup> Relying on her work as a foundation, I expand beyond these local networks to establish the transnational significance of the work conducted within these stations.

This chapter begins by focusing on the origins of Russian-American seed and plant exchange, exploring its institutional organization before the 1917 revolution. Next, it examines early attempts by Soviet officials at Narkomzem and scientists within their own laboratories and academic institutions to organize industrial seed production based on scientific principles. Particularly, it focuses on the establishment of the State Seed Union (*Gossemkul'tura*), the Bureau of Applied Botany in Petrograd, and the role of the Volga famine in stimulating research of drought resistant crops. The third section demonstrates the establishment of the Russian Agricultural Agency in New York City, its goals, and the organization of Soviet-American seed exchange. Finally, the chapter closes with an examination of attempts by Soviet experiment stations and peasants to cultivate American corn in drought-prone regions. While these efforts had failed by 1925, Soviet experiments in corn breeding and cultivation continued well into the post-WWII era, most notably within Nikita Khrushchev's corn campaigns of the 1960s.

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*Russia between the Wars* (Toronto: University of Toronto, 2006); Nikolai Krementsov, *International Science between the World Wars: The Case of Genetics* (New York: Routledge, 2005).

<sup>139</sup> Olga Elina, "From Russia with Seeds: The Story of the Savitskys, Plant Geneticists and Breeders," ; Elina, "Planting Seeds for the Revolution: The Rise of Russian Agricultural Science, 1860-1920," *Science in Context* 15, no. 2 (2002): 209-237; Elina, "Between Local Practices and Global Knowledge: Public Initiatives in the Development of Agricultural Science in Russia in the 19<sup>th</sup> Century and Early 20<sup>th</sup> Century," *Centaurus* 56, no. 4 (2014): 305-329.

### *A. Seed and Plant Exchange: Pre-1917*

From the mid-nineteenth to the early-twentieth century, the development of agricultural science and plant breeding in the Russian empire was in the hands of local agricultural organizations, educational institutions, and administrations (*zemstvos*). Pressed by other financial concerns, the Russian imperial government showed little interest in financing the scientific aspirations of local agronomists to solve farm problems.<sup>140</sup> As a result, local institutions assumed responsibility for the production, organization, and promotion of agricultural knowledge and policy. Without adequate state support, they were forced to establish connections between their own experiment stations and foreign research centers. Together these geographically peripheral organizations defined the overall direction of agricultural science institutionalization in the Russian Empire.<sup>141</sup>

During the 1910s, local agricultural societies and *zemstvos* sought to establish an institutional network for the development of plant breeding by organizing professional conferences and meetings. The first All-Russian Conference on Crop Breeding and Seed Culture, held by the Khar'kov Agricultural Society, was held in 1911 and played a key role in identifying the framework and agenda for agricultural scientists and plant breeders. In just a few years, attendance swelled to more than 250 delegates. Among them were prominent scientists and policymakers: Aleksander Krivoshein (Minister of Agriculture), Robert Regel (Head of the Bureau of Applied Botany of MA and Nikolay Vavilov's advisor), renowned professors of agriculture, Aleksandr Chelintsev, Dmitry Pryanishnikov and Dinonysiy Rudzinskiy. The major accomplishment of the conference was in the

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<sup>140</sup> Elina, "Between Local Practices and Global Knowledge," 314.

<sup>141</sup> Elina, "Between Local Practices and Global Knowledge," 319.

delegates' attempts to outline the goals for the development of the field: training future plant breeders, creating a network of experiment stations, publishing specialized periodical magazines, setting up the Russian Plant Breeding Society, and organizing regular professional conferences.<sup>142</sup>

The efforts of local agricultural societies, experts, and zemstvos paid off. By the mid-1910s, efforts in plant breeding were rapidly developing in southern and southeastern parts of the Russian Empire (today's Ukraine), the Central black soil region (the Volga region), and western parts of the Empire (today's Baltic states).<sup>143</sup> During this time twelve plant breeding stations and thirty experiment stations were established. Moreover, plant breeding lecture courses were introduced at most colleges, while conferences and associations allowed members to communicate and develop inter-regional ties to other organizations.<sup>144</sup> Thus, these steps towards the local and national institutionalization of plant breeding and seed science laid the foundation for the articulation of demands for the development of Russian agricultural science and the turn towards embracing foreign experience.

Beyond strengthening the network of the Russian imperial agricultural scientists, local agricultural societies kept a close eye on foreign developments in plant breeding. During the early twentieth century, several local agricultural societies proposed to establish professional contacts with foreign experiment stations, including those within the United States. For instance, in August 1905, representatives of the Agricultural Society of South

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<sup>142</sup> Elina, "Between Local Practices and Global Knowledge," 305.

<sup>143</sup> Elina, "Mestnye sel'skokhoziaistvennye obshestva: na puti k agrarnoi modernizatsii Rossii," *Istoriko-biologicheskie issledovania* 4, no. 3 (2012): 37.

<sup>144</sup> Elina, "Ot razvlechenii aristokratov do dekretov bolshevikov: vekhi rossiiskoi selektsii. Konets XIX veka – 1920-e gody," *Na Perelome: Otechestvennaya nauka v kontse XIX-XX veke* no. 3 (2005): 152.

Russia (ASSR) in Odessa discussed a proposal, made by Fyodor Kryshtofovich at the Ministry of Agriculture, to open an office in the United States. As an avid supporter of the American system of agricultural development, Kryshtofovich, according to his own testimony, instructed peasants in modern agricultural methods during the summer months by way of “introducing American machinery, American methods, American seed, and so on.”<sup>145</sup> For some years, Kryshtofovich tried to persuade the Russian imperial government to organize a foreign representative body but had no luck. Local organizations, however, were receptive to his ideas, leading to the establishment of the Minneapolis bureau of the Yekaterinoslav zemstvo in 1908.

Using the Minneapolis-based agricultural agency as an example to demonstrate the potential of foreign connections for the development of Russian agriculture, Kryshtovofish continued to push his agenda in St. Petersburg. While at first his proposals were rejected due to a lack of funding, in 1909, the Ministry of Agriculture eventually allocated 15,000 rubles to organize an official Agricultural Agency in the United States.<sup>146</sup> The Ministry considered this agency to be an important step in furthering its activity with regard to “measures for the development and improvement of various branches of agriculture.” Yet, even if it was significant for the Ministry, organizing a foreign agency was lower than other

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<sup>145</sup> Fyodor Kryshtofovich, “Testimony of Theodor Kyshtofovich,” in “Brewing and Liquor Interests and German and Bolshevik Propaganda,” in U.S. Congress, Senate, Subcommittee on the Judiciary, *Brewing and Liquor Interests and German and Bolshevik Propaganda*, 65th Cong., 1st sess., 1919, S. Res. 307 and 439, vol. 3, 418. <https://books.google.com/books?id=iN1GAQAIAAJ&printsec=frontcover#v=onepage&q&f=false> (accessed online: February 19, 2019).

<sup>146</sup> Elina, “Between Local Practices and Global Knowledge,” 321; *Obzor deyatel'nosti Sel'skokhozyaystvennogo agentstva v Severo-Amerikanskikh Soedinennykh Shtatakh s 1 iyulya 1909 g. po 1 yanvarya 1912 g.* (St. Petersburg: Tipografiya V.F. Kirshbauma, 1913); *Izvestiya sel'skokhozyaystvennogo agentstva Yekaterinoslavskogo gubernskogo zemstva v Severo-Amerikanskikh Soedinennykh Shtatakh* (1908–1911) (Yekaterinoslav: Tipografiya Gubernskogo Zemstva).

budgeted items on the Ministry's list of priorities. By comparison, merely the maintenance of the Imperial Agricultural Museum received more funds (18,000 rubles).<sup>147</sup> Despite this, the project went forward.

The news that Russian agriculturalists intended to establish a central agency in America spread quickly in the United States.<sup>148</sup> For example, in October 1908, the *California Fruit Grower* newspaper reported that Russia expressed interest in American farming methods and said agency would work closely with the U.S. Department of Agriculture in order to learn more about American "experiment stations, irrigation, the grain trade, and the settlement of new lands in the West."<sup>149</sup> Beyond the agency's interest in dry farming, irrigation, and mechanization, it emphasized the importance of plant breeding and seed science in the United States.

The takeaways from the American experience were telling. In its 1913 report, the Agency stated that Americans were never satisfied with the inherent properties of plants. Rather, it was indicative of American ingenuity and the nation's immense resources that better strains and hybrids were constantly being researched and developed. Despite what

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<sup>147</sup> *Proposed Budget of the Empire for 1909 with the Explanatory Memorandum of the Minister of Finance* (St. Petersburg: Printing-Office of the Imperial Academy of Science, 1908), 91. (accessed online: <https://books.google.com/books?id=HZ9DAQAAMAAJ&pg=PA91&dq=%22agricultural+agency%22+1909+united+states+russian+empire&hl=en&sa=X&ved=0ahUKEwiKqvv32sjgAhVqw1QKHW-OBdAQ6AEIKjAA#v=onepage&q=%22agricultural%20agency%22%201909%20united%20states%20russian%20empire&f=false>).

<sup>148</sup> "Russia to Study Farming: Agents Coming to Washington to Obtain Ideas and Machinery," *Washington Post*, April 1, 1909; "Dots and Dashes," *Urbana Daily Courier*, April 1, 1909; "Foreign News in Brief," *Chicago Livestock World*, September 19, 1908; "Russia Likes Our Methods," *Chicago Livestock World*, April 2, 1909.

<sup>149</sup> "Russia Interested in Our Farming Methods," *California Fruit Grower*, October 3, 1908, 4. Similar news reports can be found in "Happenings This Week," *Michigan Farmer*, September 26, 1908, 238.

they perceived as a more advanced program utilizing superior funding and resources, the agency noted American interest in one aspect of Russian agriculture.<sup>150</sup>

American agronomists, according to the Agency's report, highly valued Russian seeds. Experiment stations across the Midwest (Kansas, Nebraska, Colorado, Wyoming, South Dakota, Minnesota, and Wisconsin) conducted experiments with Russian wheat and oat varieties. Among them were Kherson oats and wheat varieties of what the Mennonites referred to as "Turkey" red winter wheat.<sup>151</sup> Brought by the Mennonites in the second half of the nineteenth century when they migrated from the Russian empire to the United States, American agronomists believed these strains possessed valuable characteristics that could improve Midwestern wheat production.<sup>152</sup> For instance, Russian red "Turkey" wheat could produce satisfactory yields under a wide range of environmental conditions.<sup>153</sup> It is not surprising then that from the late nineteenth century to 1944, Russian "Turkey" wheat remained at the center of American wheat breeding, serving as a parent for multiple hybrid strains including those utilized in South Asia during the Green Revolution.

With regard to the work of plant breeding, the Agency encouraged Russian agronomists and plant breeders to familiarize themselves with the accomplishments of their American

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<sup>150</sup> *Obzor deyatel'nosti Sel'skokhozyaystvennogo agentstva v Severo-Amerikanskikh Soedinennykh Shtatakh s 1 iyulya 1909 g. po 1 yanvarya 1912 g* (St. Petersburg: Tipografiya V.F. Kirshbauma, 1913), pp.

<sup>151</sup> *Obzor deyatel'nosti Sel'skokhozyaystvennogo agentstva v Severo-Amerikanskikh Soedinennykh Shtatakh s 1 iyulya 1909 g. po 1 yanvarya 1912 g* (St. Petersburg: Tipografiya V.F. Kirshbauma, 1913), 63.

<sup>152</sup> For the most recent account of this seed migration from Russia to the United States, see: Courtney Fullilove, *The Profit of the Earth: The Global Seeds of American Agriculture* (Chicago: University of Chicago Press, 2017), ch. 4.

<sup>153</sup> K.S. Quisenberry and L.P. Reitz, "Turkey Wheat: The Cornerstone of an Empire," *Agricultural History* 48, no. 1 (January 1974): 109.

colleagues. While plant breeder Luther Burbank and his experiments in California were widely known in Russia, the work of Niels Hansen, or the “Burbank of South Dakota” as the Agency eventually referred to him, was less familiar. The selection work that Hansen conducted in South Dakota would end up being far more significant for Russian agriculture, as South Dakota’s climate and environment was closer to that of Russian agricultural regions: a fact that led to South Dakota being dubbed the American Siberia.<sup>154</sup> Hansen, for his part, was quite familiar with the Russian environment. Having studied in Iowa State College under the supervision of Charles Bessey and Joseph L. Budd, two agronomists who had frequently visited Russia, Hansen perceived Russia as the “Promised Land” in terms of its agricultural possibilities.<sup>155</sup> Sent by the USDA in 1897, Hansen conducted a four-month trip in Russia, traveling more than 2,000 miles from St. Petersburg to China in search of fodder plants that would grow in colder and drier regions of the United States.<sup>156</sup> Prior to his return to the United States, he shipped five carloads of seeds, grasses, and grains from Russia, Turkestan, Siberia, China, and Transcaucasia to the USDA. David Fairchild, an American botanist who had just been appointed as the head of the USDA Division of Seed and Plant Introduction, received Hansen’s shipments and was overwhelmed with the variety of Russian seeds. Sent in individual small packets to experimenters, Hansen’s cold-resistant

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<sup>154</sup> *Obzor deyatel’nosti Sel’skokhozyaystvennogo agentstva v Severo-Amerikanskikh Soedinennykh Shtatakh s 1 iyulya 1909 g. po 1 yanvarya 1912 g* (St. Petersburg: Tipografiya V.F. Kirshbauma, 1913), 65.

<sup>155</sup> H.J. Taylor, “To Plant the Prairies and the Plains: The Life and Work of Niels Ebbesen Hansen,” *Bios* (March 1941): 9. Among other explorers were Ernest A. Bessey and Frank N. Meyer who were also sent by the USDA to “search for agriculturally, medicinally, and ornamentally important plants.”

<sup>156</sup> Hansen conducted an earlier four-month trip to Russia and other European countries with the help of his advisor Joseph Budd. H.J. Taylor, “To Plant the Prairies and the Plains: The Life and Work of Niels Ebbesen Hansen,” *Bios* (March 1941): 9.

seeds and plants became an obsession among American agriculturalists.<sup>157</sup> One of the plants that he brought back was the so-called Cossack alfalfa that quickly replaced the ordinary North American variety as it proved more resistant to drought and cold. By 1908, the Russian empire exported alfalfa seed from Turkestan to North and South America at a rate of 9,600,000 pounds annually.<sup>158</sup>

The interest of American agricultural experts and plant breeders in Russian seeds played into the hands of the Russian agricultural mission in the United States. As American experiment stations had more financial resources for research and plant breeding, the Agency hoped that it could acquire better breeds of red winter wheat developed by American stations. Its 1913 report echoed this hope, that “all this selection work on agricultural, garden, and fruit plants is capable of giving valuable breeds for many Russian areas, as well as invaluable material for the work of our experiment stations.”<sup>159</sup> In declaring this, the agency’s research of American and former Russian seeds revealed not only the intent to learn from American colleagues but also viewed American experiment stations as laboratories whose research capabilities could be utilized to improve Russian seeds and then ship them back to Russia.

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<sup>157</sup> H.J. Taylor, “To Plant the Prairies and the Plains: The Life and Work of Niels Ebbesen Hansen,” *Bios* (March 1941): 18.

<sup>158</sup> M.D. Rumbaugh, “N.E. Hansen’s Contributions to Alfalfa Breeding in North America,” in South Dakota State University Agricultural Experiment Stations, *Bulletin*, June 1, 1979, p. 4. (accessed online: [https://openprairie.sdstate.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1669&context=agexperimentsta\\_bulletins](https://openprairie.sdstate.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1669&context=agexperimentsta_bulletins), January 10, 2019).

<sup>159</sup> *Obzor deyatel’nosti Sel’skokhozyaystvennogo agentstva v Severo-Amerikanskikh Soedinennykh Shtatakh s 1 iyulya 1909 g. po 1 yanvarya 1912 g* (St. Petersburg: Tipografiya V.F. Kirshbauma, 1913), 65.



Due to a lack of extant source material, the circumstances regarding the demise of the Russian Agricultural Agency in the United States are difficult to discern. But, most likely, the disruption caused by First World War and the 1917 revolutions put a stop to its work. Despite this interruption in the Agency's work, the exchange would resume few years after the revolution. Yet, it would happen on new terms and through new institutions. The change in the regime brought new organizational and institutional changes to the plant breeding science and development of plant breeding technologies.

***B. The Early Days of the Bolshevik Regime: Plant Breeding, Institutionalization, and the Famine, 1917-1922***

The October Revolution transformed the development of seed and plant breeding practices throughout the region. While the Russian imperial regime left the responsibility for the development of agriculture to local societies and zemstvos, the Bolshevik state undertook a different approach. For the first time, the Russian, and now Soviet, state took on the role of the patron for the agricultural sciences and seed programs, in particular. While the Bolsheviks planned to utilize the existing network of established experiment stations, they would do so from a position of institutional control.<sup>160</sup>

The first step in this regard was made in 1919. The People's Commissariat of Agriculture (Narkomzem), the Supreme Soviet of the National Economy (VSNKh) and the Council of Labor and Defense (STO) together with agricultural scientists began to discuss strategies to establish the system of mass seed and plant breeding as an important part of the

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<sup>160</sup> Elina, "Between Local Practices and Global Knowledge," 305.

strategy for agricultural modernization.<sup>161</sup> While these top-down initiatives were raised on different levels of the new Bolshevik state, it took two years to launch the first state project on the mass production of seeds. These first reports and discussions also led to the revitalization of plans to utilize foreign knowledge and expertise. The same year, the Sel'skosovet and Glavsovkhoz listened to the report on the organization of plant breeding abroad and possibilities for cooperation between the Soviets and the United States.<sup>162</sup>

With the beginning of the New Economic Policy (1921-1928) that promoted the system of cooperation, *khozraschet*, and state financial assistance, the Narkomzem finally approved the establishment of a state-funded seed breeding organization. Developed by Pyotr Lisitsyn, a Russian plant-breeder, the State Seed Union (*Gosudarstvennaia semennaia kul'turai*) organized a network of state seed nurseries on premises of large-scale state farms. There, agricultural scientists conducted plant breeding experiments to produce improved plant varieties on the industrial scale. Improved varieties (*elita*) were mass produced and then distributed to seed cooperatives who would were to distribute them amongst the peasants. This project amounted to the first attempt of the Soviet state and plant breeders to the industrial approach to plant breeding and seed production. Moreover, the significance of the Gossemkul'tura lay in its emphasis towards the development of seed technologies that embraced the entire process of seed production: from breeding to drying and cleaning.<sup>163</sup>

Despite its establishment, not all institutions of the new Soviet state immediately recognized the importance of the project. During its early years, the Gossemkul'tura had a hard time obtaining funds to organize its work. For instance, in the fall of 1922, the inter-

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<sup>161</sup> Elina, "P.I. Lisitsyn i Shatilovskaya Gossemkultura: proekt gosudarstvennoi systemy sortovogo semenovodstva," *Istoriko-biologicheskie issledovaniya* 7, no. 4 (2015): 16.

<sup>162</sup> Elina, "P.I. Lisitsyn i Shatilovskaya Gossemkultura."

departmental conference refused to include the Gossemkul'tura estimates in the budget. Instead, it proposed the organization request a loan from the State Bank. In the end, the Gossemkul'tura received a loan that was two times less than the required sum. These circumstances frustrated Lenin, who wrote to the Financial Committee, among others, in November 1922, that the Gossemkultura represented a matter of "great state importance." Further, Lenin demanded that the interdepartmental conference "satisfy" the needs of the institution, as he had been persuaded that the "improvement of plant varieties [based] on the American model is integral to increasing agricultural productivity."<sup>164</sup> Lenin's support was based on his understanding of the successes of American agriculture, what he believed to be an optimal system for the reproduction of high-grade seeds.<sup>165</sup>

While the Narkomzem and its Gossemkul'tura project played a significant role in fostering the establishment and development of seed science and plant breeding, parallel scientific endeavors took place in academic institutions. Though shaken by the war and the revolutions, the pre-revolutionary network of academic plant-breeding institutions had survived relatively intact. In fact, many plant breeders met the new regime with renewed energy and inspiration.<sup>166</sup> Among the academic organizations that had survived the turbulent revolutionary times was the Bureau of Applied Botany in Petrograd. Established in 1894, the Bureau of Applied Botany sought to describe, preserve, and utilize botanical

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<sup>163</sup> Elina, "P.I. Lisitsyn i Shatilovskaya Gossemkultura," 13, 18.

<sup>164</sup> Vladimir Lenin to Financial Committee, November 4, 1922, *Lenin Collected Works*, vol. 45 (Moscow: Progress, 1976), 589-590.

<sup>165</sup> Elina, "P.I. Lisitsyn i Shatilovskaya Gossemkultura," 21; Olga Elina, Susanne Heim, and Nils Roll-Hansen, "Plant Breeding on the Front: Imperialism, War, and Exploitation," *Osiris* 20 (2005).

<sup>166</sup> Krementsov, *Stalinist Science*.

knowledge in the interest of plant production.<sup>167</sup> The bureau's laboratories and experiment stations conducted research in genetics, cytology, taxonomy, and other disciplines of plant science.<sup>168</sup> By the 1910s and '20s, the Bureau transformed into a world-famous center for crop diversity studies, attracting specialists from the Russian empire and the Soviet Union, as well as from abroad.<sup>169</sup> In doing so, it became the center for seed exchange between the Soviet Union and foreign countries, including the United States.

Undoubtedly, seed exchange between the two countries was not possible without the leadership and charisma of the Bureau's Head and eminent botanical geneticist, Nikolai Vavilov.<sup>170</sup> Beyond his outstanding contribution to the fields of genetics and botany, particularly his work on homologous series of variation, Vavilov was a master of navigating Soviet bureaucracy and finding powerful patrons within the state to promote his research. His international plans for the Bureau were ambitious. In his 1920 letter to G.S. Zaitsev, Vavilov stated:

Plans are numerous. I would like the Department to be a necessary institution, as useful to everybody as possible. I'd like to gather the varietal diversity from all over the world, bring it to order, turn the Department into the treasury of all crops and other floras... The outcome is

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<sup>167</sup> For more on the Bureau of Applied Botany, see: Igor G. Loskutov, *Vavilov and His Institute: A History of the World Collection of Plant Genetic Resources in Russia* (Rome: International Plant Genetic Resources Institute, 1999).

<sup>168</sup> Elina, "From Russia with Seeds: The Story of the Savvytskys, Plant Geneticists and Breeders," *Istoriko-biologicheskie issledovaniya* 6, no. 2 (2014): 63. In addition to the Americans, Soviet plant geneticists and breeders had an especially close relationship with German scientists during the interwar period.

<sup>169</sup> Loskutov, *Vavilov and His Institute*, 7-8.

<sup>170</sup> For more on Nikolai Vavilov and his work, see: . [I plan on expanding this section to tell more about Vavilov and his role as an administrator and organizer of the international exchange.]

uncertain, especially considering the surrounding hunger and cold.<sup>171</sup>

Vavilov's comment on hunger conditions in Soviet Russia referred to the systemic problem in agriculture at the time. That the work of Vavilov's Bureau and the development of state programs in plant breeding and seed science (Gossemkul'tura) took place during one of the worst famines in Soviet history is of critical significance. After the October Revolution, the early Bolshevik state inherited food supply problems and the turbulence in rural areas with regard to land redistribution. While the regime nationalized the land which allowed peasants to officially redistribute *pomeshchiks'* property, Bolsheviks' food requisition policies that took place after the October Revolution and during the Civil War significantly undermined peasant trust in the new regime. More important, war communism policies disrupted agricultural production that, coupled with the drought in the Volga basin in 1919-1920, caused famine conditions between 1919-1922. The mortality was almost incomprehensible, as more than five million people perished in just three years.

The grave nature of the famine and its effect on the Soviet countryside had a tremendous impact on plant breeding and seed science. Both state officials and Soviet agronomists recognized the importance of finding solutions to environmental problems that peasants and emerging state farms were facing. It was well-established that the Volga region suffered from irregular rainfall, frequent droughts, and soil erosion. These factors not only caused degradation of the soil, but it also factored into the unpredictability of the farm season. According to the climate data for the eighteenth-twentieth centuries, the number of drought years had increased from 34 in the eighteenth century to 49 in the

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<sup>171</sup> Nikolai Vavilov, *Nauchnoe nasledstvo*, vol. 5. Vavilov's letters 1911-1928 (Moscow: Nauka Press, 1980), 79.

twentieth.<sup>172</sup> Even before famine had struck, the region presented many challenges to agricultural modernization.

What began from a desire to improve agricultural production and efficiency quickly metamorphosed into a dire need to feed an increasingly vulnerable population. As such, the famine of 1921-23 further stimulated the development of agricultural sciences with regard to dry farming and pushed scientists and experts to develop ideas about the cultivation of crops, including red winter wheat, corn and others drought-resistant varieties. In the end, it was Vavilov and his Bureau of Applied Botany that would make the biggest imprint on seed exchange between the United States and the Soviet Union through the organization and work of the Russian Agricultural Bureau in New York City.

### ***C. Soviet-American Seed Exchange: The Russian Agricultural Agency in New York City, 1921-24***

In August 1921, Vavilov traveled to the United States to present his research on homologous series in variation at the International Phytopathological Congress in New York.<sup>173</sup> Beyond merely sharing his work, Vavilov had more ambitious plans for his American trip. Prior to his departure, the Council of Labor and Defense (STO) proclaimed the absolute necessity to send Vavilov and Artur Iachevskii, a Russian mycologist and phytopathologist, abroad to learn more about modern agriculture. Providing them with more than 200,000 rubles, the STO hoped that Vavilov and Iachevskii would travel extensively

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<sup>172</sup> A.I. Shabaev and Iu.F. Kurdiukov, “Razvitie i modernizatsiia system zemledelia na iugo-vostoke Evropeiskoi chasti Rossii,” *Zemledelie* no. 4 (2010): 15.

<sup>173</sup> Vavilov, *Petrogradsky period*, vol. 1, page 19; Loskutov, *Vavilov and His Institute*, 18. It should be mentioned that Vavilov visited European countries as well. The discussion of his European tour is beyond the scope of this project and will be most likely developed in a book manuscript.

and purchase agricultural literature as well as technologies for Soviet agricultural experiment stations.<sup>174</sup> During the four-month trip that took them across midwestern states all the way to California, Vavilov and Iachevskii were able to expand their knowledge of American agriculture and establish professional and personal contacts that would be essential for agricultural exchange between the countries.<sup>175</sup> Yet, the most significant result of this trip was Vavilov's decision to organize the American Division of the Petrograd Department of Applied Botany and Plant Breeding (RAA).<sup>176</sup>

The Russian Agricultural Agency (RAA) became an international center for agricultural knowledge and technology exchange between the United States and Soviet Russia from 1921 to 1927. While the idea for its establishment belonged to Vavilov who sought to organize the exchange on the institutional level, his initiative could not have been realized without the help and ambition of Dmitrii Borodin. Borodin, a Russian entomologist, immigrated to the United States in 1918 and managed to establish close relationships with

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<sup>174</sup> "Postanovlenie Soveta truda i oborony," 1921, no date, the full text is quoted in E.V. Truskinov, *Russkoe sel'skokhoziastvennoe predstavitel'stvo v Amerike (v svete perepiski N.I. Vavilova i D.N. Borodina)* (accessed online: <http://vir.nw.ru/files/pdf/books/NewYork-TEV.pdf>, February 1, 2019); T.B. Avrutskaia, "Poezdka N.I. Vavilova v SShA i Zapadnuu Evropu v 1921-1922 gg.," *Vavilovskii zhurnal genetiki i seleksii* 6, no. 3 (2012): 541.

<sup>175</sup> Vavilov met with USDA officials, particularly W.A. Orton, who later supplied him with scientific literature. Moreover, during his trip, he met with Thomas Morgan, an American evolutionary biologist, who then worked at Columbia University. Finally, while travelling in California, Vavilov met Luther Burbank, a world-famous horticulturalist. Loskutov, *Vavilov and his Institute*, 19.

<sup>176</sup> The Division would be reorganized in 1924 when the Narkomzem would absorb it and rename it into the Russian Agricultural Bureau in New York City. It would exist until 1927. For the purposes of this paper, I will use the name that Borodin used in his correspondence: the Russian Agricultural Agency (RAA).

leading American agricultural scientists in three years.<sup>177</sup> Borodin's networking skills and his desire to promote what he called the "transplantation" of American plants to Soviet Russia made him a perfect candidate for the directorship of the RAA.

In their *Plan for the Seed introduction of Plants from the United States to Soviet Russia*, Vavilov and Borodin outlined seven goals. It is worth mentioning that these goals corresponded with the priorities set by the Bureau of Applied Botany in Petrograd as Vavilov perceived the organization to be a direct link to foreign knowledge, technologies, and expertise. The RAA goals included: 1) the introduction of the "New World" seeds; 2) the systematic investigation of flora in the United States, Canada, and South America from the perspective of applied botany; 3) sending literature on agriculture, botany, and genetics to Soviet Russia; 4) the establishment of relationships with American agricultural organizations, experiment stations, and scientists; 5) assisting Soviet scientists who would be sent to the United States to conduct research; 6) shipping museum collections, herbaria to Soviet Russia; and 7) purchasing and shipping seeds for Soviet experiment stations and other organizations.<sup>178</sup>

To accomplish the aforementioned goals, the RAA had to rely on the financial support and patronage of the People's Commissariat of Agriculture.<sup>179</sup> Presided by N.N. Osinsky (1921-22) and later Alexander Smirnov (1923-28) who actively supported international

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<sup>177</sup> Laurence H. Parker, "Russia and the World Agriculture: Contact Established between the Russian Agricultural Scientific Committee and American Institutions through its Bureau of Applied Botany," *World Agriculture* 2, no. 3 (January-April, 1922): 162.

<sup>178</sup> D.N. Borodin, "Introduktsia novykh kul'tur Russkim S.-Kh. Agentstvom (Biuro) v Amerike iz Novogo Sveta v S.S.S.R. i dr. raboty," *Obozrenie amerikanskogo sel'skogo khoziaistva* 2, no. 3 (September 15, 1925): 9. This version of the chapter will focus only on seed exchange. I plan to add more material on how other goals of the Bureau were accomplished.

<sup>179</sup> On patronage networks, see: Nikolai Kremmentsov, *Stalinist Science*, ch. 1.



connections within the field of agriculture, the Narkomzem found Vavilov and Borodin's project to be a promising venture. After his return to Soviet Russia from the United States, Vavilov received multiple invitations from different departments of the Narkomzem and other scientific institutions to report on his travels. These reports offered Vavilov an opportunity to promote the RAA project.<sup>180</sup> After lobbying the RAA in front of Narkomzem officials, the Narkomzem provided Vavilov with 26,000 golden rubles, a much bigger sum than Vavilov and Borodin hoped for when they founded the agency. In his letter to Borodin, Vavilov wrote that "this sum was comparably big, much bigger than the one we proposed in New York, and this extra money will be enough for your trips to Alaska, Canada, Peru, Chile, and Moscow. In short, you are the luckiest man of the mortals." Yet, Vavilov warned Borodin that he could not guarantee that the Narkomzem would finance the Bureau for 1923. He explained that "the financial position in Russia is desperate, and it might be that starting June-July, a large part of state institutions will be liquidated."<sup>181</sup> This unstable financial situation would continue to trouble the work of the Agency throughout its existence.

As RAA budgetary issues were resolved, Borodin who stayed in New York eagerly delved into organizing the work of the Agency. His first and foremost mission was not concerned with scientific matters, however. As Volga famine conditions worsened in early 1922 and the necessity of seed shipments increased, Borodin appealed to the American Relief Administration (ARA) offering its expertise on seed shipments. The ARA that sent food relief both to Europe and Soviet Russia responded by inviting Borodin to consult the

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<sup>180</sup> Letter from Vavilov to Borodin, April 19, 1922, in Vavilov's letters, vol1, 30.

<sup>181</sup> Letter from Vavilov to Borodin, April 19, 1922, in Vavilov's letters, vol. 1, page 29.

administration on what seeds Russia needed. Despite Borodin's recommendations and attempts to influence ARA decisions, the ARA did not leave him much room for action. For instance, Borodin recommended that they ARA should ship wheat varieties from the Northwest (*Durum, Marquis* and *North Manitoba*) and corn from Wisconsin, Montana, North and South Dakota (*Northwestern, Minnesota 13, Minnesota 23, Brown County, and Leaming*). He explained that these varieties would grow best in southern regions of Soviet Russia, North Caucasus and the Volga region. Yet, according to Borodin, he met some resistance from ARA representatives with regard to seed purchases. Despite Borodin's recommendations and insistence on including specifications of purchased seeds into the shipment logs, the ARA bought all corn seeds in Minneapolis without offering proper control over the seed material shipped to Soviet Russia. This misunderstanding stemmed from the different goals that the Russian Agricultural Agency and the ARA. While, as an agricultural scientist, Borodin was interested in proper practices of plant breeding and agricultural experimentation, the ARA focused on delivering corn from American farm regions that suffered from post-World War I overproduction.<sup>182</sup>

While Borodin's work with the ARA was not so successful, the Russian Agricultural Agency found other channels for shipping and introducing American seeds in Soviet agriculture. Borodin managed to establish close relationships with the Friends of Soviet Russia (FSR), a pro-communist group that facilitated agricultural immigration to Soviet Russia during the famine. According to Borodin, the Agency consulted foreign agricultural communes that headed to different regions of Soviet Russia to settle and promote new

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<sup>182</sup> "Introduction of New Cultures by the Russian Agricultural Agency (Bureau) in the United States from the New World to the USSR and other works," *Digest of American Agriculture* 2, no. 3 (September 15, 1925): 12-13; Parker, "Russia and the World Agriculture," 162.

agricultural technologies. Among the Russian regions that these colonies headed to were Perm, Odessa, and Don. According to Borodin, these agricultural immigrants needed help in choosing compatible plant varieties for these areas.<sup>183</sup> For him, then, these groups represented a unique opportunity to “introduce American types” of grains and to become nurseries for American crop varieties. In addition, Borodin claimed that the Bureau took an active part in facilitating commune members’ agricultural education. To do so, Borodin made an agreement with Albert Johnson, Head of the Institute of Applied Agriculture, Farmingdale, Long Island, NY, and a former Director of the Near East Relief, to accept students who would work in Soviet Russia upon graduation. According to Borodin’s sources, seven people were accepted to the Institute and after several months of education, five of them left for Russia, while two of them entered graduate school.<sup>184</sup>

Beyond its initiatives with regard to alleviating the Volga famine, the Russian Agricultural Agency never lost sight of its central mission: to ship seeds and plant samples to Soviet Russia. To engage and develop seed exchange, Vavilov and Borodin utilized their professional connections with multiple agricultural colleges and USDA officials. During his four-month trip in the United States, Vavilov made arrangements with American experiment stations to send him seeds and plant samples through the RAA. Upon his return to Soviet Russia, he continued to correspond with his new acquaintances, reminding them about these arrangements. For instance, in October 1921, Vavilov sent numerous letters to

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<sup>183</sup> Due to the fact that Borodin mentions Perm as one of the regions of agricultural immigration, it is quite possible that Borodin knew Harold Ware and consulted him on seed purchases. I do not have any information about any other agricultural projects in Perm guberniya at that time, besides Harold Ware’s American tractor unit in Toikino, Perm gubernia (1922-23).

<sup>184</sup> “Introduction of New Cultures by the Russian Agricultural Agency (Bureau) in the United States from the New World to the USSR and other works,” *Digest of American Agriculture* 2, no. 3 (September 15, 1925): 17-18.

directors of experiment stations asking them to send samples of seeds for crop, garden, and decorative cultivation. He explained that the Russian interest in American seeds lay not only in seeds themselves but also in the plant breeding work that American botanists and agricultural scientists had done since the beginning of the twentieth century. In his letters, Vavilov often mentioned the work of Hansen, Fairchild, Meyer, Bolley: those scientists who extensively traveled in pre-revolutionary Russia collecting seeds and plants to experiment with them on midwestern prairies. He sought to get seeds that these scientists had worked with to assess the result of their work.

Vavilov and Borodin highly valued the work of American experiment stations. Not only were these institutions rapidly developing with regard to plant breeding and seed science, but also U.S. experiment stations had established a wide network of professional contacts with foreign experiment stations. The RAA sought to utilize this network to its own devices. Together with Borodin, Vavilov regarded the RAA as a link between Soviet Russia and South American, Asian, and Middle Eastern agricultural expertise. In one of his letters to Borodin in 1922, Vavilov asked him to appeal to South American, Japanese, Egyptian, Sudanese, and Indian experiment stations and ask them to send the Central Experiment Station in Petrograd some rice samples.<sup>185</sup> In another letter in the spring of 1923, Vavilov appealed to Borodin with a request to obtain seeds from Morocco, Tunisia, Algeria, Sudan, Spain, and Greece. Particularly, Vavilov recommended that Borodin should use both his professional contacts and some seeds companies that traded with those regions.<sup>186</sup> In doing so, the RAA had transformed from an institution that supervised the agricultural exchange

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<sup>185</sup> Letter from Vavilov to Borodin, August 13, 1922, in Vavilov's letters, vol. 1, page 42.

<sup>186</sup> Letter from Vavilov to Borodin, March 2, 1923, 71.

between the U.S. and the Soviet Union into an organization that cultivated global connections with other regions.

Seed exchange, however, was not one-directional in that not only the Soviet Union received seeds from other countries. In return for seed and plant samples acquired from the United States or other regions, the RAA promised that the Central Experiment Station in Petrograd would send results of its own experimental work. In late 1921 and 1922, Borodin flooded the Petrograd Bureau with requests of American experiment stations to send Russian seeds. In April 1922, Vavilov promised that his Petrograd Bureau would start fulfilling requests as quickly as possible. However, he noted that he was not able to address all the requests. According to him, some American agricultural experiment stations could not understand the post-revolutionary Soviet situation in science and its funding. Instead of requesting several grams of seeds, they asked for bushels of samples. The Bureau was unable to fulfill these requests. In his letter to Borodin, Vavilov lamented that he could not even afford sending telegrams due to the lack of money and funds in the institution. To avoid the miscommunication, Vavilov cautioned Borodin to warn their American colleagues about “our difficulties and not to throw around any promises that we are not able to fulfill due to our current situation.”<sup>187</sup> Despite these financial problems, the Petrograd Bureau managed to send small seed shipments to the United States.

In addition to financial issues, shipping presented one of the most serious problems for seed exchange between the U.S. and Soviet Russia. While post-war shipping channels between the countries had been restored, internal Soviet shipping networks were still in a disarray after the October Revolution and the Civil War. For instance, in late 1921, Borodin shipped multiple containers with seeds and literature to the Petrograd Bureau. In his letter

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<sup>187</sup> Letter from Vavilov to Borodin, April 19, 1922, in Vavilov’s letters, voll1, page 29.

dated April 1922, Vavilov informed Borodin that he received only sixteen containers and was trying to locate others. Two containers were finally delivered to Moscow, and other two were sent to Petrozavodsk. To make matters worse, Vavilov experienced difficulties in getting these containers back. All these delays in shipments caused damage to seeds and plant samples. Many samples did not survive prolonged travels. Others arrived too late for the planting season and had to be used only during the next season. Some of them did not grow at all. In June 1923, Vavilov reported to Borodin that one quarter of 10,000 seed samples that he sent from the United States did not grow.<sup>188</sup>

Notwithstanding these difficulties, numerous varieties of American seeds reached Soviet agricultural experiment stations. As the RAA established and maintained business contacts with multiple experiment stations and seed breeding companies, seeds and plant samples from New York City, Minnesota, North and South Dakota were shipped to the Central Experiment Station in Petrograd. According to Borodin's inventory, only in 1923, he sent more than 8,000 seed samples.<sup>189</sup> Among those seeds were corn, sorghum, oats, beans, soy, peanuts, and sweet potatoes. While the list of shipped seeds was lengthy and Soviet experiment stations received a wide variety of seeds and plant samples, the Soviet side expressed particular interest in drought-resistant plant varieties, especially corn.

#### ***D. American Corn in the Soviet Steppes: RAA Corn Shipments and the 1920s Corn Campaign***

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<sup>188</sup> Letter from Vavilov to Borodin, June 20, 1923, 79.

<sup>189</sup> D.N. Borodin, "Introduktsia novykh kul'tur Russkim S.-Kh. Agentstvom (Biuro) v Amerike iz Novogo Sveta v S.S.S.R. i dr. raboty," *Obozrenie amerikanskogo sel'skogo khoziaistva* 2, no. 3 (September 15, 1925): 17.

The first and foremost goal of the Russian Agricultural Agency was to introduce American seeds with regard to their economic significance to Soviet agriculture. In its original plan, the Agency outlined five categories of seeds ranked from the most desirable to the less desirable. The first category included the introduction of grains, fodder crops, and special plants; the second one – vegetables; the third one – garden and fruit plants; the fourth one – medicinal plants; and the final one – decorative plants. The plant that, according to the Agency, had to be introduced “immediately” and “fully” (“*vo vsei vozmozhnoi polnote*”) was corn.

The RAA focus on corn was not accidental. Since the beginning of the Volga famine in 1921, Soviet state officials expressed immense interest in the cultivation of corn in regions that were prone to droughts.<sup>190</sup> In October 1921, Vladimir Lenin suggested that the All-Russian Committee to Aid the Hungry (*Komissiiia pomoshchi golodaiushchim*) should form a committee that would analyze the potential value of corn and its cultivation in southeastern regions of the Soviet Union, particularly Ukraine and the Volga region. According to the results of the committee’s survey, the cultivation of corn was “not only desirable but also necessary.”<sup>191</sup> The Committee decided that the Samara, Saratov, Markstadt, Tsaritsin, Stavropol, Ural, and part of Astrkhan’ guberniias were the most suitable areas for planting corn. Further, the Committee notified the Narkomzem that the Commissariat had to launch the corn campaign immediately. Moreover, the committee

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<sup>190</sup> It is worth noting that the cultivation of corn took place even in the Russian empire. But its cultivation was limited to the region of Georgia.

<sup>191</sup> “Bor’ba za budushchii urozhai: Kul’tura kukuruzy,” *Izvestiia*, October 30, 1921, no. 244, 2.

recommended that the Narkomzem would assist and teach local experiment stations how to plant, cultivate, and harvest corn.<sup>192</sup>

The state corn initiative was further buttressed by scientific findings of Soviet agronomists. One of the leading agrarians and promoters of agricultural experimental work, Nikolai Tulaikov, argued that corn should replace wheat in some dry-farming regions. In his brochure on corn, Tulaikov argued that corn, as well as potato and sunflower, was able to use rainfall in the second half of the summer to continue growing and providing more feed for animals during drought years.<sup>193</sup> Tulaikov's arguments found warm reception among plant breeders and Soviet state officials as they sought to find solutions to preventing future famines in the regions that were prone to droughts. Thus, when it was time to import corn varieties for Soviet breeding experiments, the United States offered a unique market.

In the United States, the RAA used its wide network of professional and commercial connections to obtain corn. Agricultural colleges and experiment stations became the primary suppliers of corn seeds. Yet, in addition to working with experiment stations, the RAA succeeded in receiving corn seeds from several Native American reservations. After Borodin contacted the Department of Interior, he established contacts with reservations in North Dakota, Wisconsin, Arizona, Florida, and New Mexico. In his words, corn varieties that these reservations shipped to the RAA were "rare" and "extremely precious."<sup>194</sup> Further, the RAA worked closely with several American seed companies. Among them

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<sup>192</sup> "Bor'ba za budushchii urozhai: Kul'tura kukuruzy," *Izvestiia*, October 30, 1921, no. 244, 2.

<sup>193</sup> Nikolai Tulaikov, *Kukuruza, ee vozdeleyvanie i ispol'zovanie* (Samara: gos. izd., 1922).



were S.D. Woodruff & Sons (CT), Northrup King & Co. (MN), Arizona Seed and Flora Co. (AZ), and Funk Bros. Co. (IL). The latter became one of the leaders in promoting scientific research in corn breeding.

Established in 1901, Funk Brothers differed from other seed companies. Unlike their competitors, it stressed the importance of plant breeding research and integrated most recent scientific trends into its breeding practices. In its public addresses, advertisements, and interviews, owners of the company emphasized their commitment to the scientific investigation of corn production. Moreover, Funk Brothers employed professional agronomists and even established a laboratory to conduct its own experiments. For instance, in 1917, Funk Brothers hired Purdue agronomist J.R. Holbert and acquired USDA support for his research of corn disease.<sup>195</sup> The company's ultimate goal was to improve corn performance through breeding. "Bred for vigor and freedom from disease," Funk Brothers' advertisements proclaimed to entice farmers to purchase their corn seeds.<sup>196</sup>

Of the multiple corn varieties bred by Funk Brothers, the RAA purchased those strains that were suitable for drought-prone regions. Among them were *90-days dent*, *Iowa Silver Mine*, *Gold Standard Leaming*, *Funk's 329*, and *Reid's yellow dent*. The choice of *Funk's 329* and *Iowa Silver Mine* was of particular interest. First, *Funk's 329* strain was the first variety ever established by controlled cross pollination of two families: 90-Day and Yellow

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<sup>194</sup> D.N. Borodin, "Introduktsia novykh kul'tur Russkim S.-Kh. Agentstvom (Biuro) v Amerike iz Novogo Sveta v S.S.S.R. i dr. raboty," *Obozrenie amerikanskogo sel'skogo khoziaistva* 2, no 4-5 (November 15, 1925): 33.

<sup>195</sup> "Field Survey Division Men Experimenting with Corn," *Daily Illinois*, May 23, 1923, 7.

<sup>196</sup> "Make 1921 a Record Crop," *Prairie Farmer*, March 19, 1921, 29; Deborah Fitzgerald devoted a wonderful chapter that discusses the Funk Brothers company's contribution to corn breeding. Deborah Fitzgerald, *The Business of Breeding: Hybrid Corn in Illinois, 1890-1940* (Ithaca: Cornell University Press, 1990), ch. 5.

Dent. It outyielded its parent strains by twenty bushels per acre and matured much earlier than other varieties.<sup>197</sup> With regard to *Iowa Silver Mine*, this strain showed remarkable drought-resisting properties and large yields. Thus, it was not surprising that the Russian Agricultural Agency purchased these strains of corn in large quantities.<sup>198</sup>

Over the course of three years (1922-1924), the Russian Agricultural Agency sent more than a thousand varieties of corn to Soviet Russia for experimental work. The Central Experiment Station in Petrograd that received these shipments kept some seeds for its own experiments and shipped the rest to Soviet experiment stations, including the ones in the Volga region and Ukraine.<sup>199</sup> Volga experiment stations embraced this challenge with enthusiasm, as their research on corn had been developing since the 1910s. For instance, the Bezenchuk experiment station in Samara that was presided over by Nikolai Tulaikov played an important role both in researching and promoting corn cultivation in other regions. In 1922, Tulaikov organized a committee to introduce the cultivation of corn in the Samara guberniya.<sup>200</sup>

Overall, the introduction of corn in the Volga region and Ukraine grew substantially over the next several years.<sup>201</sup> While in 1923, corn was planted on 1,700 thousands of

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<sup>197</sup> Funk Brothers Seed Company, *Funk Farms: Birthplace of Commercial Hybrid Corn. A History of Hybrid Corn*. (Bloomington: Funk Bros. Seed Co., 1940), 10.

<sup>198</sup> In May 1922, the RAA shipped 1,500 lbs of *Funk's 329* and 2,500 of *Iowa Silver Mine*.

<sup>199</sup> E.V. Dvoretkaia, "Uchastie uchenykh-agrarnikov Nizhnego Povolzh'ia v razrabotke zasukhoustoichivoi sistemy zernovogo proizvodstva v 1920-e gody," *Vestnik Saratovskogo gosudarstvennogo sotsial'no-ekonomicheskogo universiteta* no. 2(26) (2009): 136.

<sup>200</sup> V.A. Korchagin, "'Povolzh'e sebja opravdaet... Ono stanet zhitnitsei Rossii.' K 140-letiiu so dnia rozhdeniia akademika N.M. Tulaikova," *Izvestiia Samarskogo nauchnogo tsentra Rossiiskoi akademii nauk* 17, no. 4 (2015): 447-454.

<sup>201</sup> The Russian Agricultural Agency in New York would not be able to purchase seeds on a large scale for mass agricultural production until 1925.

desyatins; in 1924, this number grew to 1,870; in 1925 – 2,750. Such a vast growth of corn cultivation was explained by the profitability of corn and its high yields. Yet, by 1924 and early 1925, Soviet agricultural economists and state officials faced first problems with corn production. First and foremost, more than one third of annual corn crop was produced for export. To compete with the United States and Argentina, the Soviet Union had to export the best quality corn. Yet, due to several rainy years, a lot of corn was damaged, as Soviet corn growers did not have technologies and technological knowledge to store and dry corn.<sup>202</sup> While in the end, the Ukrainian State Trading Organization (Gostorg) allocated funds to purchase twenty drying machines from the United States, twenty machines could not sustain industrial corn production.<sup>203</sup> In addition to technological issues, Soviet farmers complained about the poor quality of corn seed that they received from abroad; local agricultural administrations lacked the infrastructure to efficiently export corn and had not established mechanisms for using corn as fodder.<sup>204</sup> All in all, by 1927, central Soviet newspapers were flooded with unfavorable articles on the perspectives of corn production and the failure of local bureaucracies to develop effective mechanisms for corn distribution.

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From 1924 to 1926, research-based seed exchange conducted through the Russian Agricultural Agency shifted towards a more commercial enterprise. In 1924, the People's Commissariat of Agriculture (Narkomzem) took control of the Russian Agricultural

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<sup>202</sup> "Kukuruznaia problema," *Izvestia*, October 6, 1925, no. 228.

<sup>203</sup> "450,000 i 1,300,000," *Pravda*, September 8, 1925, 1.

<sup>204</sup> Lev Sosnovskii, "Nad nami kaplet," *Pravda*, August 27, 1927, 6.

Agency. Nikolai Vavilov, then Head of the All-Union Institute of Applied Botany, continued to work with the RAA and Borodin but lost any authority to control the direction of RAA activities in the United States. In contrast to Vavilov who emphasized the role of the agency as the link between American and Soviet plant breeding research, the new RAA focused on commercial aspects of seed exchange. Borodin, who celebrated the expansion of this commercial activity at first, was soon discouraged. The Amtorg (Amtorg Trading Corporation), a Soviet organization that was responsible for trade with the United States, gradually assumed responsibilities for purchasing American seeds. In early 1925, Borodin expressed first concerns about the power of the Amtorg and predicted the future of the RAA when he stated that "the Amtorg would soon swallow us up." On August 5, 1926, Borodin sent his last letter to Vavilov, informing him that the battle with the Amtorg was lost. The Amtorg assumed all responsibilities for directing American seed purchases for Soviet agriculture.<sup>205</sup>

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<sup>205</sup> Borodin to Vavilov, August 5, 1926.

### III. Tractors and Expertise: The American Tractor Unit and the Agricultural Reconstruction of Soviet Russia, 1921-1923

The October Revolution inspired a wave of foreign migration to Soviet Russia. In the early 1920s, some Americans immigrated to Soviet Russia in search of an ideological refuge, better pay, and out of solidarity with its revolutionary ideals. Among this number, some answered the call of the Soviet authorities to help the newly formed state in its quest for industrial and agricultural reconstruction.<sup>206</sup> Inspired by the rhetoric of the October Revolution and the new opportunities for agricultural experiments offered by the Soviet state, these Americans traveled to aid the Bolsheviks in reforming the Soviet countryside. In turn, the Soviet state, beset with a farm crisis, peasant resistance, and the Volga famine in the early 1920s, accepted this help and encouraged the influx of foreign specialists, hoping that foreigners would provide valuable expertise in modern agriculture and technological assistance. Among these ventures was that of Harold Ware, whose spring 1922 initiative sought to bring a tractor unit to Soviet Russia in order to assist agricultural reconstruction.

In late 1921, Ware, an agrarian organizer of the Communist Party of America, formed an American tractor unit to help modernize the Soviet countryside. Disturbed by portends of

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<sup>206</sup> In his work *Farming the Red Land*, Jonathan Delek-Chen examines the Jewish agricultural colonies that were established in Crimea and Ukraine, focusing on the relationship between American-Jewish sponsors of the project, the Soviet authorities, and the colonists. In addition, Deborah Fitzgerald's *Every Farm a Factory* provides a short discussion of American agricultural projects in Soviet Russia during the 1920s and emphasizes American fascination with the opportunities that the Soviet state offered for agricultural experimentation.<sup>206</sup> Finally, Dana Dalrymple's article on American tractors offers an economic perspective on the growth of the tractor industry. Dana Dalrymple, "The American Tractor Comes to Soviet Agriculture: The Transfer of a Technology," *Technology and Culture* 5, 2 (1964): 191-214; Jonathan L. Dekel-Chen, *Farming the Red Land: Jewish Agricultural Colonization and Local Soviet Power, 1924-1941* (New Haven: Yale University Press, 2005); Deborah Fitzgerald, *Every Farm a Factory: The Industrial Ideal in American Agriculture* (New Haven: Yale University Press, 2003).

a worldwide agricultural depression in both the United States and Soviet Russia, Ware perceived an opportunity not only to aid the Soviets but also to test new ideas about farm organization, agricultural education, and the implementation of technology.<sup>207</sup> He insisted that Russian “climate conditions” and the “types of crops” that the Russians cultivated were similar to those found in America. Consequentially, “Americans, their methods and machinery,” Ware reasoned, would “be best equipped to assist with [Soviet Russia’s] agricultural reconstruction.”<sup>208</sup> Funded by the Friends of Soviet Russia, an international pro-communist relief organization, eleven members of the unit, including Ware and his wife Clarissa, six North Dakota farmers, a tractor mechanic, a doctor, and an interpreter, traveled thousands miles into an “abandoned” sovkhos near Toikino village, in the Perm gubernia. In addition to smaller agricultural equipment and spare parts, the unit carried twenty J.I Case and one Fordson tractors, effectively twenty-one times the amount of tractors imported to Soviet Russia in the previous year.<sup>209</sup> For Ware, as well as for Soviet state officials involved in the negotiations, these tractors provided not only a solution to the Soviet farm crisis, but also their introduction to the countryside would be integral to the development of modern agriculture.

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<sup>207</sup> In contrast to American agricultural communes that settled permanently in the Russian steppes in the early 1920s, Ware perceived his project as a temporary measure. Seth Bernstein and Robert Cherny, “Searching for the Soviet Dream: Prosperity and Disillusionment on the Soviet Seattle Agricultural Commune, 1922-1927,” *Agricultural History* 88, 1 (2014): 22-44.

<sup>208</sup> Permskii gosudarstvennyi arkhiv noveishei istorii (PermGANI), f. 557 (Permskii gubkom RKP(b), Permskaya guberniia), op. 3, d. 68, l. 2 (Harold Ware, “Soobshchenie direktora pervogo amerikanskogo soiuzna traktorov H.M. Ware o sovkhoze,” no earlier than September 1922).

<sup>209</sup> In 1920, only one tractor was imported from the United States to Soviet Russia. Dalrymple, “The American Tractor Comes to Soviet Agriculture: The Transfer of a Technology,” 193.

While Ware's plans for the introduction of modern farming in the Toikino sovkhos were short-lived, leaving the Perm gubernia after one farming season, the story of the American tractor unit opens a window into a larger history of the circulation of ideas about technology, power, modernization, and science during the early Soviet period.<sup>210</sup> During those short summer months of 1922, the Toikino sovkhos became the locale for the dissemination of technological know-how, ideas about farm organization, and discussions about the ownership of technology and the leadership in the process of agricultural reconstruction. Over the course of several months, multiple representatives of state agencies, local administrations, scientific institutions, and peasants from nearby and faraway villages witnessed the work of the unit. Yet, it was not a simple act of transferring technological knowledge and expertise. Each institution and actor carried their own view of the future development of the region's and Soviet agriculture, in general, and contributed to these debates as well as to the eventual dismantling of the unit's work.<sup>211</sup>

In interweaving the history of technology, agriculture, science, and political history, this chapter demonstrates that the introduction of farm modernization and mechanization in Soviet Russia during the early 1920s was a complex process, defying a binary narrative of

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<sup>210</sup> Susan Gross Solomon, "Circulation of Knowledge and the Russian Locale," *Kritika: Explorations in Russian and Eurasian History* 9, 1 (2008): 9-25; Yves Cohen, "Circulatory Localities: The Example of Stalinism in the 1930s," *Kritika: Explorations in Russian and Eurasian History* 11, 1 (2010): 11-45; Yves Cohen, "The Soviet Fordson. Between the Politics of Stalin and the Philosophy of Ford, 1924-1932," in Hubert Bonin et al., eds., *Ford, 1903-2003: The European History*, vol. 2 (Paris: P.L.A.G.E., 2003): 531-558; Michael Werner and Bénédicte Zimmerman, "Beyond Comparison: Histoire Croisée and the Challenge of Reflexivity," *History and Theory* 45, 1 (2006): 30-50.

<sup>211</sup> Dalrymple, "The American Tractor Comes to Soviet Agriculture"; Anthony Sutton, *Western Technology and Soviet Economic Development*, 2 vols. (Stanford: Hoover Institution Publications, 1968-1971); Kendall Bailes, *Technology and Society under Lenin and Stalin: Origins of the Soviet Technical Intelligentsia, 1917-1941* (Princeton: Princeton University Press, 1978).

“success” or “failure.” The history of the American tractor unit reveals that the Soviet state was not prepared to effectively manage foreign technical aid, highlighting its naive reliance on the managing abilities of local institutions. Further, it illuminates the reluctance of local agricultural specialists (agronomists) to blindly accept American technological assistance. Rather than being passive acceptors of foreign aid, these specialists had a great deal of their own agency within the scientific structure of the new Soviet state in that they openly questioned the American expertise and sought to take leading positions in the agricultural reconstruction. Finally, the article reveals how the local context, in this case, the rural region of the Southern Urals, affected the tractor unit’s perceptions of technology and methods of its implementation.<sup>212</sup> While Ware believed in the Soviet experiment, promoting it extensively in the United States, his work in Toikino village and his report for the future development of the region relied on an American model of the farm organization. His misunderstanding of the Soviet reality and his insistence on the dominance of American experts in agricultural reconstruction further contributed to the gap between the unit and local institutions. In the end, peasants resisted the introduction of new technology and the interference of foreign and Soviet experts into the traditional agricultural practices by, among other things, breaking tractors and stealing fuel. As a result other agents, such as the central state, local institutions, Americans, and agricultural specialists, were forced to negotiate the implementation of technology and, even more important, the power over that technology with local populations during the early 1920s.

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<sup>212</sup> The idea of the transformation of scientific knowledge and the role of intercultural encounter in the creation of knowledge is adopted from: Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Scientific Knowledge in South Asia and Europe* (New York: Palgrave Macmillan, 2007).



### ***A. The Russian Countryside, Technology, and the New Soviet State, 1914-1921***

Before the First World War, Russian agriculture faced major challenges in the countryside and on the world market. Despite the increase in crop yields from 1895 to 1913, peasants struggled to produce enough to hold Russia's dominant position on the European grain market and to compete with emerging grain exporters, such as Canada, the United States, and Argentina. As grain export constituted over seventy percent of Russia's foreign trade, the Ministry of Agriculture and local land committees (*zemstvos*), as well as the new generation of agricultural specialists, sought to find solutions to the modernization of peasant farms. The communal system of agriculture, three-field fallow system of farming, and the use of outdated technology were among the most prescient issues that officials identified. While the Pyotr Stolypin reforms, which combatted the commune and promoted the development of large-scale individual farming, as well as the introduction of modest agricultural knowledge and technology, had some success, by the eve of the First World War, eighty-two percent of the population still lived in communes in rural areas, largely ploughed with wooden plows, had only heard rumors of mechanized farming, and rarely received any agronomic aid from the state.<sup>213</sup>

After the 1917 October Revolution, the early Bolshevik state inherited the previous regime's food supply problems, further exacerbated by the disruption of the First World War. Then there was the matter of land redistribution. While the regime nationalized the countryside, allowing peasants to officially redistribute the *pomeshchiks'* property,

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<sup>213</sup> James Heinzen, *Inventing a Soviet Countryside: State Power and the Transformation of Rural Russia, 1917-1929* (Pittsburgh: University of Pittsburgh Press, 2004), 13-16; Peter Holquist, *Making War, Forging Revolution: Russia's Continuum of Crisis, 1914-1921* (Cambridge: Harvard University Press, 2002), 12-18; Zhores A. Medvedev, *Soviet Agriculture* (New York: W.W. Norton & Company, 1987), 7, 13-14.

Bolshevik food requisition policies that took place after the October Revolution and during the Civil War significantly undermined peasant trust in the new regime. More important, war communism policies undermined agricultural production that, coupled with the drought in the Volga basin in 1919-1920, led to severe famine conditions between 1919-1922. In response to these policies, mass demonstrations not only among peasants but among workers in 1920-21 caused the new regime to abandon war communism strategies and to accept the New Economic Policy which legalized free trade in food and consumer goods and employed proportional tax on food surpluses.<sup>214</sup>

While these policies revived agricultural production to some extent and provided enough supply to feed an urban population diminished by the Civil War, peasants, according to the Bolsheviks, still did not produce enough grain to launch any form of industrialization.<sup>215</sup> To encourage agricultural production, the Bolsheviks envisioned cooperative development and the implementation of farm mechanization.<sup>216</sup> As for the latter, the Bolsheviks perceived technology and related expertise as the primary solution to the modernization of Soviet agriculture.<sup>217</sup> Technology, they believed, would break the communal living pattern and allow the village to turn into more productive units, such as collective farms.<sup>218</sup> As a result, not only would technology increase farm productivity, but

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<sup>214</sup> Medvedev, *Soviet Agriculture*, 32-39; Dekel-Chen, *Farming the Red Land*, 12-13.

<sup>215</sup> V.I. Lenin, "Doklad o rabote v derevne 23 marta," VII s'ezd RKP(b), March 23, 1919 in V.I. Lenin, *Polnoe Sobranie Sochinenii*, 5<sup>th</sup> ed., vol. 38 (Moscow: Izdatelstvo politicheskoi literatury, 1969), 204.

<sup>216</sup> Medvedev, *Soviet Agriculture*, 43; Fitzgerald, *Every Farm a Factory*, 158-59.

<sup>217</sup> Paul R. Josephson, "'Projects of the Century' in Soviet History: Large-Scale Technologies from Lenin to Gorbachev," *Technology and Culture* 36, 3 (1995): 519-59.

<sup>218</sup> Fitzgerald, *Every Farm a Factory*, 158-59.

also it would change the lives of Russian peasants by transforming them from backward manual laborers to highly qualified workers. Through this social and technological transformation, the Soviet state believed it would be able to create an exemplary model of socialist agriculture that could be transferred to other countries around the world.<sup>219</sup>

Inspired by this futuristic vision of modern socialist agriculture, the Bolsheviks turned to foreign agricultural expertise to acquire the most up-to-date agricultural knowledge and technology. While they encouraged European agricultural companies and experts to participate in the reconstruction of the Russian countryside as well, the Bolsheviks viewed American advancements in agriculture as *avant-garde* in the post-WWI rural economics. “Americanism,” the product of merging Taylorism and Fordism in the minds of Bolshevik ideologues, signified modernity, efficiency, and progress.<sup>220</sup> As a result, since the early days of the regime, V.I. Lenin encouraged Russian tractor engineers to purchase limited numbers of American tractors and use them for research and the eventual establishment of the Russian tractor industry.<sup>221</sup>

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<sup>219</sup> Jenny Leigh Smith, *Works in Progress: Plans and Realities of Soviet Farms, 1930-1963* (New Haven: Yale University Press, 2014), 1.

<sup>220</sup> Richard Stites, *Revolutionary Dreams: Utopian Vision and Experimental Life in the Russian Revolution* (New York: Oxford University Press, 1989), 148. While the fascination with American agricultural technology had existed prior to 1917 and the imperial government collaborated with the McCormick company, Soviet leaders’ vision of American agricultural expertise further intensified the introduction of this particular technology and knowledge into the Russian countryside. Fred V. Carstensen, *American Enterprise in Foreign Markets: Singer and International Harvester in Imperial Russia* (Chapel Hill: University of North Carolina Press, 1984).

<sup>221</sup> In March 1918, Yakov Mamin who is considered to be one of the founders of Russian tractor engineering demonstrated Lenin the design of his tractor “Dwarf.” In response, Lenin ordered Mamin to purchase foreign tractor samples. Meanwhile, the Petrograd factory “Bolshevik” began manufacturing tractors by copying the American tractor “Holt.” Later, in 1923, after the special commission investigated best tractors, the Putilov factory launched the manufacturing of Fordsons. S.I. Illiev, “Iz istorii sozdaniya otechestvennoi traktornoj promyshlennosti,” *Izvestiia Penzenskogo gosudarstvennogo pedagogicheskogo universiteta im. V.G. Belinskogo*, no. 3(2007): 100.

For Lenin, tractors, particularly American ones, were more than merely machines. They signified the solution to bridging the gap between Soviet workers and peasants. At the VIII Plenum of RKP(b) in March 1919, Lenin proclaimed that the central goal of the party was to win trust of the Russian peasant through technical aid, particularly tractors.<sup>222</sup> “If we can get 100,000 first-class tractors, provide fuel, and hire mechanics,” Lenin addressed party members, the “peasant would say: ‘I’m for *kommunia* (i.e. communism).’”<sup>223</sup> Moreover, this “trust” between workers and peasants, according to Lenin, would prove to be an essential component for the successful industrialization of the country, as increasing agricultural production would ensure well-fed workers who would actively participate in the industrialization process. To this end, obtaining agricultural machinery, in particular tractors, was a critical step in the Bolshevik vision of agricultural reconstruction and the building of a united socialist front.

Getting tractors into the countryside, according to Lenin, could happen only through two channels: either producing Soviet tractors, which Lenin acknowledged, was a dream at that point, or importing them from abroad.<sup>224</sup> In the summer of 1921, incapable of fighting the famine of 1921 in the Volga area, the Soviets were forced to ask the international community for food relief. In addition to accepting food relief from the American Relief Administration and multiple international organizations, the Soviet authorities perceived the famine of 1921 as an opportunity to encourage more agricultural immigration from the

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<sup>222</sup> Lenin, “Doklad of rabote v derevne, 23 marta,” in *Polnoe sobranie sochinenii*, vol. 38, 204.

<sup>223</sup> Lenin, “Doklad of rabote v derevne, 23 marta,” in *Polnoe sobranie sochinenii*, vol. 38, 204.

<sup>224</sup> Lenin, “Doklad of rabote v derevne, 23 marta,” in *Polnoe sobranie sochinenii*, vol. 38, 204.

United States. Through pro-communist relief organizations based in the United States, such as the Friends of Soviet Russia (FSR), the Soviet government sought to attract American agricultural experts to rebuild the Soviet countryside by introducing tractors and educating peasants about modern agricultural methods. In turn, American pro-communist agricultural experts, such as Harold Ware and his American tractor unit, sought to gain knowledge about large-scale agriculture, innovative methods of agricultural reconstruction and education.<sup>225</sup>

### ***B. Harold Ware: American Agrarian Organizer and “Western Pioneer” in Russia***

In May 1922, the Friends of Soviet Russia sent its first tractor unit under the supervision of fellow communist and future New Dealer, Harold Ware. Ware (1889-1935), the son of well-known labor activist and socialist organizer, Ella Reeve Bloor, was considered to be one of the foremost experts on agriculture within the Communist Party of America.<sup>226</sup> He graduated from the Pennsylvania Agricultural College and worked on multiple farms, gaining valuable experience in the field. In 1913, Ware was among the first farmers in the Downingtown area (PA) who introduced tractors to his Jolly Waters Farm. After selling the farm three years later, Ware worked in a shipyard where he got involved into the labor

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<sup>225</sup> Bruno Cabanes, *The Great War and the Origins of Humanitarianism, 1918-1924* (Cambridge: Cambridge University Press, 2014); David Engerman, *Modernization from the Other Shore: American Intellectuals and the Romance of Russian Development* (Cambridge: Harvard University Press, 2009); Bertrand M. Patenaude, *The Big Show in Bololand: The American Relief Expedition to Soviet Russia in the Famine of 1921* (Stanford: Stanford University Press, 2002); Benjamin M. Weissman, *Herbert Hoover and Famine Relief to Soviet Russia, 1921-1923* (Stanford: Hoover Institution Press, 1974).

<sup>226</sup> Ella Reeve Bloor was a famous American labor organizer, an activist in the socialist and communist movements, and a member of the Communist Party of America. Mary E. Triece, *On the Picket Line: Strategies of Working-Class Women during the Depression* (Chicago: University of Illinois Press, 2007).

movement. During the later years of the First World War, he joined the Worker's Party of America (the antecedent of the CPA) and delved into the world of American rural politics.<sup>227</sup>

Yet, it was the October Revolution that was pivotal for the development of Ware's ideas about agricultural modernization, the farm crisis, and the gap between the city and the farm. After the revolution, Ware, according to his mother, was convinced that Russian "peasants received an opportunity to solve their problems once and for all, and that their experience will have a great importance to us in America."<sup>228</sup> This perception would guide Ware's agricultural projects in Russia in that he sought not only to reconstruct the Russian countryside but also to learn more about educating peasants both about new methods of agriculture and about communism and class struggle.

One year prior to his departure to Russia, Ware traveled as an undercover "stiff" with "five dollars in his pocket" across the United States, recording "American agricultural problems."<sup>229</sup> The CPA sent Ware on this trip after Lenin's appeal to American communists to send him materials about the farm situation in the United States. Lenin bluntly inquired, "Have you no farmers in America?"<sup>230</sup> As a result of Lenin's appeal and CPA's directives, Ware traveled from May to October 1921, moving with other migrant workers all over the United States. He went from planting of "fuzzy cotton seeds in the South" during spring to

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<sup>227</sup> Lement Harris, *Harold Ware – Agricultural Pioneer* (New York: American Institute for Marxist Studies, 1978), 8-11.

<sup>228</sup> Ella Reeve Bloor, *We are Many: An Autobiography of Ella Reeve Bloor* (New York: International Publishers, 1940).

<sup>229</sup> Harold Ware, "American Agricultural Problems," *The Toiler*, 12 November 1921; Ware, "Our Agrarian Problem," *The Communist* 1, 5 (1921): 20-21, 23.

<sup>230</sup> John L. Shover, "The Communist Party and the Midwest Farm Crisis of 1933," *The Journal of American History* 51, 2 (1964): 251.

the “cultivation of the fruit orchards of the Pacific coast” to “burned fields of Montana and the great harvests of golden grain” in the Dakotas and Kansas.<sup>231</sup> There, in Montana and the Dakotas, Ware met members of the Nonpartisan League that, according to one historian, “rattled the foundations of American politics in the 1910s and 1920s” by engaging western farmers into “electoral politics.”<sup>232</sup> Some of the Nonpartisan League members would later join Ware in his Russian agricultural ventures.

In his reports to the CPA, Ware echoed Lenin’s concerns about the gap between farmers and workers and emphasized the urgency of organizing farm workers to close this gap. In his November 1921 report “American Agricultural Problems,” Ware portrayed destitution, physical and “spiritual starvation” of American farmers whose dreams about “economic independence” were crushed by the creeping postwar agricultural depression.<sup>233</sup> He argued that even the most advanced agricultural technology could not help American farmers to deal with the crisis. For Ware, technology represented a double-edged sword in that it led to both improvements in agricultural production and the “exploit[ation]” of farmers. In his later reports, Ware stated that “young American farmers” were “disappointed” in the American farm policy and “imperialistic conditions” that they worked in. These conditions, he contended, made farmers use newest machines and “forced them individually to combine with the more organized urban industries.” To Ware, this was the moment where the CPA had to interfere by organizing farmers, insisting it should reorganize the centralized Agrarian Bureau so it could respond to the needs of farm workers who had been dismissed

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<sup>231</sup> Ware, “American Agricultural Problems.”

<sup>232</sup> Michael Lansing, *Insurgent Democracy: The Nonpartisan League in North American Politics* (Chicago: University of Chicago Press, 2015), 2.

<sup>233</sup> Ware, “American Agricultural Problems.”

by the Party as “counterrevolutionary forces.”<sup>234</sup> By contrast, Ware considered “the producers of food” to be integral undermining capitalist exploitation. In his mind, “the critical battles” on the socialist front would “be for *Food*.”<sup>235</sup>

Ware’s 1921 report to the CPA on the agricultural situation in the United States eventually reached Lenin. During her meeting with Lenin in the spring of 1921, Ware’s mother and prominent socialist organizer, Ella Bloor, reminded Lenin that the report was “the work of one of [her] sons.”<sup>236</sup> Lenin acknowledged and highly praised Ware’s work.<sup>237</sup> For him, the transformation of Soviet agriculture, in particular, its technological modernization based on American ideas, was of utmost importance. In one of his letters, Lenin wrote that he dreamt that the Russian peasantry would soon move from the outdated methods of agriculture to the “horse of the big machine industry.”<sup>238</sup> As a result, when the FSR informed Soviet authorities that Harold Ware was going to organize a tractor unit to Russia, they readily accepted, as they were already familiar with him and his agricultural work. All that was left was to secure sufficient funding.

While traveling across the United States and recording his observations on the American agricultural situation, Ware got acquainted with Lincoln Steffens, an American journalist, who had just returned from Russia and was touring the United States with lectures

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<sup>234</sup> Ware, “Soobshchenie direktora pervogo amerikanskogo soiuz traktorov H.M. Ware o sovkhoe,” no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 2); Ware, “Our Agrarian Problem,” 3.

<sup>235</sup> Ware, “Our Agrarian Problem,” 3.

<sup>236</sup> Quoted in O.D. Sokolov, “Pis’ma V.I. Leninu iz-za rubezha,” *Istoriya SSSR*, no. 2 (1960): 117.

<sup>237</sup> Bloor, *We are Many*, 270.

<sup>238</sup> Lenin, “Luchshe men’she, da luchshe,” *Pravda*, 4 March 1923.



associated with the Friends of Soviet Russia and their relief projects.<sup>239</sup> According to the reminiscences of an American farmer Philipp Smith, Lincoln Steffens collected \$70,000 during his tours and was going to give this money to fund food aid to Russia. However, Ware proposed another plan. He appealed to Steffens and the FSR to use this money to finance his group of American farmers and technicians who would travel to Russia equipped with agricultural machinery to cultivate land.<sup>240</sup> In early 1922, the FSR agreed and facilitated the trip of Ware's tractor unit to Russia.

### ***C. The American Vision for the Future of the "Abandoned" Sovkhoz, May-November 1922***

On May 10, 1922, Harold Ware and his unit left the United States for a long trip to Russia.<sup>241</sup> Occupying twenty train cars, the Ware unit carried \$50,000 worth of tractors, agricultural equipment, and spare parts, as well as other necessities to organize agricultural

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<sup>239</sup> Elizabeth G. Flynn, *I Speak My Own Piece* (New York: Masses & Mainstream, Inc., 1955), 276; "Stand by Soviet Russia," no later than 15 November 1921 (RGASPI f. 538, op. 2, d. 5, l. 41). The brochure was published some time before November 15, 1921 because Broms is still listed as a secretary.

<sup>240</sup> F. U. Smith, "Ochima amerikanskogo fermera," *Vechernii Kiev*, 23 June 1960, quoted in A.A. Makarenko, *Mirovoi Proletariat – Strane Sovetov* (Kiev: Izdatel'stvo Akademii Nauk Ukrainskoi SSR, 1963), 207.

<sup>241</sup> The tractor unit included Joseph Broecker (the tractor expert from the J.I. Case Threshing Machine Co.), George Iverson, Charles H. Heck, Otto Andstrom, Seaborn Erickson, Mikke Meling, John Schlonborger, Clarissa Ware, and Ivan Polischuk (a worker from Kiev who had lived in America for twelve years), as well as "doctor Gudash." Iverson, Heck, and Andstrom were the "North Dakota boys" and might have been members of the Nonpartisan League, or at least had some ties with the organization. Anna Louise Strong, "North Dakota in the Urals," *Soviet Russia Pictorial*, May 1923, 91; Makarenko, *Mirovoy Proletariat – Strane Sovetov*, 207.

work in Soviet Russia. Familiar with the devastating effects of the Volga famine, Ware hoped that the tractor unit would receive land for its operation in the Volga region. Not only was it a famine-stricken area that required agricultural reconstruction, but also the Volga region had the best land for tractors and had lots of geographic similarities with areas in Montana and South Dakota.<sup>242</sup> However, when the tractor unit arrived in Moscow in June 1922, the Soviet authorities informed Ware that the unit was assigned 14,000 acres in Toikino, the Sarapulsky uezd, within the Perm guberniya.<sup>243</sup> Such an unexpected turn of events appeared to be only one of the first obstacles that Ware's unit encountered during its work in Russia.

Harold Ware did not expect to travel to Perm, almost a thousand miles to the east of Moscow. Situated in the European part of Russia, near the Ural Mountains, the Perm guberniya had long, cold, and snowy winters with short and warm summers and clay soils suitable for growing rye. In contrast to the Volga region, the Toikino area was not as fertile and suitable for growing wheat. In spite of Ware's protests, the Soviets insisted that his unit had to establish its operations in an "abandoned sovkhos" near the Toikino village surrounded by "typical Russian village roads" and unsteady bridges that could not carry tractors. Moreover, according to Ware, the land itself had not been used for a long time,

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<sup>242</sup> Ware, "Soobshchenie direktora pervogo amerikanskogo soiuz traktorov H.M. Ware o sovkhoze," no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 2).

<sup>243</sup> Harold Ware's name in the CP was Harrow to underscore his responsibility for dealing with agricultural questions in the party. "Minutes of the Central Executive Committee of the Communist Party of America," New York - March 8, 10, 14, 16, 23, 27, 29, 31, 1922. The Comintern Archive, f. 515, op. 1, d. 94, ll. 12-20. Accessed: <https://www.marxists.org/history/usa/parties/cpusa/1922/02/0200-cec-minutes.pdf> (November 27, 2017)

ranging from four to ten years.<sup>244</sup> It was hilly and full of Kolchak's trenches. All in all, when the group finally arrived to the Vereshchagino station, forty-five miles away from Toikino, on July 1, Ware knew that the land was not suitable for the tasks that the tractor unit intended to accomplish.<sup>245</sup>

Despite this first disappointment, the American tractor unit, according to local newspapers, victoriously entered the Vereshchagino village on July 8, gathering more than 2,000 peasants from surrounding areas to witness the arrival of Americans and their tractors. For Ware, local administrators, and peasants, this moment was the first place from which ideas about agricultural technology would disseminate further. According to local newspapers, peasants gathered around the train platform where "proud, powerful" tractors were standing. These "outlandish machines," the newspaper reported, were met with mixed feelings of "disbelief" and fascination. While some peasants declared the superiority of the traditional plow, others mocked bystanders: "Look, know-it-all! Your wooden plow is for picking; and this is the power!" Others perceived tractors as another way of state torment and lamented that authorities would "torture the people again with this monster train [*paravozina*]." Even the kulaks whispered: "Look, *merikanets* [the American] wants to work with disregard to Christian ways. Now the bread will smell like gas."<sup>246</sup> In this way, peasants perceived their outdated plows not only as a tool for cultivating land, but also as a religious symbol of traditional ways which the Soviets and foreigners sought to modernize.

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<sup>244</sup> Ware, "Soobshchenie direktora pervogo amerikanskogo soiuz traktorov H.M. Ware o sovkhoze," no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 2).

<sup>245</sup> Quoted in: Olga Ivanova, "Sociokulturnaya adaptaziya inostrantsev v Sovetskoi Rossii v 1920-1930-e god" (Ph.D., Rossiiskii Institut Kulturologii, 2007), 85; Makarenko, *Mirovoy Proletariat – Strane Sovetov*, 207-8.

<sup>246</sup> Kas'ian, "Putevye nabroski," *Zvezda*, 13 August 1922.

Thus, this general feeling of suspicion mixed with delight prevailed among peasants as the tractor unit moved from Vereshchagino to Toikino.

Local administrators cheerfully welcomed the arrival of the tractor unit. Local communist organizers expressed their gratitude and promised in a conventional communist style to aid the unit to “restore agriculture in free Soviet Russia.”<sup>247</sup> More importantly, for them, the work of the American tractor unit and its introduction of mechanization into Russian agriculture signified more than just an innovative way to cultivate the land. It was a political move by the party demonstrating peasants that the Bolsheviks cared about the Russian village. This strategy echoed Lenin’s rhetoric about winning the peasant’s trust to ensure the success of industrialization.

As for Ware and his unit, they understood the importance of counteracting these feelings to ensure the success of the tractor project. In his appeal to Russian peasants, Ware assured the local population that the American group did not come to exploit them with tractors. On the contrary, Americans, he proclaimed, came to reconstruct Russian agriculture by bringing technology and new farm methods to the Russian countryside. Additionally, Ware emphasized that every tractor was the gift of American workers to Russian peasants and proudly showed a wooden plate nailed to every tractor “The gift of American workers to Russian workers.” Hence, not only did tractors symbolize progress in Ware’s speech, but also they represented the charitable nature of the American operation and their role as instructors for the Russian peasant.<sup>248</sup>

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<sup>247</sup> “Eto otsenil Lenin,” 14, quoted in Makarenko, *Mirovoy Proletariat – Strane Sovetov*, 208.

<sup>248</sup> After the unit left Vereshchagino for Toikino on July 15, it participated in another mass meeting in the village of Ochera where more than thirty villages sent 1,200 people. Harold Ware, “Amerikanskii traktornyi otriad,” *Pravda*, October 15, 1922.

To fulfill its teaching mission, the American tractor unit employed tractor demonstrations and tractor courses. As for the former, on August 6, 1922, Ware's unit gathered more than 3,000 peasants to demonstrate the work of American agricultural machinery.<sup>249</sup> According to the local newspaper report, some peasants traveled more than twenty miles to see the Americans and their machines. Ware himself confirmed in his interview to Anna Louise Strong that peasants "came from miles around to see us."<sup>250</sup> To show the radical difference between a tractor and a horse, Ware made one peasant "plough with his horse and another with one of our tractors alongside him." A local newspaper reporter later noted that the more the crowd looked at the "striking work of tractors," the more it "pitied" the work of "our wooden plough" dragged by an "exhausted horse."<sup>251</sup> Moreover, Ware showed that tractors could be operated not only by men but also by women. In his reminiscences, he noted that "one of the things that made them talk for days was when we had a woman [Clarissa Ware] run a tractor."<sup>252</sup> A woman operating a tractor shocked the villagers. According to one account, the locals called Clarissa Ware "*Supolen*" which the local dialect defined as "neither a man nor a woman."<sup>253</sup> Therefore, the American

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<sup>249</sup> It is hard to judge the actual number of peasants who came or were forced to come to the demonstration because the report of the demonstration was published in a communist newspaper which could have exaggerated the number. "Eto otsenil Lenin," 14, quoted in Makarenko, *Mirovoy Proletariat – Strane Sovetov*, 208.

<sup>250</sup> Strong, "North Dakota in the Urals," 91.

<sup>251</sup> "Eto otsenil Lenin," 14, quoted in Makarenko, *Mirovoy Proletariat – Strane Sovetov*, 209.

<sup>252</sup> Strong, "North Dakota in the Urals," 91.

<sup>253</sup> Interview with Pelageya Stepanovna Degtyaryeva, December 2005, quoted in Svetlana Fedotova and Egor Garaev, "'Merikantsy' v Permskoy gubernii," *Kompan'on Magazine*, no. 5 (September 2006): 47.

tractor unit challenged the perception of farm work and the use of technology as a purely masculine task.

With regard to tractor courses, the American tractor unit educational courses for Russian peasants and workers who were willing to learn how to use tractors. Ware insisted that “a peasant who learned how to work a tractor” would never be satisfied with his present state. In Ware’s view, the peasant with tractor skills would become “the center of propaganda among his own villagers.” As this peasant, Ware continued, would propagate the methods of large-scale agriculture, he would facilitate the future establishment of collective farms.<sup>254</sup> More than forty Russian peasants joined Ware’s tractor courses. When the representative of the CPA, J.G. Andreychin, inspected the tractor unit, he reported that “Russian workers rode tractors and appeared to be hardworking and intelligent laborers.” They worked, Andreychin continued, for “12-14 hours,” despite “poor nutrition and intolerable living conditions.” Their enthusiasm, Andreychin concluded, was so apparent that a “week before the beginning of the seeding campaign, the Russians declared their willingness to work fourteen hours a day, to the great amusement of Americans.”<sup>255</sup>

In the eyes of the Americans, the Russian peasant went through an individual transformation kindled by the introduction of American tractors into his/her life. This transformation appears quite often in the narratives that the Ware unit shared with the American public.<sup>256</sup> When Clarissa Ware reported about the trip of the tractor unit to Toikino, she represented American farmers within the discourse of the American frontier

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<sup>254</sup> Ware, “Amerikanskii traktornyi otriad,” *Pravda*, October 15, 1922.

<sup>255</sup> GARF, f. 1065 (Tsentralnaia komissiiia po bor’be s posledstviiami goloda (TsK Posledgol) pri VTsIK RSFSR), op. 3, d. 57, l. 11, quoted in: “Eto otsenil Lenin,” 14, quote in Makarenko, *Mirovoy Proletariat – Strane Sovetov*, 210.

<sup>256</sup> Clarissa Ware, “In Russia with Western Pioneers,” *Survey* 19, 3 (1922): 162; Strong, “North Dakota in the Urals,” 91.

where Americans were portrayed as “pioneers.” Utilizing this romanticized rhetoric of discovery, exploration, and an encounter with native people (i.e. Russian peasants), Clarissa Ware depicted the backwardness of the Russian peasantry and the intellectual and technological superiority of the Americans.<sup>257</sup> Even Harold Ware himself used the language of underdevelopment in the descriptions of his first encounters with the Russian rural life. For instance, when Ware discussed his unit’s arrival to Vereschagino, he portrayed the naiveté of peasants with “their little hand hoes” trying to cut ruts which “they thought our tractors could not negotiate.” On the other hand, Ware presented his unit as a powerful example of American technology when he discussed how American tractors easily “cut down the ruts” and crowned “the road as [they] went.” Thus, American narratives begin with the imagination of the backwardness of Russian peasants before their “contact” with American farmers.<sup>258</sup>

Yet, the “contact” with Americans and their technology, according to the Ware unit, changed the image of Russian peasants: from “ignorant and illiterate,” according to one of the unit’s members, to hard-working and able laborers.<sup>259</sup> “He’s going to get ahead,” one of the unit’s members claimed. Americans perceived themselves as that link that transformed and or gave birth to a new peasant who was “able to reconstruct Russian agriculture in the near future.” By presenting the abilities of Russian peasants to transform from their backwardness to intelligence, the unit members hinted that intelligence was not enough. They pointed to American farmers who were “most intelligent, skilled farmers in the world,

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<sup>257</sup> Clarissa Ware, “In Russia with Western Pioneers,” 162.

<sup>258</sup> Strong, “North Dakota in the Urals,” 91.

<sup>259</sup> Strong, “North Dakota in the Urals,” 91.

with the best machinery.” Thus, there was another ingredient for the recipe of successful agricultural reconstruction. The state and its policies mattered, Ware argued. Ware described the benefits that the socialist state gave to Russian peasants and contrasted them with corporations and the middlemen that contributed to the destitute of American farmers. By portraying this transformation of the Russian peasant, the Ware unit tried to make their readers think about the state of American agriculture and issues within American state farm policies.<sup>260</sup>

The importance of introducing technology to the Russian countryside was a major theme in the observations written by foreign journalists for American readers in the *Soviet Russia* magazine. For instance, A.C. Freeman who visited Toikino in the summer of 1922 emphasized that the introduction of tractors and the demonstration of their potential was “unquestionably” the best way to reconstruct Russian agriculture and to overcome “the narrow individualistic psychology” of “the stupidest and most conservative of the muzhiks.”<sup>261</sup> Further, Freeman shared Ware’s mission in that the introduction of technology would not only reconstruct the Russian countryside but would also help “prevent famine” in the future. Both Freeman and Ware hoped that this experience would stimulate peasants to form collective communes for agricultural work. In his article, Freeman pointed out that Ware’s work kindled “the formation of two new agricultural communes and saved the existence of another which was on the point of dissolution.”<sup>262</sup> Thus, in his words, the introduction of tractors was even more important as it stimulated new forms of agricultural

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<sup>260</sup> Strong, “North Dakota in the Urals,” 91, 106.

<sup>261</sup> A.C. Freeman, “Ploughing Up Kolchak’s Trenches,” *Soviet Russia* (November 1922): 232. A.C. Freeman was pseudonym for William Henry Chamberlin, an American historian and journalist who worked in Soviet Russia from 1922 to 1934.

<sup>262</sup> Freeman, “Ploughing Up Kolchak’s Trenches,” 233.



organization – collective farming. This idea went hand in hand with Soviet authorities' perspective on the development of agriculture in the early 1920s.

As the farm season was getting to the end in 1922, the question of who would continue to mechanize agriculture in the Toikino village became a point of discussion. Before his departure from the Perm guberniya, Harold Ware published a report in which he clearly articulated that Americans should take charge in the technological side of sovkhov's operations. Similar to other Americans who came to organize reconstruction projects in Soviet Russia, Ware came to what he saw as the socialist country sharing radicalism and belief in the Soviet experiment. Yet, he understood that, to accomplish his goals of turning the Toikino sovkhov into an exemplary *collective farm* that would “give foundation for the gradual development of smaller [collective] farms,” and a “*scientific center*” that would educate “the backward mass of peasants,” the American way of organization was paramount.<sup>263</sup>

Ware's vision of the future of the Toikino enterprise was intertwined with the insistence of the correct implementation of agricultural technology, particularly tractors. He believed that American specialists who, in his words, were the only “experienced instructors,” had to supervise the mechanization of the Toikino agriculture.<sup>264</sup> According to his estimates, the four American farmers whom he brought with him in 1922 was not enough to complete the instruction, and, thus, he planned to bring “no less than twenty-five” American specialists to

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<sup>263</sup> Ware, “Soobshchenie direktora pervogo amerikanskogo soiuz traktorov H.M. Ware o sovkhove,” no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 2, 7); Joshua B. Freeman, *Behemoth: A History of the Factory and the Making of the Modern World* (New York: W.W. Norton & Company, 2018), 179. In this chapter, Freeman discusses Sydney Hillman and his work in Russia as the president of the Amalgamated Clothing Workers.

<sup>264</sup> Ware, “Soobshchenie direktora pervogo amerikanskogo soiuz traktorov H.M. Ware o sovkhove,” no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 2.oborot).

Toikino in 1923.<sup>265</sup> In his report, Ware declared: “I can’t help but insist on the necessity of these people.” “The first operations of new machinery and methods and the future education of the Russians,” he added, “will require the work of American specialists during at least two productive seasons. The whole plan is based on the use of American machinery and the transfer of American experience to the Russians.”<sup>266</sup> Ware did not trust local agronomists arguing that the “majority of Russian students from the Moscow Agricultural Institute rejected the collective way of agriculture.” In addition, he distrusted Russian workers who, in his view, “pretended to be qualified” but largely resisted the introduction of American agricultural methods.<sup>267</sup> Therefore, the only way to ensure success of the whole enterprise was to Americanize the technological side of the operation until the Russians were fully converted into the American way of farm mechanization. In his proposal, Ware left the latter point quite vague, not specifying when Americans would leave Toikino.

But Ware’s hopes for the successful future of the Toikino sovkhoz met several obstacles. First, as Ware financially relied on the Friends of Soviet Russia, his aspirations for a new import of tractors, smaller agricultural machinery, and seeds were crushed by the decreasing amount of funds raised by these organizations.<sup>268</sup> By the beginning of 1923, the American public was less and less eager to contribute to the Volga famine relief because of

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<sup>265</sup> Ware, “Soobshchenie direktora pervogo amerikanskogo soiuz traktorov H.M. Ware o sovkhoze,” no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 2.oborot).

<sup>266</sup> Ware, “Soobshchenie direktora pervogo amerikanskogo soiuz traktorov H.M. Ware o sovkhoze,” no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 3).

<sup>267</sup> Ware, “Soobshchenie direktora pervogo amerikanskogo soiuz traktorov H.M. Ware o sovkhoze,” no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 2 oborot).

<sup>268</sup> Ware, “Soobshchenie direktora pervogo amerikanskogo soiuz traktorov H.M. Ware o sovkhoze,” no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 3, oborot).

the news that Soviet Russia started exporting grain.<sup>269</sup> As a result, the FSR was not able to further support the unit's work. Yet, more important were Harold Ware's strained relationships with the local administration and local agronomists that darkened the future development of the sovkhoz.

***D. Soviet Visions of Agricultural Reconstruction: Agronomists, Provincial Committees, and the Central State on the American Tractor Unit***

During the American unit's operations in the summer of 1922, multiple parties visited the Toikino sovkhoz transforming it into a space for the circulation of ideas about the future of farm organization and, more importantly, about the power over the future agricultural development. Besides peasants, the sovkhoz administration, and the Americans themselves, central state representatives (the People's Commissariat of Agriculture), officials from provincial and county committees, "scientific agronomists" (*uchenyi agronom*) from the Ural Oblast' Experiment Station, university professors, local agronomists, and even representatives of the uezd GPU traveled to the Toikino village to witness the work of Ware's unit. One observer quipped that "there were too many visitors but not enough managers."<sup>270</sup>

Visits to the Toikino sovkhoz stimulated the circulation of information as it flowed through official reports sent by central to provincial institutions and back, as well as through personal correspondence among local officials who sought to control the unit's

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<sup>269</sup> "Pleading for Food, Russia Sells Grain," *New York Times*, February 21, 1923; Walter Durranty, "Russians Excuse Shipments of Grain," *New York Times*, February 15, 1923; "Germany Buys Grain from Moscow," *New York Times*, February 23, 1923.

<sup>270</sup> Letter from Tiunov to Turkin, no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 20-22 oborot).

activity in the Perm guberniya (fig. 1). Such an active and convoluted process of interactions among all parties set up the competing discourse of narratives about the future of farm organization. For provincial authorities and local agronomists, the question was as much about how to implement tractors into peasants' agricultural practices as about how to control those who introduced technology into the countryside. These debates over power in the agricultural reconstruction appeared in diverse contexts: local agronomists' criticisms of the American unit's work to provincial administrators' claims about the lack of communist ideology in the unit.

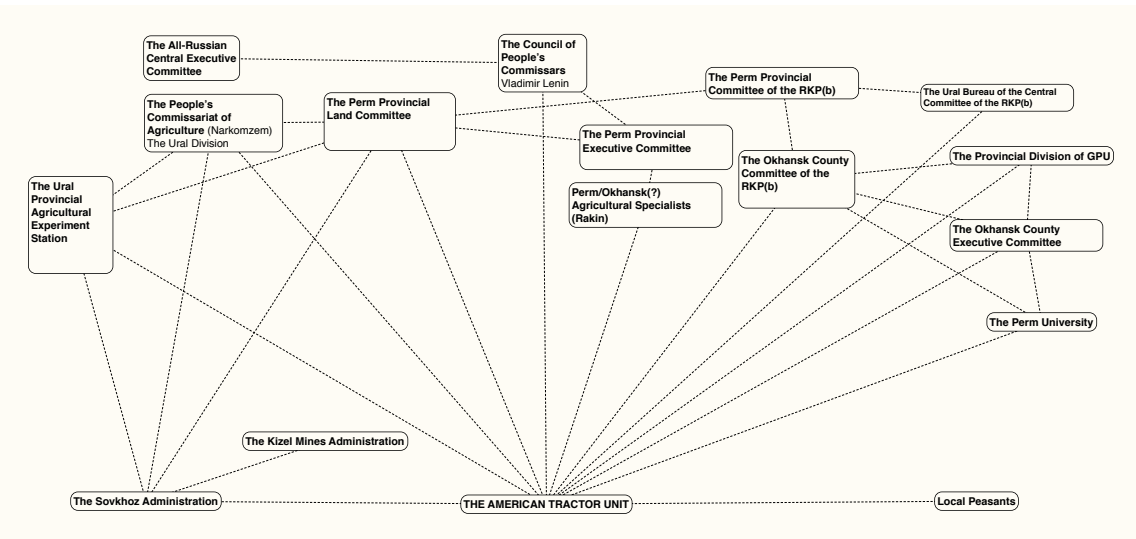


Figure 1. The network of American tractor unit's interactions with the central state, local administrative institutions, agricultural specialists, and peasants, July-October 1922

Since the Stolypin reforms which put emphasis on funding the development of agronomical help and the establishment of experiment stations in regions, the Perm guberniya became one of the most developed areas with regard to agronomical help. In 1914, it was divided 57 agronomic plots and planned to expand its number to 70 by the

beginning of the 1920s.<sup>271</sup> The Perm guberniya land service (*zemskaya sluzhba*) consisted of 170 agricultural employees, including 56 agronomists, 43 agricultural instructors and technicians, 71 lower agricultural personnel. The majority of agronomists had secondary agricultural education (58.1%) and higher agricultural education (41.1%).<sup>272</sup> Yet, by the early 1920s, local agronomists lacked funding from federal and local institutions and struggled to establish their authority among local peasants. As a result, the arrival of Americans and their neglect to consult with a Russian agronomist about agricultural works in the area troubled local specialists.

While the agricultural specialists shared Ware's intentions of building a new sovkhos according to rational principles of farm organization, they criticized the American tractor unit for its misunderstanding of the peculiar Russian conditions, including the infrastructure, crops, and the qualities of the land. For instance, in his report to Aleksandr Bannikov, vice-deputy of the Perm Provincial Executive Committee, local agronomist I.I. Rakin criticized Ware for poor economic calculations with regard to the infrastructure of the sovkhos. For him, the infrastructure was one of the keys for the successful mechanization and ultimate modernization of the sovkhos. Rakin sided with the sovkhos administration that argued that the unit did not understand the landscape of the village and

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<sup>271</sup> "Doklady Permskoy gubernskoy zemskoy upravly Permskom zemskomu sobraniyu 45-I ocherednoi sessii. Otd. III. Ekonoicheskije meropriyatiya," (Perm: Elektrotipografia gubernskogo zemsstva, 1914), 5 quoted in: Stepan P'iankov, "Agenty agrarnogo razvitiya: deyatel'nost' agronomicheskikh i statisticheskikh sluzhby uralskikh zemstvo v kontse XIX – nachale XX veka," *Genesis: istoricheskie issledovaniya* no. 3 (2017), [http://e-notabene.ru/hr/article\\_21713.html](http://e-notabene.ru/hr/article_21713.html).

<sup>272</sup> Milana Esikova, "Vozniknovenie i razvitie agronomicheskoi sluzhby v Rossii (1880-1917)," *Voprosy sovremennoy nauki i praktiki*, no. 4-6 (2010): 278.

should have chosen a different place for living and working facilities.<sup>273</sup> Moreover, the American tractor unit received criticisms for the improper use of tractors. One observer noted that Americans were not familiar with the peculiarities of the land and plowed too deep that, in the case of bad weather conditions, might have resulted in the loss of the harvest.<sup>274</sup> As a result, local agronomist unanimously agreed that the Americans lacked “proper agricultural knowledge” and that they needed a local Russian agronomist on staff.<sup>275</sup>

The American tractor unit, in fact, was not the only one that fell under the criticism of local agronomists. Agricultural specialists also complained about the sovkhos administration and its poor planting practices. In his report, Rakin quips that the absence of an agronomist in the sovkhos caused a “agronomic *kur'yo*z [curiosity]” when during the spring time (before Ware’s arrival), the sovkhos thought it planted ten desyatins of turnip. Instead, summer rape grew but could not ripen because of the late planting.<sup>276</sup> Moreover, Rakin disapproved of sovkhos’s “uneven” planting of the area with crops.<sup>277</sup> Thus, similar to his solution to the American unit’s mistakes, Rakin concluded that these agricultural “mishaps” could be solved only if the sovkhos hired a local agricultural specialist with

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<sup>273</sup> I.I. Rakin, “Doklad po komandirovke v Toikinskii sovkhos predsedateliu prezidiuma tovarishchestva rabpomkhoz tov. Bannikovu,” (PermGANI f. 557, op. 3, d. 68, l. 8 oborot).

<sup>274</sup> I.K. Popov, “Doklad Nachalnika Permskago Gubernskago Zemelnogo Upravleniia I.K. Popova po povodu oznakomleniia na meste raboty Traktornogo otriada Mezhrabkoma,” September 22, 1922 (PermGANI, f. 557, op. 3, d. 68, l. 14 oborot).

<sup>275</sup> I.I. Rakin, “Doklad po komandirovke v Toikinskii sovkhos predsedateliu prezidiuma tovarishchestva rabpomkhoz tov. Bannikovu,” (PermGANI f. 557, op. 3, d. 68, l. 8-8 oborot).

<sup>276</sup> I.I. Rakin, “Doklad po komandirovke v Toikinskii sovkhos predsedateliu prezidiuma tovarishchestva rabpomkhoz tov. Bannikovu,” (PermGANI f. 557, op. 3, d. 68, l. 8 oborot).

<sup>277</sup> I.I. Rakin, “Doklad po komandirovke v Toikinskii sovkhos predsedateliu prezidiuma tovarishchestva rabpomkhoz tov. Bannikovu,” (PermGANI f. 557, op. 3, d. 68, l. 8 oborot).

proper skills of agricultural planning, knowledge of the land and crops.<sup>278</sup> Such remarks pointed to the Russian agronomists' skepticism not only towards foreign expertise but also towards local administration that they perceived to be underqualified to conduct proper farm modernization. As a result, the Toikino sovkhos became the discourse for negotiating the power over agricultural practices among the unit, the sovkhos administration, and local agronomists.

Beyond the perceived lack of agricultural knowledge on the part of both the Americans and the sovkhos administration, local agronomists criticized both groups for perpetuating the "antagonistic" relationship which prevented the successful development of any farm planning. The conflict stemmed from the broken distribution of power in rural areas after the October revolution. Despite the Provincial Land Committee's attempts to organize a sovkhos in Toikino in 1920, the project was closed due to continuous crop failures and the lack of infrastructure. In the spring of 1922, a few months before Ware's arrival, the sovkhos was given to the management of the Kizel Mines which were 250 miles away from Toikino. That spring, sovkhos workers, under the direction of the Kizel Mines and with the help of their funding, cultivated and planted more than 400 desyatins (1,000 acres). Upon Ware's arrival, the local Mezhrabpom (the Workers' International Relief) tried to negotiate with the Perm Land Committee to give Ware several thousand desyatins where the unit could work. Because the Provincial Land Committee did not have such a big plot of land, it gave the land of the sovkhos that was currently managed by the Kizel Mines. Thus, the Mezhrabpom had to make a contract with the Kizel Mines to unite the management of the sovkhos under the direction of the sovkhos manager (Chinin), but the tractor unit,

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<sup>278</sup> I.I. Rakin, "Doklad po komandirovke v Toikinskii sovkhos predsedateliu prezidiuma tovarishchestva rabpomkhoz tov. Bannikovu," (PermGANI f. 557, op. 3, d. 68, l. 9).

according to I.K. Popov, head of the Perm Provincial Land Committee, was “autonomous, reported to the Mezhrabpom and worked per zavsovkhoz’s [head of the sovkhoz] request.” Even this directive demonstrates the confusing situation about the management of the sovkhoz, where the American tractor unit and the sovkhoz administration shared power over the land.<sup>279</sup>

In addition to the conflict of powers in Toikino, Perm provincial and Okhansk county committees struggled to establish control over the work of the American tractor unit. While Ware advocated for the unit’s independence, provincial authorities were worried that the tractor unit did not have the communist leadership. In a letter to Mikhail P. Turkin, Vice Secretary of the Perm Provincial Committee, Pavel Tiunov, Executive Secretary of the Okhansk County Committee, lamented that, based on several meetings with the unit, an “organic link” between the unit, central and provincial authorities “did not exist.” “The center sent [the tractor unit],” he added, “calmed down or, more precisely, relied on local authorities. But they [county committees] do not pay much attention to [the unit] or think that somebody does something, and manage.”<sup>280</sup> This dissatisfaction with the central state’s policy occurred partly due to the pressure that Lenin exercised upon Pyotr Obrosov, head of the Perm Provincial Executive Committee. On October 10, 1922, Lenin sent a letter to Obrosov in which he disparaged provincial authorities for understanding the fuel problems that the tractor unit experienced and failing to propose any solutions. “I urge you” to support the tractor unit, Lenin claimed, and “to help them with the fulfillment of their

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<sup>279</sup> I.K. Popov, “Doklad Nachal’nika Permskago Gubernskago Zemelnogo Upravleniia I.K. Popova po povodu oznakomleniia na meste raboty Traktornogo otriada Mezhrabkoma,” September 22, 1922 (PermGANI, f. 557, op. 3, d. 68, l. 13).

<sup>280</sup> Letter from Tiunov to Turkin, no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 21).



suggestions on the rational use of tractors, buying fuel, organization of a workshop, building houses etc.” “American agricultural groups’ help is the most wanted and needed. Our major goal,” he continued, was to “facilitate the fulfillment of their beginnings with minimal delays.”<sup>281</sup> Yet, provincial and county authorities could not do much as the transportation network to the region was still under reconstruction and, thus, the unit could not get as much fuel as it needed for tractors.

Feeling the pressure of the central state, provincial and county authorities, as well as agricultural specialists, offered competing visions of the future of agricultural reconstruction of the Toikino sovkhoz in the fall of 1922. County authorities saw the solution to this crisis of authority in establishing direct control over the American tractor unit by organizing “a soviet agency that is responsible for the technical and practical work of the unit.”<sup>282</sup> Others, including provincial representatives, perceived the independence of Ware’s work and his vision of agricultural reconstruction as paramount for the success of the Toikino sovkhoz. They argued that the conflict between the local administration and the Kizel mines had to be resolved by turning the Toikino sovkhoz into a state-owned farm and that the sovkhoz administration had to follow Ware’s plans of turning Toikino into an exemplary tractor base (MTS) and a scientific center. Moreover, according to this group, provincial authorities planned to provide a “full-time representative” to supervise and report to the provincial committee and to Narkomzem.<sup>283</sup> Yet, the third group saw the key to the

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<sup>281</sup> Vladimir Lenin Predsedateliu Permskogo Gubispolkoma, October 26, 1922 (PermGANI, f. 557, op. 3, d. 68, l. 10).

<sup>282</sup> Letter from Tiunov to Turkin, no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 21-22).

<sup>283</sup> I.K. Popov, “Doklad Nachal’nika Permskago Gubernskago Zemelnogo Upravleniia I.K. Popova po povodu oznakomleniia na meste raboty Traktornogo otriada Mezhrabkoma,” September 22, 1922 (PermGANI, f. 557, op. 3, d. 68, l. 11(oborot)-12).

effective agricultural reconstruction in Toikino in eliminating the conflict between the tractor unit, the sovkhos administration, and the Kizel mines, hiring a Russian agronomist, and establishing a plan for the sovkhos's development.<sup>284</sup> In turn, Ware himself argued that the sovkhos should be "given an opportunity of independent existence as a tractor base and a scientific center," as well as the base for workshop [MTS].<sup>285</sup>

While provincial and county institutions, as well as agricultural scientists, competed for their authority over the unit, the central state, including the All-Russian Central Executive Committee and Lenin himself, had a bigger fish to fry. For him, the perceived success of the American tractor unit work in Toikino was paramount for demonstrating the successful integration of technology into the countryside. To this end, in October 1922, after the Soviet press praised the achievements of American agricultural communes, Lenin sent a telegram to the Friends of Soviet Russia, congratulating the organization with the success of the Ware agricultural unit.<sup>286</sup> He declared that "despite gigantic difficulties," the Ware tractor unit achieved "exceptional results." Recognizing the importance of American agricultural communes, Lenin appealed to the All-Russian Central Executive Committee (VTsIK) to publicly acknowledge the work of the FSR and the contribution of American agricultural groups. In his appeal to the VTsIK, he stated that the Soviet authorities should facilitate the work of the FSR because these groups brought American technology to Soviet

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<sup>284</sup> I.I. Rakin, "Doklad po komandirovke v Toikinskii sovkhos predsedateliu prezidiuma tovarishchestva rabpomkhos tov. Bannikovu," (PermGANI f. 557, op. 3, d. 68, l. 9).

<sup>285</sup> Ware, "Soobshchenie direktora pervogo amerikanskogo soiuz traktorov H.M. Ware o sovkhoze," no earlier than September 1922 (PermGANI f. 557, op. 3, d. 68, l. 3).

<sup>286</sup> Lenin, "Druz'iam Sovetskoi Rossii," *Pravda*, October 24, 1922; "Realnaia pomoshch Druzei Sovetskoi Rossii," *Izvestia*, August 25, 1922; Ware, "Amerikanskii traktornyi otriad," *Pravda*, October 15, 1922.

Russia which was of “great significance” to Russian agriculture.<sup>287</sup> The next month the All-Russian Central Executive Committee declared the Toikino agricultural commune to be a “model farm estate” for the rest of Russia.<sup>288</sup> While Lenin was aware of all the difficulties that the American tractor unit was facing, he recognized the importance of demonstrating the success of the tractor unit and the superiority of its machinery in cultivating the Soviet land.

Little did Lenin and other groups know that the American tractor unit would soon leave Toikino and never come back. Yet, the departure of Americans did not end the discussion about the future of technological modernization of the countryside. When the unit left the sovkhos, American tractors and other agricultural equipment stayed there. This issue raised a question for provincial and even central authorities, as well as for the sovkhos administration about what to do with tractors. Undoubtedly, these tractors, even those that were broken, represented a precious commodity. Some groups proposed to transfer these tractors from Toikino. Yet, on December 11, 1922, the Ural Bureau of the Central Committee of the RKP(b) got involved in this debate and decided that the transfer was “premature.”<sup>289</sup> Ultimately, on January 6, 1923, the Committee of the Mezhrabpom (the Russian section) decided to shut down the tractor base in the Toikino sovkhos.<sup>290</sup> Historical

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<sup>287</sup> Lenin, “Presidiumu VTsIK,” October 24, 1922, in Lenin, *Lenin Collected Works*, vol. 45 (Moscow: Izdatelstvo Politicheskoi Literatury, 1970), 232.

<sup>288</sup> “American Farm Models for Russia,” *Soviet Russia* (December 1922): 287.

<sup>289</sup> “Protokol zasedaniya Ural-Byuro TsK RKP ot 11 dekabrya -22 g.” (PermGANI, f. 557, op. 3, d. 68, list 16).

<sup>290</sup> “Protokol obshego sobraniya grazhdan sela Toikina ob obraschenii k amerikanskomu traktornomu otryadu s khodataistvom o vspashke zemli,” July 23, 1922 in A.Iu. Bakhturina, ed., *Rossiia i SShA: ekonomicheskie otnosheniya, 1917-1933. Sbornik dokumentov* (Moscow: Nauka, 1997), 60-61.

sources offer little information on what happened to the Toikino sovkhos later in the 1920s and where American tractors were transferred.

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The history of the American tractor unit and its role in the agricultural reconstruction of the Toikino sovkhos provides a micro-historical view on the circulation of ideas about technology, power, and methods of agricultural reconstruction that went beyond the geographical borders of the Southern Urals. Instead of focusing on foreigners' failures or successes in teaching peasants modern agricultural methods in a particular village, the chapter combines micro-history and a global perspective on the circulation of ideas to reveal a complex network of groups that negotiated every step of the introduction of technology and ideas about farm modernization. From the central state to provincial and county institutions, from local agricultural experts and local peasants to the American unit members – all these actors took a significant role in debating the future of the Soviet agricultural reconstruction. As a result of these interactions, ideas about technology and farm modernization appeared to be in constant flux.

To trace these changes means to follow ideas and their bearers, including humans and non-humans, that constantly crossed national and administrative borders. Harold Ware, for instance, left Toikino in 1922 only to come back with new and more ambitious, as well as “constructive,” plans for the agricultural reconstruction of Soviet Russia. For him, the Toikino experience lay the foundation for the future agricultural projects that he would conduct in the Soviet Union from 1923 to 1929. When organizing later projects, Ware would invite leading American agricultural economists and planners, such as Benton MacKaye and Milburn Wilson among others, to research and develop detailed plans for his

work in Russia. By doing so, Ware would challenge these American experts to envision a different, Soviet, version of large-scale agriculture. As a whole, the analysis of the circulation of ideas, bodies, and technologies complicates our understanding of a one-way technological transfer and makes us reconsider traditional historical interpretations by focusing on the entangled nature of ideas, bodies, and technologies.

#### **IV. Experimental Ground: Harold Ware and the Russian Reconstruction Farms, 1925-27**

On a “little boat,” sailing from New York City to Liepāja, Latvia, in the early days of July 1925, an energetic man in his mid-thirties was telling his fellow passengers about the new Russian Farm project that he, together with his team, was about to launch. The agricultural unit, the man relayed, was traveling to Soviet Russia to organize the reconstruction of Russian agriculture. Among those present, Anna Porter wrote of the exchange in her *Moscow Diary*. Porter wrote that the project was “not a colonization scheme,” but rather, an “experiment of agricultural production on an industrial basis.” Further, she noted the man “hoped that this experiment may reflect back and teach our own farmers the value of industrial production” and the merits of collective organization.<sup>291</sup> The man’s name was Harold Ware, and he was leading another “selected group of well-trained Americans” to establish the Russian Reconstruction Farms in the hope of revolutionizing farming, not just for Soviet Russia, but in line with his socialist vision for the future of American agriculture as well.<sup>292</sup> More than merely a means to increase grain production, Ware returned to the Soviet countryside only a few years after his Toikino project to cultivate a new agrarian worker, utilizing an approach that focused more on education as a means to achieve that end.

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<sup>291</sup> Anna Porter, *Moscow Diary* (New York: Charles H. Kerr & Company, 1926), 27-29.

<sup>292</sup> “Outline of Organization and Operation of Russian Reconstruction Farms, Inc.,” in Papers of Leonard Knight Elmhirst, Memoranda, LKE/OVR/R/1/B, Devon Heritage Services, Devon, U.K.

Organized in 1925, the Russian Reconstruction Farms, Inc., operated 15,000 acres of Soviet land in the Tersky district of southeastern Russia.<sup>293</sup> When Ware's associates proposed this plan to Soviet officials at the International Peasant Conference in October 1923, they promised to equip the farm with the most up-to-date agricultural machinery, to establish a farm school, and to provide "constructive" agricultural relief according to the latest "scientific methods." The Soviets readily accepted. As the New Economic Policy (NEP) was now in full swing, Soviet state officials perceived foreign agricultural communes and concessions as a welcome and essential contribution to the reconstruction of the Soviet countryside.<sup>294</sup> As for the Americans themselves, the Russian Reconstruction Farms were not merely a charitable project. Organized by members of the Workers' Party of America and other progressives, this venture represented a "laboratory" to experiment with large-scale farming, to find solution to future famines, to test socialist theories, and to try out new educational ideas.

The RRF has received little attention beyond historical works on Soviet foreign concessions. What is more, this scholarship has focused on the prevalence of foreign investment into Soviet industrial rather than agricultural sectors, as well as demonstrating the failure of the Soviet state to organize a coherent concession policy.<sup>295</sup> While there have

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<sup>293</sup> In Soviet documents, this project was known as the Prikumskoe russko-amerikanskoe tovarishchestvo (the Prikumsk Russian-American Company).

<sup>294</sup> V.V. Bulatov, M.M. Zagorulko, "'Nekapitalisticheskie' Innostrannye Kontsessii v SSSR," *Vestnik Volgogradskogo Gosudarstvennogo Universiteta* 4, no. 1 (2012): 51-58.

<sup>295</sup> Taisia Iudina, "Kontsesionnaia praktika v sovetskoii Rossii na rubezhe 1920-1930-kh gg.," *Vlast'*, no. 12 (2012): 131-133; M.M. Zagorulko and O.V. Inshakova, eds., *Inostrannii kontsesii v SSSR (1920-1930 gg.): dok. i materialy* (Moscow: Sovremennaiia ekonomika i parvo, 2005); S.S. Khromov, *Inostrannii kontsesii v SSSR: Istoricheskii ocherk. Dokumenty*, 2 vols. (Moscow: Izdatelstvo tsentralnogo Instituta rossiiskoi istorii RAN, 2006); Taisia Iudina, *Sovetskie rabochie i sluzhashchie na kontsessionnykh predpriatiiakh SSSR v gody NEPa* (Volgograd: Izdatelstvo VolGU, 2009); Taisia Iudina,

been several historical studies on foreign agricultural projects that utilized the Russian Reconstruction Farms to demonstrate American attempts to organize model farms in the Soviet Union, they have not investigated the RRF as a “laboratory” for the development and exchange of agricultural knowledge and expertise between the Soviet Union and the United States during the 1920s.<sup>296</sup>

This chapter examines the Russian Reconstruction Farms and its mission to transform the geographical space of Maslov Kut into a farm “laboratory” where ideas about the future of agricultural modernization were developed and contested by various actors.<sup>297</sup> In doing so, the RRF was an experimental ground for testing ideas not only about large-scale production but also farm training. Further, this chapter shows the intentions of the RRF in

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Vladimir Bulatov, and Ekaterina Furman, “Inostrannii kapital i trudovie resursy v Nizhnem Povolzh’e v 1920-1930-e gg.,” *Vestnik Volgogradskogo gosudarstvennogo universiteta* 4, no. 3 (2004): 26-; E.G. Shiriaeva, “Legitimatsia i stanovlenie sel’skokhoziastvennoi kontsesii v ekonomicheskoi praktike severo-kavkazskogo regiona v 1920-kh godakh,” *Vestnik Stavropolskogo gosudarstvennogo universiteta*, no. 71 (2010): 62-68; S.V. Zhuravlev, “Malen’kie liudi” i “bol’shaia istoriia.” *Inostrantsy moskovskogo Elektrozavoda v sovetskom obshchestve 1920-1930-kh gg.* (Moscow: ROSSPEN, 2000); Taisia Iudina, “Sotsialno-trudovie konflikty na kontsessionnykh predpriatiakh SSSR v 1920-e gg.,” *Novyi istoricheskii vestnik*, no. 19 (2009): 45-53; M.M. Zagorulko and V.V. Bulatov, “‘Nekapitalisticheskie’ inostrannie kontsesii v SSSR,” *Vestnik Volgogradskogo gosudarstvennogo universiteta* 4, no. 1 (2012): 51-58; O.Iu. Red’kina, *Sel’skokhoziastvennie religioznie trudovye kollektivy v 1917-1930-e gody: na materialakh evropeiskoi chasti RSFSR* (Volgograd: Izdatelstvo VolGU, 2004).

<sup>296</sup> Jonathan Dekel-Chen, “An Unlikely Triangle: Philanthropists, Commissars, and American Statesmanship Meet in Soviet Crimea, 1922-1937,” *Diplomatic History* 27, no. 3 (June 2003): 366 (pp. 353-376); Deborah Fitzgerald, “Blinded by Technology: American Agriculture in the Soviet Countryside, 1928-1932,” *Agricultural History* 70, no. 3 (1996): 459-486; Deborah Fitzgerald, *Every Farm a Factory: The Industrial Ideal in American Agriculture* (Yale University Press, 2010). In her work, Fitzgerald mentions that “there is very little written on Russian Reconstruction Farms.” Footnote 5 in Fitzgerald, *Every Farm a Factory*, 230.

<sup>297</sup> Henri Lefebvre, *The Production of Space*, trans. D. Nicholson-Smith (Oxford: Blackwell, 1991); David Harvey, *Justice, Nature and the Geography of Difference* (Oxford: Blackwell, 1996); J.E. Malpas, *Place and Experience: A Philosophical Topography* (Cambridge: Cambridge University Press, 1999).



making this space a global site for agrarian socialist experiments. The ultimate hope of those who participated in this exchange was that these experiments could be replicated beyond the Soviet Union.<sup>298</sup> Finally, by examining the educational plan of the RRF, this chapter also shows how plans, agricultural knowledge, and notions of locality were co-produced through processes of exchange.<sup>299</sup>

***A. Farming for Solutions: The American Farm Problem and the Path to the Russian Reconstruction Farms, 1923***

Upon his return to the United States from his project with the Toikino tractor unit in early 1923, Harold Ware resumed his work as an Agrarian Organizer for the Workers' Party of America (WPA). He came away from this experience in Toikino assured that educating farmers in order to narrow the ideological divide between them and urban labor was key to solving the American agrarian problem. In a four-page proposal for the WPA, Ware offered a hybrid solution. For his "fundamental remedies" for the U.S. farm problem included the transformation of the "working farmer" into a landowner, liberating them from banks while nodding to the American cultural value of land ownership, and organizing them into "farm labor unions," structurally similar to those of the city. In addition, Ware proposed to create farm organizations that would put farmers in charge of production, distribution, and

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<sup>298</sup> Doreen Massey, "A Global Sense of Place," in *Reading Human Geography: The Poetics and Politics of Inquiry*, ed. Trevor Barnes and Derek Gregory (London: Arnold, 1997), 315-323, quote from page 323. Doreen Massey and Pat Jess, eds., *A Place in the World? Places, Cultures, and Globalization* (Oxford: Open University and Oxford University Press, 1995).

<sup>299</sup> Susan Gross Solomon, "Circulation of Knowledge and the Russian Locale," *Kritika: Explorations in Russian and Eurasian History* 9, no. 1 (Winter 2008): 17-18; Kapil Raj,

marketing, as well as credit operations. To accomplish this goal, Ware sought to establish the United Farmers Educational League as a central organization. While Ware received support of his initiatives from farmers he met traveling across rural America in 1923, the WPA ultimately rejected his proposal.<sup>300</sup>

Undaunted by the WPA's rejection, in August 1923, Ware informed its Central Committee that he planned to resign from his post in order to launch a new agricultural project in Russia.<sup>301</sup> Dissatisfied with the inability to realize his vision in the U.S., Ware felt that the desperate situation of the Soviet countryside would provide an opportunity for such a venture. While drafting his a proposal for his new "Russian Farm Project," Ware lamented the WPA did not have anyone who was motivated to assist him with "Agrarian Party work." As such, he believed that his decision to leave the Party and return to Soviet Russia would pay off.<sup>302</sup>

In October 1923, Harold Ware returned to Moscow with preliminary ideas about the new project that would later be name the Russian Reconstruction Farms. Having arrived, he immediately set himself the task of assisting with the organization of the First International Peasant Conference in which 158 delegates from around the world would participate later

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"Colonial Encounters and the Forging of New Knowledge and National Identities: Great Britain and India, 1760-1850 (Milieux and Metaphor)," *Osiris* 15 (2000): 119-134;

<sup>300</sup> H.M. Ware and Alfred Knutson, "Why Not a United Farmers Educational League and then a Union Between Working Farmers and City Workers," quoted in Lement Harris, *Harold M. Ware (1890-1935): Agricultural Pioneer, USA and USSR* (New York: The American Institute for Marxist Studies, 1978), 30-31.

<sup>301</sup> Letter from Harold Ware to CC WPA, February 29, 1924, in RGASPI, f. 515, op.1, d. 410, 2-3.

<sup>302</sup> Letter from Harold Ware to CC WPA, February 29, 1924, in RGASPI, f. 515, op.1, d. 410, 2-3.

that month.<sup>303</sup> This conference marked the establishment of the Red Peasant International (Krestintern) and its governing body, the International Peasant Council.<sup>304</sup> The Council brought together leaders of left-wing agrarian parties and peasant associations from Europe, Asia, and America. Among his fellow delegates were two American representatives: W.H. Green and Otto Anstrom, the latter having previously worked with Ware in Toikino.<sup>305</sup>

Ware's interest in the Peasant conference in Moscow was two-fold. First, he shared ideas proclaimed by Tomasz Dombal, an influential Polish communist and the leading spokesman at the conference, who argued that the agrarian question was the weakest part of communist parties' agenda. In accord with Dombal, Ware believed the future of socialism necessitated finding the right form of cooperation between workers and peasants/farmers.<sup>306</sup> Second, in his correspondence with the Central Committee of the WPA, Ware indicated his intention to pitch the Russian Farm project to Soviet authorities in attendance. In the end, both Ware and Green "were given credentials in Moscow to make a survey in the Ukraine"

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<sup>303</sup> The conference followed the International Agricultural Exhibition which took place in Moscow from August 15 to October 15. The history of this conference will be addressed in a different chapter on the Russian Agricultural Agency in New York.

<sup>304</sup> In the United States, the Krestintern was known as the Farmers International. Bismarck, ND, was the home of the American section of this organization from 1926 to 1930. Lowell K. Dyson, "The Red Peasant International in America," *The Journal of American History* 58, no. 4 (1972): 958.

<sup>305</sup> Among the delegates was Ho Chi Min. George D. Jackson, *Comintern and Peasant in East-Europe 1919-1930* (New York: Columbia University Press, 1966), 59-63. W.H. Green, a Roman Catholic and, probably, not a Communist, had had experience in the organization of the farm movement. He helped to organize the Farmers' Union in Nebraska and, earlier in 1923, he was elected as vice-president of the Federated Farmer-Labor Party. Green was selected as a member of the twelve-man presidium of the Red Peasant International. However, after the collapse of the presidential campaign of the Farmer-Labor party in July 1924, he resigned from the organization. Lowell K. Dyson, "The Red Peasant International in America," *The Journal of American History* 58, no. 4 (1972): 959-960.

<sup>306</sup> André Mommen, *Stalin's Economist: The Economic Contributions of Jenó Varga*, ; Ware's article about the American farm problem.

for potential farmland for their project. At the conclusion of the conference, Ware and Green traveled to Ukraine where they spent “two weeks looking over lands suitable to this project.” To ensure against any unforeseen difficulties and or misunderstandings, they also met with Soviet officials in the Department of Agriculture of the Ukraine.<sup>307</sup>

For the Soviets, Ware’s plan to establish a large-scale agricultural enterprise was a welcome venture. As a part of the New Economic Policy (1921-1927), the new Soviet state sought to reconstruct and develop its economy by attracting foreign investment. While the concession policy led to heated debates among some Bolsheviks who viewed it as a compromise with capitalism, the dire need for economic reconstruction, modernization of technologies, and the attraction of qualified workers prevailed over ideological concerns. After the Soviets announced the beginning of the foreign concession policy, many foreign investors jumped at the opportunity to invest into the most profitable industries, such as timber, gold, oil, metalworking, and railway construction. Soviet state officials, however, desired foreign investment into agricultural enterprises above all.<sup>308</sup>

Since 1923, the People’s Commissariat of Agriculture (Narkomzem) and the Main Concession Committee (GKK) worked tirelessly to attract foreign capital to the Soviet countryside. After surveying available lands, Soviet authorities determined the Don district

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<sup>307</sup> Letter from Harold Ware to CC WPA, February 29, 1924, in RGASPI, f. 515, op.1, d. 410, 2-3. While initially Ware was promised the land in Ukraine, the Soviets changed their decision later and gave him 15,000 acres in the Tersky district, North Caucasus. According to Lement Harris, the Soviets claimed that many peasants, who used to occupy the land but fled due to the Civil War in the region, were coming back for resettlement. Thus, the Soviets could not “take land away from these peasants and assign it to Americans.” Harris, *Harold M. Ware*, 34.

<sup>308</sup> V.V. Bulatov and M.M. Zagorulko, “‘Nekapitalisticheskie’ inostrannye kontsesii v SSSR,” *Vestnik Volgogradskogo gosudarstvennogo univiersiteta* no. 1 (2012): 51; Taisiia Iudina, “Privlechenie inostrannogo kapitala v sovetskuiu ekonomiku v period NEPa,” *Vlast*, no. 7 (2009): 132-134; Antony Sutton, *Western Technology and Soviet Economic Development, 1917-1930*, vol. 1 (Stanford: Stanford University Press, 1968), 113-114.

of Ukraine, the Volga region, and the North Caucasus area near Piatigorsk would be best suited for foreign agricultural ventures. According to the Soviet authorities, the North Caucasus, in particular, were in dire need of intervention with regard to agricultural reconstruction. As a result, during 1923-1924, the Soviets signed contracts with three foreign concessions in the North Caucasus: the Friedrich Krupp of Essen company, a seed-growing concession to Deutsche-Russische Saatbau A-G (Drusag), and the Prikumskoe Russian-American Association (the Soviet title for Ware's Russian Reconstruction Farms).<sup>309</sup>

Yet, before signing the contract with the Americans, a heated debate ensued between Soviet central and regional authorities in September 1924. The Soviet authorities at Narkomzem had a keen interest in the American agricultural project. In accord with the Narkomzem, the Regional Executive Committee of the Southeastern Region (Krai) supported the initiative, commenting favorably on Harold Ware's previous experiments in the Toikino village.<sup>310</sup> The Regional Land Administration of the Southeastern Region, on the other hand, openly criticized the investment of the American capital into the area. Being suspicious of foreign capital and disinterested in ceding any authority to the Americans, it argued that the Russian Reconstruction Farms threatened the future of communism in the village. That central officials insisted that the RRF be established in a sovkhos in Maslov Kut, an area already thriving under regional administration, further irked local and regional

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<sup>309</sup> Sutton, *Western Technology*, 117; E.G. Shiriaeva, "Legitimatsiia i stanovlenie selskokhoziastvennoi kontsessii v ekonomicheskoi praktike severo-kavkazskogo regiona v 1920-kh godakh," *Vestnik Stavropolskogo gosudarstvennogo universiteta*, no. 71 (2010): 65-66.

<sup>310</sup> The Southeastern Agricultural Trust was founded to organize and manage large-scale agricultural units, sovkhosy, in the Southeastern Region (Krai), later the North-Caucasus region (Krai), that was formed in February 1924. Letter from Tolmachev to Narkomzem, September 9, 1924. RGAE, f. 478, op. 2, d. 928, list 1.

officials. Moreover, they asserted the RRF sought to use this “powerful sovkhov” to set up a motor-tractor station (MTS) in which Ware and his associates would seemingly profit from selling American tractors to other nearby sovkhovs.<sup>311</sup>

Ultimately, the authority of the central government won out and a compromise was reached. In ruling in favor of Ware’s project, the administration assured local and regional officials that the Americans would only bring as many tractors as were necessary to operate in the region, and Ware’s group agreed to provide sufficient capital to rehabilitate the Southeastern Agricultural Trust (IuVSeltrest) in return for the land concession.<sup>312</sup> Though ultimately agreeing to these terms, the opposition of local and regional authorities to the RRF did not dissipate. This ongoing tension between them and the RRF would determine the character of relationships between the Americans and local institutions for the foreseeable future.

In November 1924, the Soviet central authorities in the Narkomzem finalized the RRF concession in Maslov Kut. In his letter to the Main Concession Committee, Alexander Smirnov, Head of the Narkomzem, assured that the work of the RRF would have the utmost positive affect on the development of local agriculture, including bringing much-needed agricultural equipment and capital (200,000 rubles).<sup>313</sup> The concession consisted of 15,000 acres to establish an “exemplary farm founded on the mechanization of agriculture and

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<sup>311</sup> Letter from Odintsov to [unknown]. September 9, 1924. RGAE, f. 478, op. 2, d. 928, 19. Odintsov was the Head of the Regional Land Administration (Kraizemupravlenie).

<sup>312</sup> “Protokol Soveshchaniia po predlozheniiu gruppy amerikantsev o sovместnoi rabote s Iuvseltrestom gruppy sovkhovov Prikumskogo raiona,” September 30, 1924, RGAE, f. 478, op. 2, d. 928, l. 40-41.

<sup>313</sup> “Pismo narkoma zemledelii RSFSR A.P. Smirnova v Glavkontsesskom pri Sovnarkome SSSR ob organizatsii Prikumskogo russko-amerikanskogo tovarishchestva,” November 5, 1924, RGAE, f. 478, op. 2, d. 928, l. 9-9 ob.

rational utilization of all... lands.”<sup>314</sup> In addition, the Narkomzem openly encouraged the RRF to turn the area into an agricultural educational training base for future farm workers and agricultural scientists.<sup>315</sup>

These negotiations with the Soviets and regional authorities, along with organizing the operation stateside, exhausted Harold Ware. In addition to persuading Soviet authorities in the viability of the project, Ware had to find funding for the whole enterprise. From February to November 1924, he sought credit from American manufacturers who he hoped would be interested in Soviet business. With the help of Frank P. Walsh, a left-wing New York attorney, Ware incorporated the Russian Reconstruction Farms to sell any and all that “have money and are interested in Russia,” including those with “a desire to help” or merely an “axe to grind.”<sup>316</sup> By promoting this company through public campaigns and appeals, Ware and his colleagues were able to attract support of many prominent investors, including Jane Addams, Roger N. Baldwin, Sophonisba Breckenridge, whose names would appear on the official letterhead of the Russian Reconstruction Farms. Yet, after dealing with this all year, Ware confided in his mother and prominent socialist organizer, Ella Reeve Bloor: “My God, I’m nearly at the end of my rope – I’ve been playing with these darn liberals and

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<sup>314</sup> Contract between the Southeastern Agricultural Trust and the Ukraine Farming and Machine Company. RGAE, f. 478, op. 2, d. 928, list 2.

<sup>315</sup> Karl Borders, “Report. Student Program. Prikumsk Russian American Association, Summer season, 1926,” in LKE/OVR/R/1/B, p. 2.

<sup>316</sup> Letter from Harold Ware to CC WPA, February 29, 1924, in RGASPI, f. 515, op.1, d. 410, 2-3. Maria Meehan, “Frank P. Walsh and the American Labor Movement,” (Ph.D. Dissertation, 1962).

alleged radicals for over a year. I've just about put it over and I'm ready to raise my right hand and say 'never again' but... I tell you it's needed."<sup>317</sup>

For Harold Ware, the Russian Reconstruction Farms represented more than an opportunity to aid the Soviet countryside and teaching peasants how to operate tractors. In another letter to his mother, Ware openly admitted: "I'm not sentimental over Russia – never was – but ... I need this training and so do some other agrarian workers I know."<sup>318</sup> While emphasizing the importance and "need for this [reconstruction] work in Russia," Ware envisioned the RRF as an experimental laboratory with "infinite" possibilities where solutions to the problems that beset American agriculture could be found.<sup>319</sup> Ware lamented that many farmers and policymakers in the U.S. had accepted the lack of strong cooperatives and well-defined rights as "a necessary evil."<sup>320</sup> Those who shared his concerns, he continued, were making "the mistake of searching for its solution in European test tubes."<sup>321</sup> Instead, Ware argued, the solution could be found on Soviet soil. In contrast to the United States, Soviet Russia had developed "the only real cooperation of farmers."<sup>322</sup>

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<sup>317</sup> Letter from Ware to Bloor, November 29, 1924, in RGASPI, f. 515, op.1, d. 410, 21-22.

<sup>318</sup> Letter from Ware to Bloor, November 29, 1924, in RGASPI, f. 515, op.1, d. 410, 21-22.

<sup>319</sup> Letter from Harold Ware to CC WPA, February 29, 1924, in RGASPI, f. 515, op.1, d. 410, 2-3; Letter from Ware to Bloor, November 29, 1924, in RGASPI, f. 515, op.1, d. 410, 21-22.

<sup>320</sup> Letter from Ware to Bloor, November 29, 1924, in RGASPI, f. 515, op.1, d. 410, 21-22.

<sup>321</sup> Letter from Ware to Bloor, November 29, 1924, in RGASPI, f. 515, op.1, d. 410, 21-22.

<sup>322</sup> Letter from Harold Ware to CC WPA, February 29, 1924, in RGASPI, f. 515, op.1, d. 410, 2-3.



As a result, as a part of the RRF mission, Ware wanted to bring American non-communist farmers to witness the possibilities demonstrated by the Soviet reality. These “young” Americans, who were familiar with the “desperate conditions of the independent farmer in the United States,” would be best able to absorb the experience of Soviet cooperation.<sup>323</sup> Afterwards, “these young men” would come back to the American “farm country with the authority of men who have done it, and know how it can be done.”<sup>324</sup> Thus, in Ware’s mind, the Russian Reconstruction Farms would become an experimental training ground for American farmers and agrarian-minded communist organizers, like Ware himself, to “get revolutionary and practical experience” in organizing large-scale farming enterprises and effective agricultural cooperation. And the only price to be paid was sharing the “technique” with the Soviets.<sup>325</sup>

### ***B. Plans for the Organization of a “Living Laboratory,” 1924***

From theoretical plans developed for the RRF by American scientists and experts to the actual work on the farm, Ware approached the Russian Reconstruction Farms as an agricultural experiment based on scientific foundations. In its promotional campaigns, the Russian Reconstruction Farms advertised its work as “constructive philanthropy,” claiming that its organizational plan was “the result of more than a year of systematic, persistent

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<sup>323</sup> Letter from Ware to Bloor, November 29, 1924, n RGASPI, f. 515, op.1, d. 410, 21; “Outline of Organization and Operation of Russian Reconstruction Farms, Inc.” in Papers of Leonard Knight Elmhirst, Memoranda, LKE/OVR/R/1/B, Devon Heritage Services, Devon, U.K.

<sup>324</sup> “Outline of Organization and Operation of Russian Reconstruction Farms, Inc.” in Papers of Leonard Knight Elmhirst, Memoranda, LKE/OVR/R/1/B, Devon Heritage Services, Devon, U.K.

<sup>325</sup> Letter from Ware to Bloor, November 29, 1924, in RGASPI, f. 515, op.1, d. 410, 21.

planning by qualified members of the group.”<sup>326</sup> Moreover, RRF emphasized its American employees’ expertise by portraying them as “trained and experienced in different fields of agriculture, mechanics, management or building.”<sup>327</sup> Many of them, the organization stressed, had previous experience conducting agricultural reconstruction work in Russia.<sup>328</sup> Others had background in engineering, home economics, and social work. Thus, in directing their supporters’ attention to its “systematic” approach and “qualified” experts, the RRF underscored the expertise and scientific foundations of its operation.

At the heart of the RRF program was more than just the planting and cultivation of 15,000 acres of Soviet land. Rather, the organization sought to transform the land, local people, and infrastructure into a large agricultural educational experiment. According to the official proposal, the RRF identified that present Soviet farms “had little educational value” because “of the primitive methods” they “employed.” The RRF’s goal was to install a new infrastructure of workshops, an agricultural school, and an experiment station to “teach selected peasants in short courses during the growing season.” In addition, its plans for educational experiments included not only adults but also children. The organization planned “to establish an institution for training young famine orphans” to become future farmers. Both RRF plans fit well into the Soviet grand strategy of the “five-year educational plan among the peasants to prevent future famines through the use of improved methods,

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<sup>326</sup> The official RRF letterhead included this phrase. For instance: Letter from Donald Stephens, March 20, 1926, in J.B. Matthews Papers, box 486, folder 13, Duke University's David M. Rubenstein Rare Book & Manuscript Library; “Outline of Organization and Operation of Russian Reconstruction Farms, Inc.” in Papers of Leonard Knight Elmhirst, Memoranda, LKE/OVR/R/1/B, Devon Heritage Services, Devon, U.K.

<sup>327</sup> Harold Ware and Karl Borders brought their whole families to Maslov Kut. Karl Borders, *Two Years in Russia*.

seeds, and machinery.”<sup>329</sup> This educational mission would become a central project for the RRF.

Before arriving in Russia in July 1925, Harold Ware together with Charles Kuntz, a former professor of psychology at Columbia University, drafted a plan for a new agricultural school.<sup>330</sup> The school was to enroll 15-18-year old boys and girls from neighboring villages and former soldier-peasants who returned to their villages from the Civil War. These students would both study and work by actively participating in the process of agricultural production under the supervision of their “teacher-workers.”<sup>331</sup> This educational process combined theory and practice, according to Kuntz, fulfilling “the function of higher education” by facilitating a more effective transfer of knowledge to any work environment through fostering a much faster learning process. Kuntz believed, students would be able to acquire not only technical skills but also knowledge of proper social organization. One of the goals that Kuntz proclaimed in his proposal was to present Soviet peasants with modern methods of cooperative production as the best way of social and economic organization. In doing so, he hoped to transform peasants into “self-supporting... [and] self-educating” individuals.<sup>332</sup>

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<sup>328</sup> “Outline of Organization and Operation of Russian Reconstruction Farms, Inc.” in Papers of Leonard Knight Elmhirst, Memoranda, LKE/OVR/R/1/B, Devon Heritage Services, Devon, U.K.

<sup>329</sup> “Outline of Organization and Operation of Russian Reconstruction Farms, Inc.” in Papers of Leonard Knight Elmhirst, Memoranda, LKE/OVR/R/1/B, Devon Heritage Services, Devon, U.K.

<sup>330</sup> Letter from Ware to Bloor, November 29, 1924, n RGASPI, f. 515, op.1, d. 410, 21-22.

<sup>331</sup> Charles Kuntz and Harold Ware, “Educational Program of the Russian-American Demonstration School,” no date, in RGASPI, f. 515, op.1, d.410, 33.

<sup>332</sup> Charles Kuntz and Harold Ware, “Educational Program of the Russian-American Demonstration School,” no date, in RGASPI, f. 515, op.1, d.410, 34-35.

Ware supplemented Kuntz's educational plan with his vision of the RRF as a model for a self-sustaining unit of agricultural production. By looking at the Russian Reconstruction Farms as a laboratory of agricultural knowledge and production, Ware hoped to "gradually replace the hundred or so workers now employed" at the farm "with students." Upon arriving at the farm, students would be employed in newer projects as workers, eventually replacing those workers who were occupied in older projects. Together, new students and experienced workers would be engaged in the development of a model experiment station and the school, which would function as a "a center for ideas and equipment." As these students would be involved not only in farming but also in the construction of this experiment themselves, Ware asserted the RRF spaces would become "actual living laboratories, extending the principle of utilizing the labor element beyond the seasonal limitations of the general farm work." His utmost hope was that this productive process would eventually reach the manufacturing stage. In Ware's view, when this point in the development was achieved, it was possible to establish "canning factories, oil mills, and new industrial enterprises to work up the raw products of the farm" at the RRF farm.<sup>333</sup>

To Ware, the establishment of the "living laboratory" was incomplete without a program for the reorganization of social life of RRF employees, their families, and local people from surrounding villages. Beyond providing a "well-rounded education" to future peasant-workers at a new agricultural school, Ware intended to educate future students and their families about the basics of domestic science, including hygiene and sanitation.<sup>334</sup> In

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<sup>333</sup> Charles Kuntz and Harold Ware, "Educational Program of the Russian-American Demonstration School," no date, in RGASPI, f. 515, op.1, d.410, 36.

<sup>334</sup> Charles Kuntz and Harold Ware, "Educational Program of the Russian-American Demonstration School," no date, in RGASPI, f. 515, op.1, d.410, 36.

recruiting the team for the Russian Reconstruction Farms, Ware considered those experienced in farming and those who were able to conduct social work on the RRF farm to be of particular value. Among the members of the first unit deployed to Maslov Kut were Hilda Holms (domestic science expert with famine relief experience in France, Germany, and Poland), Caroline E. Wilson (a graduate of Harvard and Cornell Universities who joined the team as the manager of the Home Economics Division), Dorothy L. Muller (a teacher), and Hannah M. Pickering (an educational and social worker with famine relief experience in Poland and Russia).<sup>335</sup> These women were in charge of establishing schools for nurseries, elementary schools, and medical services on the farm, in addition to educating adult population about the advantages of these social and educational institutions.

For Ware, the significance of the new agricultural school and other social institutions went beyond the borders of the Russian Reconstruction Farms project. In his educational plan, Ware proclaimed that the RRF space offered a unique opportunity to experiment with the “principles of the New School” that, to his regret, had only “isolated expressions” in the United States. Established in 1919 by progressive intellectuals, such as Charles Beard, John Dewey, and Thorstein Veblen among others, the New School created a more egalitarian, more free model of higher education for adults where common people could learn from and exchange ideas with scholars and artists.<sup>336</sup> In contrast to the United States where this school was perceived as radical and unconventional, Soviet Russia, according to Ware, was ready to embrace these educational ideas by offering its space for this type of educational experiments. Moreover, Ware argued that the establishment of this educational experiment

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<sup>335</sup> “Outline of Organization and Operation of Russian Reconstruction Farms, Inc.” in Papers of Leonard Knight Elmhirst, Memoranda, LKE/OVR/R/1/B, Devon Heritage Services, Devon, U.K.

had a wider “scientific importance.” In addition to the organization of the school, he planned to construct “facilities” for “American educators, graduate students, writers, publicists, and other interested in the new school who want to study these processes in actual operation.” According to his plan, the Russian Reconstruction Farms would accommodate these groups, providing them with visa support and offering them place to stay for short periods of time to conduct research.<sup>337</sup>

In sum, the planning stages of the Russian Reconstruction Farms revealed that Harold Ware envisioned the Maslov Kut space as much more than an experiment in large-scale farming. For him, the vast landscape of the Terskii district offered an opportunity to rethink the principles of social and economic organization of human life and to test these ideas in practice. Regarding the RRF as a “living laboratory,” Ware hoped that this experiment would function as a collaborative project for both American and Soviet scientists to try out innovative ideas to disseminate then these ideas further in the world.

### ***C. Farm “Laboratory”: Experimenting for a New Agrarian Future, 1925***

After their arrival in Maslov Kut in July of 1925, Harold Ware and his team spent the next eight months organizing life and work at the Russian Reconstruction Farms. During this time, the RRF sought to make the first steps towards the development of effective farm production. This process depended both on the introduction of agricultural machinery and on the reorganization of the social and educational landscape on the farm. The latter particularly mattered. The implementation of the educational plan ensured the development

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<sup>336</sup> Ira Katznelson, “Reflections on the New School’s Founding Moments, 1919 and 1933,” *Social Research* 76, no. 2 (Summer 2009): 395-410.

<sup>337</sup> Charles Kuntz and Harold Ware, “Educational Program of the Russian-American Demonstration School,” no date, in RGASPI< f. 515, op.1, d.410, 37.

of a new trained farm worker whom the RRF needed to accomplish its production goals. Additionally, the RRF hoped that the accomplishments of these first eight months would demonstrate the world the effectiveness of its enterprise and would attract more experts to work and contribute to the development of the project.

When the Soviet inspection visited the farm in the fall of 1925, it reported to Alexander Smirnov, head of the Narkomzem, about the first successes of Ware's venture. Among the achievements, the report listed the electrification of several buildings and the reconstruction of houses and horse stalls. Further, the report noted the RRF had established a machine shop that functioned both as a repair and training base for local peasants to gain skills in repairing farm machinery. The shop became such a "hive of industry" that the Soviet Department of Trade recognized as the "official service station of the entire district." This status had its obvious advantages, as it turned the RRF machine shop into a "depot" for repair parts.<sup>338</sup> As a result, the RRF would receive parts for broken machinery without the delays that were commonplace elsewhere in the region. This designation ensured that farm production would not be unnecessarily delayed by broken machinery.

In addition to the machine shop and the reorganization of infrastructure, the RRF began work on its mission to transform not only the landscape but also local people into new agrarian workers through education. In the summer of 1925, the RRF established a new school for the first ten peasant students where they would learn to operate tractors and other agricultural machinery. In addition, the organization took on five boys (age 12-16) from a local orphanage in order to train them into qualified agricultural workers. The boys' education, according to the report, combined theoretical and practical training: they

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<sup>338</sup> "R.R.F.: News from Our Farms in Russia," Bulletin No. 1, May 1, 1926, in James P. Goodrich Papers, Box 19, Folder "Russia: Economic-Agricultural Situation, 1923-26," Herbert Hoover Presidential Library.

attended school during the first half of the day and worked at different agricultural worksites in the afternoon. Yet, farm education, according to the RRF plan, went beyond theoretical and practical knowledge of agriculture.

In the interest of introducing the value of physical health and proper hygiene, the Ware's team repurposed an old warehouse into a "modest 'gym'" so that both American and Russian workers and peasants could improve their physical health. According to RRF reports, the American "gym" was so popular that RRF members had to "organize nightly classes averaging twenty members to care for the many who wish[ed] to use it."<sup>339</sup> This activity went hand in hand with the Soviet emphasis on the importance of physical culture in a daily routine of the new Soviet citizen.<sup>340</sup> For the Soviets, *fizkul'tura* (physical culture) represented an ideological and political instrument for training, educating, and uniting peasants and workers that became one of the central goals as a part of the modernization plan in the mid-1920s.<sup>341</sup>

The RRF also organized a Russian-American school, attended by ten American and twenty-five children of Soviet workers who were employed by the organization.<sup>342</sup> For

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<sup>339</sup> "R.R.F.: News from Our Farms in Russia," Bulletin No. 1, May 1, 1926, in James P. Goodrich Papers, Box 19, Folder "Russia: Economic-Agricultural Situation, 1923-26," Herbert Hoover Presidential Library.

<sup>340</sup> Susan Grant, "The Politics and Organization of Physical Culture in the USSR during the 1920s," *The Slavonic and East European Review* 89, no. 3 (July 2011): 498. For more on Soviet physical culture, see: Susan Grant, *Physical Culture and Sport in Soviet Society: Propaganda, Acculturation, and Transformation in the 1920s and 1930s* (London: Routledge, 2012).

<sup>341</sup> Rezoliutsiia TsK RKP (b) utverzhdena Orgbiuro TsK ot 13 Iiulia 1925, cited in Nikolai Semashko, *Puti sovetskoi fizkul'tury* (Moscow, 1926), 106, quoted in Susan Grant, "The Politics and Organization of Physical Culture in the USSR during the 1920s," *The Slavonic and East European Review* 89, no. 3 (July 2011): 501.

<sup>342</sup> Otchet A. Smirnovu ot chlena kollegii NKZema PredKontsessskom, RGAE, f. 478, op. 2, d. 1076, l. 118-119; "R.R.F.: News from Our Farms in Russia," Bulletin No. 1, May



infants and toddlers, RRF social workers established a day nursery, which according to Jessica Smith, Ware's wife and a former Quaker relief worker, was fiercely opposed by the older women in the village. Sitting in the corner of a village meeting room "enveloped in [their] great *shubas*," these Russian "babas" defended the old ways of raising children. Spuriously, they claimed that Americans would take their babies away until they paid taxes and argued that "the Godless ones" would "take the crosses" from the children's necks.<sup>343</sup> Despite this resistance, the nursery functioned throughout the existence of the RRF project and beyond. In the end, it served not only as a daycare for young children but also as a training ground for Soviet early education specialists who arrived to Maslov Kut from Moscow and other cities.

News about RRF's educational experiments and its agricultural reconstruction work on the farm reached beyond the central bureaucratic Soviet institutions in Moscow. Beginning in late winter 1926, the American branch of the RRF actively promoted its Russian work by sending RRF bulletins to "interested" Americans and organizing informational evenings and concerts.<sup>344</sup> In March-April 1926, Donald Stephens, head of the RRF American branch, organized concerts in which famous singers of Russian descent, including Feodor Chaliapin

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1, 1926, in James P. Goodrich Papers, Box 19, Folder "Russia: Economic-Agricultural Situation, 1923-26," Herbert Hoover Presidential Library.

<sup>343</sup> Jessica Smith, *Women in Soviet Russia* (New York: Vanguard Press, 1928), 168-169. Shuba is a Russian fur coat.

<sup>344</sup> For some examples, see: Bulletin No. 33, May 11-21, 1926, The Russian Reconstruction Farms, NYC, in Felix M. Warburg Papers, MS-457, Box 229, Folder 15, American Jewish Archives, Cincinnati, OH; "R.R.F.: News from Our Farms in Russia," Bulletin No. 1, May 1, 1926, in James P. Goodrich Papers, Box 19, Folder "Russia: Economic-Agricultural Situation, 1923-26," Herbert Hoover Presidential Library. For the campaign to get bricks to Maslov Kut, see: Letter from Stuart Chase, June 8, 1926, in Felix M. Warburg Papers, MS-457, Box 229, Folder 15, American Jewish Archives, Cincinnati, OH.

and Isa Kremer, performed.<sup>345</sup> Among the attendees of these concerts were prominent American public figures, such as Arthur Hayes, Lillian D. Wald, Arthur Calhoun, Hazel MacKaye, Oswald Garrison Villard, and John Lovejoy Elliott.<sup>346</sup>

In addition, the American RRF branch did not hesitate to reach out to former members of the American Relief Administration and Herbert Hoover's other former colleagues in seeking support for the project. In March-May 1926, Jessica Smith corresponded with James Goodrich, then Governor of Illinois and former Special Investigator for the ARA Russian Unit, about the possibility of his involvement in the RRF. Appealing to Goodrich's interest in Russian affairs and "constructive work" that he himself "advocated after he "had been in Russia," Smith hoped to use his support to reach a wider public in Indiana to raise funds for the project.<sup>347</sup> Support of people, like Goodrich or Villard, with prominent status in American political and social work, legitimized the significance of the Russian Reconstruction Farms project in the eyes of the American public and, undoubtedly, helped with further funding of American work on the Soviet land.

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<sup>345</sup> "Chaliapin Sings for Russian Relief," *New York Times*, March 8, 1926; "Isa Kremer Aids Russian Farms," *New York Times*, April 12, 1926; "Society Events," *New York Times*, April 11, 1926.

<sup>346</sup> Isa Kremer's concert to support the RRF was attended by Arthur Garfield Hays (civil worker and lawyer for the ACLU), Lillian D. Wald (a prominent social worker, founder of Henry Street Settlement in NYC), Allen Waldwell (a banking law expert, vice president of the American-Russian Chamber of Commerce in 1929), Julian Mack (U.S. federal judge), Arthur Calhoun (scholar, professor on workers' education), Hazel MacKaye (women's rights advocate and sister of Benton MacKaye), Oswald Garrison Villard (journalist, founder of the NAACP), Ruth Draper (actress), Sherwood Eddy (American Protestant missionary), Mary Dreier (NYC social reformer), Mabel Hyde Kittredge (home economist and social worker), John Lovejoy Elliott (founder of the National Federation of Settlements), Owen Reed Lovejoy (general secretary of the National Child Labor Committee), Robert Morss Lovett (political activist, left-wing). "Society Events," *New York Times*, April 11, 1926.

While raising funds to continue sponsoring the venture was an important part of the RRF American campaigns, its second, and more important, goal of its stateside campaigns was to attract the attention of those scientists and agricultural experts who might be interested in seeing and participating in the project themselves.<sup>348</sup> Exploiting his international connections, Donald Stephens reached out to Leonard Elmhirst, a British agronomist, in the summer months of 1926. Elmhirst was known for his extensive agricultural work in India, where he worked alongside Rabindranath Tagore and for the Dartington Hall project that he organized with his wife in 1925. Stephens perceived the mission of the Dartington Hall project in organizing model farming, forestry, and educational experiments, to be closely related to the goals of the Russian Reconstruction Farms. In 1926 and then again in 1927, Stephens invited Elmhirst to visit Maslov Kut to witness the Soviet agricultural reconstruction in action. Yet, while Elmhirst showed enthusiasm in his letters about the RRF initiative, he never made the trip to the North Caucasus.<sup>349</sup>

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<sup>347</sup> Letter from Jessica Smith to James P. Goodrich, March 15, 1926, in James P. Goodrich Papers, Box 19, Folder "Russia: Economic-Agricultural Situation, 1923-26," Herbert Hoover Presidential Library.

<sup>348</sup> Stephens actively corresponded with the members of the American Jewish Joint Agricultural Corporation (Agro-Joint) to collaborate on the project. See: Letter from Donald Stephens to A.R. Emanuel, June 19, 1926 in Felix M. Warburg Papers, MS-457, Box 229, Folder 15, American Jewish Archives, Cincinnati, OH.

<sup>349</sup> After Elmhirst assisted Tagore in setting up the Institute of Rural Reconstruction in the village of Surul, West Bengal, in 1922, he returned to England to launch an agricultural reconstruction project there. Over the years, Tagore and Elmhirst kept in touch through correspondence. Both would eventually visit the Soviet Union to observe collectivized agriculture. Rabindranath Tagore, *Selected Letters of Rabindranath Tagore* (Cambridge: Cambridge University Press, 1997), 365-368; Leonard K. Elmhirst, *Trip to Russia* (New York: New Republic, Inc., 1934). + citation of Stephens's letters from the Papers of Leonard K. Elmhirst, Memoranda, LKE/OVR/R/1/B, Devon Heritage Services, Devon, U.K.

Despite several failed attempts to allure agricultural experts to visit the RRF, the American branch's campaigns and personal connections succeeded in attracting attention of Clarence Stein, one of the leading American urban planners and a co-founder of the Regional Planning Association of America (RPAA).<sup>350</sup> Together with Lewis Mumford and Benton MacKaye, Stein founded the RPAA to break away from traditional housing and planning ideas. Rather than focusing on projects that emphasized private profit, the RPAA sought to create innovative, planned environments that would function in harmony with humankind's social, psychological and biological needs.<sup>351</sup> At the time, RPAA members were working on the development of the Garden City movement, and Stein envisioned the RRF as an exciting opportunity to test some of its principles.<sup>352</sup>

Intrigued by Harold Ware's plans to transform the RRF into a self-sustaining unit of agricultural production and manufacturing, Stein perceived Maslov Kut as an alternative to Garden City and offered the RPAA expertise in planning out the space. In January 1926, Stein approached MacKaye to draft a report for the RRF. Known for his research in cooperative farming and indigenous settlements along the Appalachian Trail, MacKaye was a prime candidate for the project. From February to April 1926, MacKaye worked in

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<sup>350</sup> It is possible that Stuart Chase, who worked for the RRF as General Counsel and was associated with the RPAA, informed Clarence Stein about the Russian Reconstruction Farms project.

<sup>351</sup> The full list of the RPAA membership is Clarence Stein, Henry Wright, and Frederick Lee Ackerman (planner-architects); Benton MacKaye (conservationist and regionalist); Lewis Mumford and Charles Whitacker (urban critics); Alexander Bing (realtor); Stuart Chase (economist); Catherine Bauer (housing specialist). Roy Lubove, *Community Planning in the 1920's: The Contribution of the Regional Planning Association of America* (Pittsburgh, 1963); Mark B. Lapping, "Radburn: Planning the American Community," in Neil L. Shumsky, ed., *The Physical City: Public Space and the Infrastructure* (London: Routledge, 2013): 85.

<sup>352</sup> Kristin E. Larsen, *Community Architect: The Life and Vision of Clarence S. Stein* (Ithaca: Cornell University Press, 2016), 82.

Washington, D.C., studying the Russian terrain in libraries, consulting with experts in the U.S. Department of Agriculture, the U.S. Department of Labor, and the Washington office of the Russian Information Service.<sup>353</sup>

In April, MacKaye presented a meticulous regional planning report to Stein. MacKaye's study focused on the possibility of extending the RRF methods of agriculture throughout the Archangelskii *raion* (county). In addition to addressing such topics the *artel* development, crop rotation, seasonal distribution of labor, and problems of agricultural and non-agricultural populations, MacKaye provided detailed charts that addressed most effective ways of the RRF spatial organization (fig. 1). Moreover, responding to Ware's concerns about the establishment of manufacturing in the region, MacKaye devoted several sections of the report to plan the proper organization, proposing several potential profitable industries for the community. In the end, however, MacKaye concluded that results of the planning report were limited by his inability to conduct a local study of the region himself. As a result, he warned his colleagues that some ideas might be a subject to change.<sup>354</sup> In fact, MacKaye's words were prophetic. When, inspired by MacKaye's report, Stein traveled to Maslov Kut in the summer of 1927, he severely doubted the transferability of MacKaye's plan from America to Russia.<sup>355</sup>

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<sup>353</sup> Larry Anderson, *Benton MacKaye: Conservationist, Planner, and Creator of the Appalachian Trail*, 192; Larsen, *Community Architect: The Life and Vision of Clarence S. Stein* (Ithaca: Cornell University Press, 2016), 82-83.

<sup>354</sup> Benton MacKaye, "Regional Planning Report on the Archangelskoe Rayon, North Caucasus, Russia. Report to the Russian Reconstruction Farms, Inc. Prepared by Benton MacKaye for the Regional Planning Association of America," April 1926, in Benton MacKaye Papers, Box 177, Folder 51, Rauner Special Collections Library, Dartmouth College.

<sup>355</sup> Larsen, *Community Architect*, 83.

MacKaye's regional plan never materialized in the Archangelskii *raion*. However, the intent of the RPAA and the RRF in planning the Maslov Kut environment shows the extent to which American experts perceived Soviet Russia and its geography as valuable space for experimentation with a potential to transfer of ideas back to the United States. Moreover, the interest of the RPAA in Ware's RRF project illustrates attempts to develop unconventional visions of urban and rural planning both in the United States and the Soviet Union. In doing so, Ware's vision of modernity, influenced by his readings of Marx and Lenin, corresponded with Stein and MacKaye's views of future planning. All three envisioned self-sustaining small farm communities as a representation of the future of agriculture and living. Finally, Stein's questioning of the ability to transfer theoretical ideas developed in one country to another country raises questions about the extent to which the border between the RPAA "laboratory" and the RRF "field" prevented the introduction of rural planning ideas.<sup>356</sup> The attempts to navigate the "border" between actual farming and the "training laboratory" proved difficult for RRF organizers as well.

#### ***D. The RRF Summer Program: A Gulley Between Theory and Practice, 1926***

In May 1926, the Russian Reconstruction Farms began preparations for its summer student program. Twenty new students were to join the RRF experimental farm for a four-week program.<sup>357</sup> After the initial organization and construction stages during the 1925 season, the RRF was ready to fully introduce its educational program. Yet, not everything

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<sup>356</sup> Robert E. Kohler, *Landscapes and Labscapes: Exploring the Lab-Field Border in Biology* (Chicago: The University of Chicago Press, 2002).

<sup>357</sup> Karl Borders, "Report. Student Program. Prikumsk Russian American Association, Summer season, 1926," in LKE/OVR/R/1/B, p. 1.

went according to plan. The RRF summer student program of 1926 revealed much about the difficulty of implementing an agricultural education program in practice. Delineating actual farming from farm training became a point of concern and frustration both among RRF members and students. Moreover, the introduction of this student program exposed internal collisions among students and confrontations between the RRF and local Soviet institutions that affected the overall quality of the educational program.

Before the program even began, several American members of the RRF doubted the compatibility of the summer educational experiment and the RRF farming goals for the 1926 season. Karl Borders, the RRF Educational Director, reported that American experts and farmers expressed “violent prejudice” against the introduction of students to the farm. In their view, all educational projects had to be deferred until farm production was fully established. More important, many farmers were worried that the student program and the teaching process, in general, would detract the crew from the establishment of a productive farm. Borders himself shared this view. Yet, due to the fact that the Narkomzem provided funds for the development of the program at the farm, Harold Ware “was determined to see it through.”<sup>358</sup>

The debate over the summer program among the members of the RRF revealed an inherent conflict with regard to the proper balance between actual farming in the “field” and farm training in the “laboratory,” or training school. In Ware’s vision, theoretical and practical trainings could coexist and would provide the most productive environment for the transfer of modern American agricultural knowledge to the Soviets. In reality, it proved impossible. Within the first few weeks, the RRF had to reconsider its preliminary

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<sup>358</sup> Karl Borders, “Report. Student Program. Prikumsk Russian American Association, Summer season, 1926,” in LKE/OVR/R/1/B, p. 2.

educational plan. Instead of alternating weeks of working in the field with weeks of studying at school, the needs of the farm meant students were put on a regular work schedule. The promised theoretical training was conducted only three times a week after the workday.<sup>359</sup> This shift from education to farm production put a sizeable dent their initial plans.<sup>360</sup>

In reducing the importance of farm education, the RRF transformed students into laborers. The emphasis on work in the fields and the lack of theoretical instruction, according to the students' report, curtailed their ability to learn more about the structure and organization of large-scale farming, which was, for many, what they hoped to accomplish most while observing the RRF. Instead, students had to work with other laborers and farmers in the fields "from fourteen to sixteen hours per day for more than a month."<sup>361</sup> Some could not cope with the task, and left the program after finding this labor to be too "strenuous." Other students had to be transferred to less demanding jobs, such as the repair department in the machine shop.<sup>362</sup> Overall, while some American RRF members praised the advantages of being able to "advance" farm production, many students became disillusioned.<sup>363</sup>

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<sup>359</sup> Karl Borders, "Report. Student Program. Prikumsk Russian American Association, Summer season, 1926," in LKE/OVR/R/1/B, p. 1.

<sup>360</sup> Karl Borders, "Report. Student Program. Prikumsk Russian American Association, Summer season, 1926," in LKE/OVR/R/1/B, p. 2.

<sup>361</sup> Karl Borders, "Report. Student Program. Prikumsk Russian American Association, Summer season, 1926," in LKE/OVR/R/1/B, p. 2.

<sup>362</sup> Karl Borders, "Report. Student Program. Prikumsk Russian American Association, Summer season, 1926," in LKE/OVR/R/1/B, p. 1.

<sup>363</sup> Protokol #2, Soveshanie Studentov-Praktikantov TSKhA, September 13, 1926, RGAE, f. 478, op. 2, d. 1076, list 187.



Students' frustration was further exacerbated by internal social and religious conflicts between them and local Soviet authorities. From May to mid-July 1926, different groups of students arrived to the Russian Reconstruction Farms from various Soviet regions, including Vladimir, Moscow, Kostroma, Leningrad, Tula, Tver' etc.<sup>364</sup> Those who arrived earlier in May were put to work on constructing their summer quarters. Unlike in 1925, students were recruited not only from neighboring peasant villages but also from professional agricultural colleges and universities. In early 1926, Harold Ware and the Dean of the Timiriazev Agricultural Academy (TSKhA), one of the leading agricultural universities in the Soviet Union, signed the agreement to accommodate ten TSKhA students at the RRF.<sup>365</sup> In addition to TSA students, ten young members of the Union of Russian Evangelicals (URE) joined the RRF summer student program. The presence of evangelical students was the result of the RRF's strong spiritual connections with the Russian chapter of the American Christian Missionary Society (ACMS) and the RRF dependence of the Quakers' funds. To educate ten evangelical students in the summer student program at the RRF, the American Christian Missionary Society donated three thousand dollars.<sup>366</sup> The "presence" of "the

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<sup>364</sup> The complete list of areas includes: "Vladimir (1), Moscow (4), Kostranskoe [Kostroma?] (1), Tula (1), Vyatskoe (1), Tverskoe (2), Leningrad (2), Podolsk (1), Dvinsk (1), Orlovskoe (1), Terskoe okrug (3), Ekaterinoslav (1), Donetskoe (1)." Karl Borders, "Report. Student Program. Prikumsk Russian American Association, Summer season, 1926," in LKE/OVR/R/1/B.

<sup>365</sup> Karl Borders, "Report. Student Program. Prikumsk Russian American Association, Summer season, 1926," in LKE/OVR/R/1/B, p. 1.

<sup>366</sup> Karl Borders, "Report. Student Program. Prikumsk Russian American Association, Summer season, 1926," in LKE/OVR/R/1/B, p. 1. This money never reached Maslov Kut. It went to New York to pay freight charges and to cover the expenses of the New York office because the fundraising campaign in the United States failed.

Evangelicals” and “anti-religious boys from the Academy,” according to Karl Borders, the RRF Educational Director, “projected itself as a problem from the first day.”<sup>367</sup>

This configuration of the student group was troublesome on many levels. The presence of a religious group on a Soviet state farm caused anti-religious sentiments within the student group and sparked an anti-religious “hysteria” among local Soviet officials. As RRF members failed to notify local Soviet authorities about the presence of evangelical students on the farm, the local police decided that the RRF was using the sovkhos to “covertly house a deep laid religious plot.” During the investigation, three evangelical students were summoned to the county court and accused of holding a “public religious meeting.” Such reactions came as the result of the general anti-religious Soviet policy towards sectarian groups, including evangelicals.<sup>368</sup> Since the early 1920s, the Soviet state treated religious minorities as anti-Soviet counter-revolutionaries and kulak-inspired movements.<sup>369</sup> In the end, the conflict between the RRF and the local police was resolved after chief of the local police advised evangelical students to “stick to farming” while they worked at the RRF farm.

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<sup>367</sup> Karl Borders, “Report. Student Program. Prikumsk Russian American Association, Summer season, 1926,” in LKE/OVR/R/1/B, p. 2.

<sup>368</sup> Karl Borders, “Report. Student Program. Prikumsk Russian American Association, Summer season, 1926,” in LKE/OVR/R/1/B, p. 3.

<sup>369</sup> Colin P. Neufeldt, “Collectivizing the Mutter Ansiedlungen: The Role of Mennonites in Organizing Kolkhozy in the Khortytsia and Molochansk German National Districts in Ukraine in the Late 1920s and Early 1930s,” in Leonard G. Friesen, ed., *Minority Report: Mennonite Identities in Imperial Russia and Soviet Ukraine Reconsidered, 1789-1945* (Toronto: University of Toronto Press, 2018), 224; V.S. Izmozik, *Glaza i ushi rezhima: gosudarstvennyi politicheskii kontrol' za naseleniem Sovetskoï Rossii v 1918– 1928 godakh* (St Petersburg: Izd-vo Sankt-Peterburgskogo universiteta èkonomiki i finansov, 1995), 115–16; Savin, “Divide and Rule,” 4–16; Felix Corley, *Religion in the Soviet Union: An Archival Reader* (London: MacMillan Press, 1996), 15; Coleman, *Russian Baptists and Spiritual Revolution, 1905-1925* (Bloomington: Indiana University Press, 2005), 190–7.

In addition to the collision with the local police over religion, conflicts among students arose due to different levels of their technical expertise in agriculture. TSKhA students argued that they deserved a higher pay for their work because they were trained at one of the leading agricultural universities in the Soviet Union. Meanwhile, evangelical students contended that they worked as hard as TSKhA students and should be paid as well as others. To ameliorate the situation, the RRF was forced to appropriate more funds to increase the pay of both groups by several rubles. This conflict, however, uncovered a larger problem than an increase in pay or work ethic. According to Karl Borders, the Educational Director, these tensions over differences in “technical training” created “superiority” and “inferiority” complexes among students. The diversity of educational, as well as social and religious, backgrounds was something that the RRF did not take into consideration when planning the program.<sup>370</sup>

When the RRF invited students for summer internships at the RRF promising them four weeks of intensive farm training, a substantial salary, and decent accommodations, it could not predict the amount of problems and conflicts it would encounter. Yet, in spite of all these tensions, collisions, and disruptions, the RRF summer student program was not abandoned by its organizers nor by Soviet educational institutions. While the TSKhA students’ report was filled with complaints the RRF program, TSKhA students hoped that the collaboration between the RRF and the Timiriachev Agricultural Academy would continue.<sup>371</sup> In fact, their hopes were realized.

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<sup>370</sup> Karl Borders, “Report. Student Program. Prikumsk Russian American Association, Summer season, 1926,” in LKE/OVR/R/1/B, p. 3; Karl Borders, *Village Life Under the Soviets* in Anna Borders Lynch, *Two Years in Russia: 1925-1927* (Raleigh: Pentland Press, Inc., 1999), 68-69.

<sup>371</sup> Protokol #2, Soveshanie Studentov-Praktikantov TSKhA, September 13, 1926, RGAE, f. 478, op. 2, d. 1076, list 187.

In April 1927, the Narkomzem organized another set of summer internships for TSKhA students at the RRF farm. In his letter to TSKhA Department Chairs, the Narkomzem official, Martin Latsis, wrote that the Academy should send eight students to the RRF: three from the Department of Engineering; three – Economics (specializing on large-scale farming); two – the Department of Agriculture.<sup>372</sup> In addition to TSKhA, now the Narkomzem required other educational institutions to send their students to the RRF. For instance, the Leningrad Polytechnic Institute sent its students from the Department of Industrial Agriculture to the RRF.<sup>373</sup> Thus, the Narkomzem regarded the RRF, its educational plan, and its agricultural reconstruction work to be a fertile training ground for future Soviet specialists in agriculture, economics, and engineering.

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While Harold Ware applauded the “huge progress” that the Russian Reconstruction Farms achieved by the end of 1927, stressing its accomplishments in mechanization, the utility of the data it collected for other Soviet sovkhozes, and its educational programs, by November 1927, Ware knew that his work in Maslov Kut was coming to an end.<sup>374</sup> The lack of funding from the American branch of the RRF, the inability to pay off RRF debts to American companies, and growing tensions between Ware and both regional authorities (Regional Land Administration) and central authorities (Narkomzem) raised questions about

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<sup>372</sup> Letter from Latsis to TSKhA, April 18, 1927, RGAE, f. 478, op. 2, d. 1077, list 91.

<sup>373</sup> Letter from the Chair of the Department of Industrial Agriculture to the Department of Concessions NKZ, May 3, 1927, RGAE, f. 478, op. 2, d. 1077, list 92.

<sup>374</sup> Letter from Ware to Fatus, November 9, 1927, RGAE, f. 478, op. 2, d. 1077, list 303; Letter from Ware to Fatus, November 9, 1927, RGAE, f. 478, op. 2, d. 1077, list 305.

the future existence of the Russian Reconstruction Farms.<sup>375</sup> By early 1928, Ware and his American team members left Maslov Kut, never to return.

While the Russian Reconstruction Farms ceased its operations in North Caucasus, the Narkomzem and Southeastern regional authorities did not abandon the large-scale farming experiment that the RRF had developed. In 1928, the Narkomzem tried to persuade the Main Concessions Committee (GKK) to transform the RRF farm from a concession to a sovkhoz. In doing so, the RRF farm would be under the jurisdiction of the Narkomzem. In its desire to obtain the RRF large-scale farm, the Narkomzem went as far as to offer the GKK to financially support the farm because the Narkomzem was sure of its profitability.<sup>376</sup>

The RRF's significance, however, lay not only in its future profits. The American experiment in large-scale farming in the Soviet countryside revealed attempts of diverse groups to utilize Maslov Kut as an experimental ground to test ideas about the efficient organization of modern agriculture during the mid-1920s. Beyond farm mechanization, these experiments included attempts to revolutionize agricultural education, rural planning, and social norms in the countryside. Like in any laboratory, theory could not always sustain a clash with reality. Even amidst those failures, lessons were learned and new theories were tested.

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<sup>375</sup> Letter from Ware to Odintsov, January 16, 1927, RGAE, f. 478, op. 2, d. 1077, list 17; Letter from the Baker, Carver, and Morrell Co. to the Narkomzem, February 17, 1927, RGAE, f. 478, op. 2, d. 1077, list 21-22; Letter from Ware to Amos Carver, No date (early 1927?), RGAE, f. 478, op. 2, d. 1077, list 108-109; Letter to Narkomzem, May 9, 1927, RGAE, f. 478, op. 2, d. 1077, list 123; Official Note, September 21, 1927, RGAE, f. 478, op. 2, d. 1077, list 231; Letter from Ware to Odintsov, [No date, 1927], RGAE, f. 478, op. 2, d. 1077, list 157-161.

<sup>376</sup> Report on the Prikumskoe, 1927 and early 1928, RGAE, f. 478, op. 2, d. 1220, list 16

## V. Cultivating Expertise: Soviet Agrarians' Travels to the United States, 1921-1928

On February 25, 1925, in a large office of the former Moscow Insurance Society building on the Old Square, Nikolai Kondratiev, an agricultural economist and Head of the Land Planning Commission, made a report of his research trip to the United States. Representatives of all major departments of the People's Commissariat of Agriculture (Narkomzem), including its Chair, Aleksandr Smirnov, listened attentively.<sup>377</sup> While Kondratiev's task was to investigate the state of agriculture in the U.S., Canada, Britain, and Germany, he admitted that he spent the majority of his time in the United States; "the country," according to him, "that largely determined the world market."<sup>378</sup> He did not hide his appreciation of the American agricultural system. Beyond discussing dry statistical data gathered during the trip, Kondratiev reminisced on important moments. "I was with the now-deceased Secretary Wallace at the monthly assessment of the harvest," Kondratiev began. "The whole room was full of people waiting for data to report to the press," when "the Secretary comes out and warns that in 15 seconds the report would be made and the data distributed. Everyone rushes to their phones and in few minutes the press is informed. I

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<sup>377</sup> Kondratiev's name is often associated with the theory of economic cycles, known as "Kondratiev waves." In his works, Kondratiev argued that capitalist countries experienced successive cycles of growth and decline since the beginning of the Industrial Revolution. The average length of an economic cycle was 50-55 years. As a result, the first cycle that he referred to as a "long wave" lasted from the late 1780s to 1842; the second cycle was between 1842 and 1897. The third cycle spanned from the late 1800s to the 1930s. Nikolai Kondratiev, *Bol'shie tsikly kon'iunktury: doklady i ikh obsuzhdeniia v institute ekonomiki* (Moscow, 1928).

<sup>378</sup> Doklad professora Kondrat'eva o poezdke v SShA, Angliiu, Germaniiu i Kanadu, February 25, 1925, [Report of Professor Kondrat'ev about the trip to the United States, England, Germany and Canada] Rossiiskii gosudarstvennyi arkhiv ekonomiki (RGAE), f.478, op.5, d.3244, list 4.

have a photo of this moment.”<sup>379</sup> For Kondratiev, the efficiency with which the USDA disseminated information to the remotest areas of the United States was most impressive. He hoped that one day Soviet Russia would follow the American example.<sup>380</sup>

This chapter focuses on Soviet agricultural travelers. This included agricultural economists, scientists, and experts, who traveled to the United States in the 1920s. While their travel agendas differed, they shared a desire to learn about American approaches to modern agricultural organization in order to return Soviet Russia to its position as a leader in the world grain market. This was especially important given the escalation of worldwide food shortages during the agricultural crisis of the 1920s. Using their pre-revolutionary connections with the international scientific community, this group was able to travel across the Atlantic to visit the U.S. Department of Agriculture, to meet with leading American scientists in agricultural colleges, to interact with farmers, and to establish potential partnerships with American farm companies. Their ability to acquire this knowledge through travel served as a vehicle for the circulation of agricultural ideas: valued as a precious commodity by Soviet state policymakers. Yet, by the late 1920s, with the landscape of Soviet agricultural policies moving towards forced collectivization and the shift towards Stalin’s state-driven Soviet science, this group’s travel experiences and foreign connections became a reason for their ostracization and later purging.

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<sup>379</sup> “Doklad professora Kondrat’eva o poezdke v SShA, Angliiu, Germaniiu i Kanadu,” 7.

<sup>380</sup> Tulaikov’s fascination with the USDA began during his first trip to the United States in the early 1900s. N.M. Tulaikov, “Some Features of organization and activities of the USDA,” *Vestnik selskogo khoziaistva* no. 1 (1909): 5-7; no. 2 (1909): 4-6; no. 4 (1909): 9-11; no. 9 (1909): 11-13; no. 17 (1909): 8-11; no. 18 (1909): 9-11; no. 28 (1909): 10-12; no. 32 (1909): 10-11; “The U.S. Bureau of Soils at the USDA,” *Pochvovedenie* 11, no. 1 (1909): 51-54.

This narrative uncovers how international travel functioned as an instrument of agricultural knowledge circulation and as a political tool.<sup>381</sup> Through analyzing travel instructions, reports, diaries, and publications, I argue that, over the course of the 1920s, Soviet state officials and scientists continuously redefined the value of travel and agricultural knowledge acquired through this process.<sup>382</sup> In doing so, it flips the traditional perspective offered by scholars by considering not only the westward movement of Soviet scientific bodies and ideas but, more importantly, by insisting on the circulatory movement of agricultural knowledge between East and West. By traveling and observing what they believed constituted the most advanced and modern agriculture system in the world at the time, Soviet travelers constructed their own vision of modern agriculture. While fascinated with some aspects of American agricultural achievements, they never compromised their

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<sup>381</sup> Yves Cohen, “The Soviet Fordson. Between the politics of Stalin and the philosophy of Ford, 1924-1932,” in Hubert Bonin, Yannick Lung, and Steven Tolliday, eds., *Ford, 1903-2003: The European History*: vol. 2 (2003): 531-558. Susan Gross Solomon, “Reflections on Western Studies of Soviet Science,” in *The Social Context of Soviet Science*, ed. Linda L. Lubrano and Solomon (Boulder, CO: Westview, 1976), 1-30; Nikolai Krementsov, *Stalinist Science* (Princeton, NJ: Princeton University Press, 1997); James T. Andrews, *Science for the Masses: The Bolshevik State, Public Science, and the Popular Imagination in Soviet Russia, 1917-1934* (College Station: Texas A&M University Press, 2003).

<sup>382</sup> Michael David-Fox, “The Fellow Travelers Revisited: The ‘Cultured West’ through Soviet Eyes,” *The Journal of Modern History* 75, no. 2 (June 2003): 301; David-Fox, *Showcasing the Great Experiment: Cultural Diplomacy and Western Visitors to the Soviet Union, 1921-1941* (Oxford: Oxford University Press, 2012); on the circulation of ideas: Yves Cohen, “Circulatory Localities: The Example of Stalinism in the 1930s,” *Kritika: Explorations in Russian and Eurasian History* 11, no. 1 (Winter 2010): 11-45; Claude Markovits, Jacques Pouchepadass, and Sanjay Subrahmanyam, eds., *Circulation and Society: Mobile People and Itinerant Cultures in South Asia, 1750-1950* (Delhi: Permanent Black, 2003); Susan Gross Solomon, “Circulation of Knowledge and the Russian Locale,” *Kritika: Explorations in the Russian and Eurasian History* 9, no. 1 (Winter 2008): ; on the Soviet-American exchange of technology: Kendall Bailes, *Technology and Society Under Lenin and Stalin* (Princeton: Princeton University Press, 1978); Antony C. Sutton, *Western Technology and Soviet Economic Development: 2 vols.* (Stanford: Hoover Institute, 1968-1971).



faith in the Soviet project, openly questioning some principles of western modernity and its agricultural practices in the process.<sup>383</sup> Thus, these travels to the United States revealed as much about the state of Soviet agriculture as they did about American farming. In addition, in traveling through the United States, Soviet scientists, economists, and experts perceived themselves not only as scientists but also as potential policymakers in the Soviet state. They used this experience as a powerful tool in validating their expertise within the Soviet bureaucratic system: using it to promote their vision of modern Soviet agriculture.<sup>384</sup>

#### ***A. Getting Ready for the Trip***

That the Soviets were interested in foreign agricultural ideas and practices during the 1920s —particularly those of the United States—should come as no surprise. Caused by the First World War and the Russian Civil War, the agricultural crisis of the Soviet village led to the country’s precipitous fall in the world crop market. This forced the new Soviet government as well as its scientific apparatus to appeal to foreign experience in an attempt to solve these problems.<sup>385</sup> It was an overture that fell in line with a long intellectual tradition of using foreign ideas and practices. Moreover, that the United States and Soviet Russia shared similar geography and climate, as well as Vladimir Lenin’s personal interest

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<sup>383</sup> On the ideas of modernity and Soviet Russia, see: Michael David-Fox, *Crossing Borders: Modernity, Ideology, and Culture in Russia and the Soviet Union* (Pittsburgh: University of Pittsburgh Press, 2015), 4.

<sup>384</sup> Ideas about utopianism and confronting the self: Martin Hurcombe, Angela Kershaw, and Martyn Cornick, *French Political Travel Writing in the Inter-war Years: Radical Departures* (New York: Routledge, 2017), 292.

<sup>385</sup> Jenny Leigh Smith, *Works in Progress: Plans and Realities on Soviet Farms, 1930-1963* (New Haven: Yale University Press, 2014); Zhores Medvedev, *Soviet Agriculture* (New York: Norton, 1987).

in American expertise, it laid the foundation for an extensive exchange of agricultural ideas during the 1920s.<sup>386</sup>

These Soviet agricultural travelers belonged to the so-called “old” group of scientists who received an education and conducted research in pre-revolutionary Russia. Despite their abhorrence towards these specialists due to their background, the new Soviet state had to rely on their expertise in the absence of an ideologically viable alternative due to a dearth of technically-skilled “red” scientists at the time.<sup>387</sup> The Soviets not only had to rely on the “old-school” agrarians’ scholarship but also on their administrative and teaching experience, as well as their connections with intellectual circles abroad. In turn, these “old” scientists and experts recognized that, even if Bolshevik ideals did not appeal to them, they had to find mechanisms to adapt and utilize the new system for their purposes: to advance science and to strengthen their positions in the People’s Commissariat of Agriculture (Narkomzem).

From 1921 to 1928, the influence of non-communist experts in the Narkomzen had been institutionalized and they enjoyed relative autonomy. Narkomzem eagerly recruited “old” experts and specialists who possessed “precious” agricultural knowledge and training.<sup>388</sup>

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<sup>386</sup> Vladimir Lenin, “The Agrarian Program of Social Democracy after the First Russian Revolution, 1905-1907,” in Lenin’s Works, vol. 13, 212-216; Lenin, “New Data on the Laws Governing the Development of Capitalism in Agriculture,” Lenin’s works, vol. 27, 133, 226-227. For the history of Russian agrarians’ contacts with foreign agricultural scientists, see: A.M. Nikulin, *Agrarniki, vlast’ i selo: ot proshlogo k nastoiaschemu* [Agrarians, power, and village: from the past to the present] (Moscow: Delo, RANKhiGS, 2014), 97, 101. Nikulin argues that while “old-school” agrarians maintained contacts with German colleagues, their focus was gradually moving towards American agricultural practices after the 1917 revolution.; On foreign connections between Russian/Soviet and foreign scientists, see: Susan Gross Solomon, ed., *Doing Medicine Together: Germany and Russia Between the Wars* (Toronto: University of Toronto Press, 2006).

<sup>387</sup> Thomas Owen, "The Death of a Soviet Science: Sergei Pervushin and Economic Cycles in Russia, 1850-1930," *The Russian Review* 68, no. 2 (2009): 221-239; Kremmentsov, *Stalinist Science*.

<sup>388</sup> Heinzen, *Inventing a Soviet Countryside*, 42, 66.

During N. Osinsky's (a pseudonym for Valerian Obolensky) tenure as deputy of Narkomzem from 1921 to 1923, non-party specialists occupied prominent positions in most of the institution's sections and divisions.<sup>389</sup> For instance, Nikolai Kondratiev, one of the leading agricultural economists, headed Narkomzem's Land Planning Commission (Zemplan). Not only did Zemplan produce top statistical research on rural economy, but also it maintained close ties with academic and research institutions, such as the Timiryazev Academy where many of Zemplan specialists had been trained and worked until 1928.<sup>390</sup> Even during the attempts of state agencies to "purify" Narkomzem from enemy elements in 1922 and 1924, both people's commissars of agriculture, Osinsky and Aleksandr P. Smirnov, protected nonparty thinkers from persecution.<sup>391</sup> This interrelationship between Narkomzem and these scientists defined the organization of foreign tours of American agricultural areas in the 1920s.

Agrarian specialists used their pre-revolutionary foreign connections with intellectuals and officials in Europe, Canada, and the United States to travel abroad. Throughout the 1920s, Soviet scientists were continuously invited to international congresses, conferences, and meetings, as the international academic community valued their work on agricultural economy, melioration, dry farming, and plant breeding. For instance, Nikolai Kondratiev,

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<sup>389</sup> N. Osinsky (Valerian V. Obolensky) was a left-wing communist who occupied diverse positions in the new Soviet government: from the first deputy of the State Bank of Soviet Russia to the first deputy of the Supreme Soviet of National Economy. While, initially an opponent of the New Economic Policy and a supporter of state regulation, Osinsky quickly embraced the NEP and became one of its most ardent supporters. He would conduct an extensive research of American agriculture in 1923. Heinzen, *Inventing a Soviet Countryside*, 67; N. Osinsky, *Gosudarstvennoe regulirovanie krestianskogo khoziastva* (Moscow: Gosudarstvennoe izdatel'stvo, 1920).

<sup>390</sup> Heinzen, *Inventing a Soviet Countryside*, 69.

<sup>391</sup> Heinzen, *Inventing a Soviet Countryside*, 68, 89, 91-92, 96.

Nikolai Tulaikov, Nikolai Makarov, and Nikolai Vavilov avidly traveled both to Europe and to the United States to present their findings at scientific meetings.<sup>392</sup> Besides presenting their research, scientists used these occasions as a way to familiarize themselves with foreign agricultural ideas and methods. They frequently prolonged their conference trips for several months to travel around and to meet with agricultural officials, scientists, and farmers.

Like any trip, these journeys began with the establishment of a travel agenda. While “old-school” scientists had relative autonomy in deciding whom to meet, what route to take, and what questions to explore during their trips, Narkomzem officials exercised certain control over those foreign investigations. The instructions (*zadaniia*) given to Kondratiev before his departure to the United States in 1924 are indicative of this peculiar arrangement.<sup>393</sup> Several months prior to his American visit, Kondratiev started receiving miscellaneous instructions from different Narkomzem departments to investigate six major topics: the potential of the United States as a grain exporter; the effectiveness of American solutions to the farm crisis; the organization of the USDA and its experiment stations; the organization of agricultural production, distribution, and standardization; and the mechanization of farms.

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<sup>392</sup> For instance, in one of his letters to Dmitry Borodin, Vavilov talked about an invitation to attend the International Institute of Agriculture in Italy. He added, “if komandirovka takes place, I will try to get to Tunisia and Algeria.” Letter from Vavilov to Borodin, March 2, 1923, *Nasledie*, vol. 1, 72.

<sup>393</sup> “Zadania Narkomzema kommandirovannomu v evropeiskie strany, SShA i Kanadu professoru Kondratievu N.D.,” March 27-May 28, 1924, RGAE, f. 478, op. 3, d. 2831. While Kondratiev planned on visiting not only the United States but also to Canada and several European countries, Narkomzem instructions focused largely on American agriculture.

While different departments of Narkomzem issued these instructions to Kondratiev before his trip, it was clear that he valued his own research agenda as well. Kondratiev's response to the instructions in 1924 indicated that he, indeed, shared the Narkomzem concerns about the world agricultural crisis and the state of grain production. Yet, in his letter to V.I. Senin, Head of the Department of Agricultural Economy, Kondratiev clearly articulated "major goals that *[he] put in front of himself* during the foreign trip with regard to agriculture."<sup>394</sup> As an agricultural economist, Kondratiev's primary concern was with the "perspective of the world agricultural market" and the "direction" of the grain production development, as well as the agricultural crisis. The second question that Kondratiev sought to explore was "the development of foreign animal husbandry." He argued that these two questions were of primary concern due to the importance for the Soviet Union to recover its positions on the world market. Kondratiev admitted that he was going to approach his trip from an economist's point of view, and did not want to be burdened by "technical questions" that some Narkomzem departments put in front of him.<sup>395</sup>

In addition to revealing what Narkomzem and scientists were concerned with, this case illuminates the interrelationship between Soviet officials and agricultural scientists. While Kondratiev himself occupied an administrative position within Narkomzem, in this case, he identified himself as an economist and as a scientist who was interested in theoretical rather than technical approaches. While Narkomzem's directions had an important guiding role in

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<sup>394</sup> Pis'mo Kondratieva Seninu. Zadaniia Narkomzema komandirovannomu v evropeiskie strany, SShA i Kanadu professor Kondratievu N.D., RGAE, f. 478, op.3, d.2831, лист 14; Italics is mine.

<sup>395</sup> Pis'mo Kondratieva Seninu. Zadaniia Narkomzema komandirovannomu v evropeiskie strany, SShA i Kanadu professor Kondratievu N.D., RGAE, f. 478, op.3, d.2831, лист 14; Doklad professora Kondratieva o poezdke v SShA, Angliiu, Germaniiu i Kanadu, February 25, 1925, RGAE, f.478, op.5, d.3244, list 2.

the organization of the trip, Kondratiev's scientific interests determined his explorations. Nevertheless, it would be a mistake to assume that Kondratiev had complete autonomy over his foreign trips' agenda. Rather, it was the confluence of interests and goals that determined Soviet agrarians' travel agendas.

### ***B. Touring U.S. Agricultural Regions***

To travel abroad for a Soviet citizen in the 1920s was not easy. When Soviet agricultural travelers decided to go to the United States, they faced two major problems: getting a travel permit from Soviet government institutions and obtaining travel funds. Even if Narkomzem or even Vladimir Lenin himself sanctioned those trips, agrarians could not hope to escape the bureaucracy of other Soviet institutions. Not only did they have to receive an official permission from Narkomzem, but also they had to knock on the doors of the Cheka (state security police) and other government departments to get necessary signatures. In a 1921 letter, plant geneticist Nikolai Vavilov wrote with frustration: "If I had known before how much trouble [traveling to] America would be, I would, perhaps, have abstained from the enterprise." "From morning to night," he continued, "I must fill out forms and pass them around all of Moscow – the Cheka, the Ministry of Foreign Affairs, Narkomzem, Rabkrin, Vneshtorg, and Sovnarkom."<sup>396</sup> Yet obtaining permission to travel was but one problem faced by Soviet agricultural travelers.

The new Soviet state had little to no funds to sponsor these foreign ventures. When Vavilov described the destitute position of Soviet scientists, he lamented that he did not

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<sup>396</sup> N.I. Vavilov to E.I. Barulina, June 28, 1921, private archive of Yuri Vavilov, quoted in Peter Pringle, *The Murder of Nikolai Vavilov: The Story of Stalin's Persecution of One of the Great Scientists of the Twentieth Century* (New York: Simon & Schuster, 2008), Kindle Edition, Location 1463.

even have money to send telegrams and that many academics had not received their salaries for months.<sup>397</sup> As a result, resourceful scientists had to find money through their professional contacts and in various bureaucratic institutions through their patrons.<sup>398</sup> Others obtained funds when they arrived in the United States. Nikolai Makarov, for example, arrived in New York in 1918 only to find his funding through the Siberian Cooperative Bureau in the United States had not come through. Thus, he had to find work as an editor for the Associated Press. In addition, Makarov became a chair for the organizing committee of the Russian section of the exhibition “America Making.”<sup>399</sup> While Makarov’s case was an extreme example, it nevertheless reveals how the financial difficulties faced by Russian scientists in the 1920s limited their ability to travel.

After a lengthy journey across the Atlantic to the United States, Soviet travelers oftentimes relied on two U.S.-based organizations that helped them to navigate through their American travels. The first one was the Russian Agricultural Bureau in New York, established in 1921 by Dmitry Borodin, a Russian émigré entomologist, and Nikolai Vavilov with official support from Narkomzem. Not only did this organization serve as a shipping agency (seeds and literature), but it also helped Soviet agricultural travelers to establish contacts with prominent American agricultural scientists and experts by providing them with letters of recommendation. The second source of support Soviet agrarians relied upon was the USDA. As seen in acknowledgement pages of their post-travel publications,

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<sup>397</sup> Letter from Vavilov to Borodin, June 3, 1922, in Vavilov’s letters, vol. 1, 34.

<sup>398</sup> Nikolai Kremontsov, *Stalinist Science* (Princeton: Princeton University Press, 1996), ch. 1.

<sup>399</sup> Marina Galas, “Voprosy istorii i teorii krest’ianskogo khoziaistva v trudakh A.N. Chelintseva i N.P. Makarova,” [The questions of history and theory of peasant households in the works of A.N. Chelintseva and N.P. Makarova] Ph.D. diss. (Moscow, 2000): 61, 79.

Soviet authors sang praises to USDA officials who, in Soviet agrarians' words, welcomed them with open arms.<sup>400</sup> Of particular importance were their visits to the Bureau of Agricultural Economics, headed by Henry C. Taylor. For the Soviets, working with the BAE experts, including Oliver Baker and Oscar Stine, presented an opportunity to see how American agrarians studied agricultural production and collected agricultural statistics to develop mechanisms to forecast crop yields.<sup>401</sup> Moreover, their research in the agricultural geography of the Great Plains interested Soviet agricultural economists, as the Volga region's geographic conditions were quite similar.<sup>402</sup> In addition to sharing similar scientific interests, Baker and Stine supported the organizational part of Soviet agronomists' trips in the United States. They worked tirelessly to accommodate Soviet intellectuals, organizing meetings and writing recommendation letters. In his report to Narkomzem in 1925, Kondratiev warmly reminisced, "The Department [USDA] was so nice that it had informed all places that I was supposed to visit." Kondratiev apparently received "100 letters of recommendation" from the USDA.<sup>403</sup>

After their work and research in New York and Washington D.C. was completed, Soviet agricultural travelers began their trips through agricultural areas of the United States. While individual routes differed due to research agendas and time allotment, Soviet agrarians'

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<sup>400</sup> Doklad professora Kondratieva o poezdke v SShA, Angliiu, Germaniiu i Kanadu, February 25, 1925, RGAE, f.478, op.5, d.3244, list 3.

<sup>401</sup> Éric Chancellier, "The Beginnings of the Bureau of Agricultural economics: Modelling Crops (1922-1930)," *Histoire & Sociétés Rurales* 42, no. 2 (2014): 113.

<sup>402</sup> Dmitry Borodin, *Digest of American Agriculture*, no. 1, July 15, 1925, 2; Oliver E. Baker, "The Agriculture of the Great Plains Region," *Annals of the Association of American Geographers* 13, no. 3 (September 1923): 109-167.

<sup>403</sup> Doklad professora Kondratieva o poezdke v SShA, Angliiu, Germaniiu i Kanadu, February 25, 1925, RGAE, f.478, op.5, d.3244, list 3.



reports, publications, and diaries reveal that their interest in dry-farming areas and corn/wheat-growing regions played a significant role in determining their travel plans. Soviet agricultural travelers showed primary interest in midwestern and northwestern territories that were quite similar to climate and soil of grain-producing areas in the Soviet Union. For instance, when Nikolai Tulaikov, a Soviet soil scientist, went on a short three-month trip to the United States and Canada in 1922, he visited ten midwestern and northwestern U.S. states and three Canadian provinces to learn more about dry-farming practices.<sup>404</sup> Another Soviet expert, N. Osinskii (Valerian Obolenskii), who spent six months in the United States in 1923, almost repeated Tulaikov's route in the Midwest to gather information about wheat regions. Yet, instead of traveling north to Canada afterwards, Osinskii went west and then south to observe the agriculture of the U.S. South.<sup>405</sup>

These short research trips across multiple states did not allow Soviet agricultural travelers to stay in one place for long or investigate regions in a detailed manner. To make their travels more productive, Soviet agrarians used the network of American agricultural colleges that served as a "visitor information center" for the area.<sup>406</sup> Osinskii's travels are a case in point. Wherever Osinskii went during his six-month trip, in the majority of cases, he visited an agricultural college first. There, not only did he interview leading agricultural

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<sup>404</sup> N.M. Tulaikov, *Po opytnym uchrezhdeniiam oblasti sukhogo zemledelii Severnoi Ameriki (Iz materialov poezdki kontsa 1922 g.)* (Moscow: Novaia derevnia, 1924). Tulaikov visited Kansas, Nebraska, Minnesota, South and North Dakotas, Colorado, Wyoming, Montana, Washington, Oregon, as well as Manitoba, Saskatchewan, and Alberta.

<sup>405</sup> N. Osinskii, *Po selskokhoziaistvennym shtatav Severnoi Ameriki: ekonomicheskii dnevnik* (Moscow: Izdatelstvo Kommunisticheskoi Akademii, 1926).

<sup>406</sup> Tulaikov, *Selskokhoziaistvennie kolledzhi Soedinennykh Shtatov* (Moscow: Novaia derevnia, 1924), 33-36.

economists, such as John Black, J.B. Davidson, and Richard T. Ely among others, but he also found necessary support for his travel. Through faculty and department assistants' extensive professional and personal networks, Osinskii was able to tour local farms where he met with farmers, to visit farm companies' offices and Chambers of Commerce, and to observe the work of USDA extension services. Agricultural colleges thus represented an important travel mechanism that connected Soviet travelers and exposed them to diverse groups of people and their agricultural knowledge.<sup>407</sup>

Americans, in turn, used these encounters to learn more about the state of Soviet agriculture, as well as about recent political, economic, and social developments. In his economic diary, Osinskii recorded multiple instances when his interviewees asked him “an inevitable series of questions about the USSR” instead of answering his queries.<sup>408</sup> In accord with Soviet agrarians, the majority of Americans they encountered was concerned with Soviet competition and asked about the Soviet Union's potential as a grain exporter. When Osinskii, for instance, visited the Rosenbaum & Rosenbaum Co., one of the three largest grain and elevator houses in Chicago, E.F. Rosenbaum ruminated on the possibility of a Soviet resurgence on the grain market and, according to Osinskii, overestimated its potential.<sup>409</sup> Beyond questions about grain exports, American agricultural scientists, experts, and farmers were interested in Soviet crops, labor costs, and technology.

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<sup>407</sup> Osinskii, *Po selskokhoziaistvennym shtatav Severnoi Ameriki*.

<sup>408</sup> Osinskii, *Po selskokhoziaistvennym shtatav Severnoi Ameriki*, 44.

<sup>409</sup> “Big Grain Firms Lose Identity Friday; Three Chicago Companies Will Then Become \$26,000,000 Farmers' Corporation,” *New York Times*, July 31, 1924; Osinskii, *Po selskokhoziaistvennym shtatav Severnoi Ameriki*, 9.

When Americans did not ask about agriculture, they focused on Soviet politics and society. In one conversation, Osinskii was asked about the stability of the Soviet government; whether religion was forbidden; why the Soviets overturned prohibition and allowed the drinking of vodka again.<sup>410</sup> At times, these types of conversations took place within the discourse of an American home where farm matters were put on the back burner. For instance, when Osinskii visited professor C.L. Holmes in Ames, Iowa, in August 1923, Holmes invited him for dinner after a long day of traveling through corn farms. There, according to Osinskii, both had a pleasant conversation where Osinskii was “asking about the American life (*zhit'e-byt'e*), and [Holmes], in turn, asked about Russia.”<sup>411</sup>

### ***C. Post-Travel Reports***

Upon returning to their homeland, Soviet agricultural travelers widely reported their experiences and findings. Soviet government institutions, particularly Narkomzem, were the first to receive official reports that discussed the state of American agriculture. For instance, Kondratiev who returned from his foreign trip in early 1925 presented a lengthy report on the perspectives of the world agricultural market and the ability of the United States to compete with Soviet grain exports. The Soviet scientific community also showed keen interest in travel findings of these agrarians. Presenting at Soviet conferences and publishing became two primary ways for travelers to disseminate information among their

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<sup>410</sup> Osinskii, *Po selskokhoziaistvennym shtatav Severnoi Ameriki*, 14.

<sup>411</sup> Osinskii, *Po selskokhoziaistvennym shtatav Severnoi Ameriki*, 45. Osinskii had similar evenings with other American agricultural scientists and experts as well. For instance, see: Osinskii, *Po selskokhoziaistvennym shtatav Severnoi Ameriki*, 51.

colleagues.<sup>412</sup> Finally, some agrarians, including Osinskii, gave public lectures about the state of American agriculture. In his book *My Heresy about the United States*, Osinskii stated that his lectures on American agriculture provoked a storm of emotions from the general public. According to him, his listeners were either appalled by his comments or disappointed when he did not portray American agriculture and the United States, in general, as the most developed country in the world and on the verge of proletarian revolution.<sup>413</sup> As a result, Osinskii claimed that he was forced to write a follow-up book where he dismantled his perceived “heresy” about the United States. In it, Osinskii admitted American commercial potential but he doubted its ability to establish complete control over Europe and the world. He predicted the increasing competition between the U.S. and other European countries and encouraged his fellow comrades to challenge American dominance.<sup>414</sup>

Among various topics covered in post-travel publications and reports, three themes stood out: the organization and work of the U.S. Department of Agriculture and its extension services; American agricultural education; and the use of farm technology. With regard to the latter, despite the growing import of American tractors to the Soviet Union in the 1920s and the strong belief of Soviet state institutions in the power of tractorization, Soviet agricultural travelers were far more cautious with regard to the latest technology.<sup>415</sup> After his trip to the United States in 1923, Tulaikov argued that tractorization of Soviet

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<sup>412</sup> “21 Soviet Scientists at Soil Conference,” *New York Times*, June 19, 1927.

<sup>413</sup> Osinskii, *Moi Lzheucheniia o Soedinennykh shtatakh Severnoi Ameriki* [*My Heresy about the United States*] (Moscow: Pravda i Bednota, 1926).

<sup>414</sup> Osinskii, *Moi Lzheucheniia*, 35, 38-39.

<sup>415</sup> On tractor imports, see: Dana Dalrymple, “The American Tractor Comes to Soviet Agriculture: The Transfer of Technology,” *Technology and Culture* 5, no. 2 (1964): 193.

agriculture should wait until Soviet agricultural production had gained more strength. One of his major reservations was their high price and the lack of agricultural education among peasants. Osinsky echoed Tulaikov's concerns. Wherever Osinsky went during his trip, he encountered an ambivalent attitude towards mechanization, in particular toward tractors. In South Dakota, Osinsky had a lengthy conversation with G.G. Gardner, Professor Rex F. Willard's Assistant, who stated that South Dakota farmers utilized horses for sowing and tractors for milling.<sup>416</sup> According to Willard himself, only twenty-five percent of South Dakota farmers possessed tractors, as it was cheaper to sow using horsepower. During his conversation with Osinsky, Willard quipped that even American automobile magnate Henry Ford plowed with horses rather than tractors on his own farm.<sup>417</sup>

Similarly to South Dakota, Montana farmers preferred horses to tractors for sowing land. When Osinsky visited a ranch in Big Timber, Montana, a farm supervisor told him that the "was an object of obsession, or 'tractormanía,' when it first appeared." The supervisor insisted that tractors should be "dropped" as a technology to improve farmers' lives. Further, in Oregon, Osinsky talked to farmers who said that while they used Fordson tractors, they were needed only "at the peak of the work" season. Also, the Chair of the Agricultural Department, G.R. Hyslop (Corvallis, OR) stated that it was hard to find a person who knew work with tractors. According to Hyslop, farmers did not know how to operate tractors and hiring a specialist was rather expensive.<sup>418</sup> Yet these were the attitudes of Montana and South Dakota farmers. For instance, Minnesota and Iowa farmers favored

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<sup>416</sup> Osinskii, *Po selskokhoziaistvennym shtatav Severnoi Ameriki*, 61

<sup>417</sup> Osinskii, *Po selskokhoziaistvennym shtatav Severnoi Ameriki*, 72.

<sup>418</sup> Osinskii, *Po selskokhoziaistvennym shtatav Severnoi Ameriki*, 127.

tractors because, as Osinsky noted, their soils were more ready (well worked through) than other soils. All in all, the impression that Soviet agrarians received from the observation of American tractorization was ambiguous. As a result, rather than arduously advocating for the immediate implementation of tractors in Soviet agricultural practices, agricultural scientists and experts advocated for a more gradual approach.

In addition to tractors, the USDA occupied a special place in the imagination of Soviet agricultural scientists and experts. They were most impressed by the way the USDA was organized and the efficiency with which it disseminated information. For instance, after witnessing the work of the USDA and its extension services, Nikolai Tulaikov proposed radical territorial reforms in the Soviet countryside where a *guberniya* would be replaced with an *oblast* (similar to an American state). An oblast would serve both an administrative and an agricultural unit.<sup>419</sup> According to Tulaikov, just like in the United States, every city in an oblast would have its own agricultural college. To his mind, the People's Commissariat of Agriculture would need to simplify its organizational structure and be more transparent like USDA, as well as easing regulations on agricultural schools in order to respect their "complete local agricultural autonomy."<sup>420</sup> "For me," Tulaikov quipped, "it does not seem like a wild thought that some day our overly bureaucratic Narkomzem at the Old Square in Moscow, where it is very difficult to find ten people qualified to do scientific work... will turn into something that resembles the USDA in Washington. Concerns about payments, cadres, [and] salaries... will cease and real scientific work will begin."<sup>421</sup>

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<sup>419</sup> An oblast is quite similar to an American state.

<sup>420</sup> Tulaikov, *Seslko-khozyaistvennye Kolledzhi Soedinennykh Shtatov* [Agricultural Colleges of the United States] (Moscow: Novaya Derevnia, 1924), 66.

<sup>421</sup> Tulaikov, *Seslko-khozyaistvennye Kolledzhi Soedinennykh Shtatov*, 66-67. As Head of the Saratov Experiment Station, Tulaikov himself experienced the confusing nature of the

Tulaikov and his colleagues at agricultural research universities and government institutions were swamped with what was referred to as “vermicelli,” or the practice of dealing with petty problems concerning bureaucratic issues, like staffing and budgets.<sup>422</sup>

According to Soviet agrarians, the focus on bureaucracy and the lack of “scientific work” at Narkomzem starkly contrasted with the bustling development of agricultural research conducted by the USDA.<sup>423</sup> When Kondratiev visited the Bureau of Statistics, he marveled at its ability to conduct effective statistical research. In his presentation at the 2<sup>nd</sup> All-Union Statistical Conference in Moscow in 1925, Kondratiev stated that more than 20,000 competent and educated agricultural experts regularly sent statistical information to Washington D.C. and local offices. Such a large network of experts allowed the USDA to collect a more “objective” perspective on farm production and organization.<sup>424</sup> In contrast to European and Soviet statisticians who focused on theoretical aspects of agricultural statistics, USDA officials, according to Kondratiev, showed admirable practicality. They used statistical data not only to plan future agricultural policies but also to protect farmers from deceiving information by regularly publishing statistical reports in USDA bulletins and distributing them among farmers. In short, Kondratiev urged his colleagues to pay

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agricultural organization. He personally received orders from the Narkomzem, Glavprofobr (The Central Professional Education Bureau), and local Saratov Narkomzem. In most cases, Tulaikov admitted, these orders were conflicting and did not follow any central program.

<sup>422</sup> Heinzen, *Inventing a Soviet Countryside*, 32.

<sup>423</sup> Osinsky, *Amerikanskoe sel'skoe khoziaistvo po noveishim issledovaniiam* [American Agriculture according to the Newest Research] (Moscow: Izdatel'stvo Kommunisticheskoi akademii, 1925), 29.

<sup>424</sup> Kondratiev, “Organizatsia selskokhozyaistvennoy statistiki v Severo-Amerikanskikh Soedinennykh Shtatakh. Doklad na II Vsesoyuznoy Statisticheskoy Konferentsii,” [The Organization of Agricultural Statistics in United States of America. Report at the All-Union Statistical Conference] *Vestnik Statistiki* 22, no. 7-9 (July-September 1925): 235.

closer attention to USDA statistical methods, as “some features of agricultural statistics were worth of Russian attention.”<sup>425</sup>

As many Soviet agrarians noted in their works and diaries, leaving the central office of the USDA in Washington D.C. did not mean the organization’s presence had diminished. Traveling across various states, Soviet scientists witnessed how USDA policies and information flowed through the channels of extension services, agricultural colleges, and experiment stations directly to farmers. The interrelationship of these three institutions fascinated Soviet scientists. The connection among these institutions was so close that, at times, according to Osinsky’s observations, the lines between experiments, teaching, and extension work blurred. When visiting Fargo in August 1925, Osinsky met with Rex F. Willard who served as a Chair of the Department of Agricultural Economy at the Agricultural College of North Dakota. A former USDA county agent, Willard not only taught at the local agricultural college but also owned a farm and conducted experiment work, working as a farmer.<sup>426</sup> Many saw this close-knit institutional triangle as one of the keys to the modernization and rationalization of American agriculture and, thus, an example for Soviet agricultural development.<sup>427</sup>

While almost all Soviet scientists touched on the role of American extension services and agricultural education, these topics became major themes of Nikolai Tulaikov’s works. Tulaikov believed in the superiority of American agricultural education and called on Narkomzem officials and Soviet agrarians to adopt these ideas. Undoubtedly, he did not

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<sup>425</sup> Kondratiev, “Organizatsia selskokhozyaistvennoy statistiki v Severo-Amerikanskikh Soedinennykh Shtatakh,” 231, 234.

<sup>426</sup> Tulaikov and Osinsky were the ones who paid particular attention to American agricultural education. Osinskii, *Po selskokhoziaistvennym shtatav Severnoi Ameriki*, 28-29.

<sup>427</sup> Tulaikov, *Seslko-khozyaistvennye Kolledzhi Soedinennykh Shatov*, 36.



insist on replicating the American system entirely. Yet, sensing a new era of the Soviet agricultural educational system, Tulaikov argued that this “transitional period” provided the most fruitful ground for “familiarizing” oneself with “foreign experience, ... in particular the American experience” due to the many similarities shared in terms of geography and climate.<sup>428</sup> Tulaikov emphasized that while the United States was not the only country with an excellent system of agricultural education, he had “never encountered such results from other agricultural colleges’ work.” To him, breaking with the Russian prerevolutionary system of agricultural education was a necessary step to further the Soviet agricultural reconstruction.<sup>429</sup>

While Tulaikov visited multiple agricultural colleges, he highlighted the Agricultural College in Manhattan, KS, and the Cornell Agricultural College, arguing that these institutions deserved special attention from the Soviet specialists. Providing a painstakingly detailed description of these colleges, Tulaikov covered everything from the organization of agricultural education and students’ responsibilities to curricula of undergraduate and graduate programs. In addition, he paid particular attention to agricultural schools and short-term courses that focused on farmers’ education. Finally, Tulaikov emphasized the importance of dissemination of agricultural knowledge beyond schools. He noted that “for our Russian conditions,” American extension services were “the most unique and did not have any analogues in [Russian] agricultural colleges and universities.”<sup>430</sup> Tulaikov intended to correct this situation.

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<sup>428</sup> Tulaikov, *Seslko-khozyaistvennye Kolledzhi Soedinennykh Shtatov*, 4.

<sup>429</sup> Tulaikov, *Seslko-khozyaistvennye kolledzhi Soedinennykh Shtatov*, 77.

<sup>430</sup> Tulaikov, *Seslko-khozyaistvennye kolledzhi Soedinennykh Shtatov*, 33.

As Tulaikov's own scientific interest lay in the field of experimental work, he devoted a lot of time to observing U.S. experiment stations. Beyond admiring the ability of the USDA to reach farmers through extension work, he praised it for extracurricular work with farm families through the organization of youth clubs and children's activities. He perceived extension services as an institution that was able to turn a farmer into a productive member of society from an economic, social, and cultural perspectives.<sup>431</sup> Tulaikov stated that with the help of extension services, "a farmer had not only to grow crops and tend to livestock but also to create an urban-like facilities on a farm, to rationally bring up children and simultaneously to be a good member of local community and a better citizen for a country."<sup>432</sup> Thus, for Tulaikov, agricultural education, in some way, became one of the routes to Soviet citizenship.

Inspired by what he witnessed in American agricultural colleges, Tulaikov hoped that the Soviet Union's progression from a prerevolutionary system of farm education meant that aspects of the American educational system could be more readily adopted.<sup>433</sup> To do so, Tulaikov argued for shifting focus away from theory to practice. Comparing Soviet and American programs, Tulaikov emphasized that Americans put major efforts into experimental works and practical trainings rather than theoretical learning.

"Unsurprisingly," Tulaikov stated, "practical Americans immediately recognized that a great scope of knowledge and individual ideas" of college professors and experts, as well as

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<sup>431</sup> Tulaikov, *Organizatsia rasprostraneniia sel'sko-khozyaistvennykh znaniia sredi naseleniia Soedinennykh shtatov* [The Dissemination of Agricultural Knowledge Among the Population of the United States] (Moscow: Novaya Derevnia, 1926), 30, 36.

<sup>432</sup> Tulaikov, *Organizatsia rasprostraneniia sel'sko-khozyaistvennykh znaniia sredi naseleniia Soedinennykh shtatov*, 36.

<sup>433</sup> Tulaikov, *Sel'sko-khozyaistvennye kolledzhi Soedinennykh Shtatov*, 64.

“a great number of agricultural advancements” could be “used on a much larger scale and with a greater use” for American farmers.<sup>434</sup> Perceiving American successes, Tulaikov urged his colleagues to build a new system of experiment stations, or farm laboratories where a majority of Soviet students would learn practical farming skills rather than being bogged down in agricultural theories.

Beyond making changes in agricultural programs at colleges and universities in Soviet Russia, Tulaikov urged his colleagues to reconsider who a Soviet agricultural expert should be. Guided by the American focus on practical knowledge and management, Tulaikov suggested that Soviet agricultural colleges should emulate the U.S. system of enrolling less students and providing them with practical knowledge that “was useful for [their] daily work at a farm.”<sup>435</sup> These students had to be carefully selected and pass an exam administered by a committee that was appointed by a local agricultural college. For Tulaikov, thus, to be a Soviet agricultural expert thus meant to be an “administrator of agricultural reconstruction in the Russian countryside.”<sup>436</sup>

Tulaikov’s discussions about the ideal agricultural education and agricultural students echoed concerns of the new Soviet government about the transformation of the pre-revolutionary educational system. After the October Revolution, the Bolsheviks believed that education would instigate a major transformation of society, including the creation of a

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<sup>434</sup> Tulaikov, *Organizatsia rasprostraneniia selsko-khozyaistvennykh znaniy sredi naseleniia Soedinennykh shtatov*, 44.

<sup>435</sup> Tulaikov, *Organizatsia Rasprostraneniia Selsko-Khozyaistvennykh Znaniy Sredi Naseleniia Soedinennykh Shtatov*, 13.

<sup>436</sup> Tulaikov, *Selsko-khozyaistvennye kolledzhi Soedinennykh Shtatov*, 70.

new Soviet citizen.<sup>437</sup> Due to the fact that the debate over education took place during the more tolerant years of the New Economic Policy, the idea of borrowing foreign ideas about education, in particular from a capitalist country, such as the United States, did not seem so radical.<sup>438</sup> In her foreword to one of Tulaikov's works, Nadezhda Krupskaya, Vladimir Lenin's widow and one of the leading figures in the People's Commissariat for Enlightenment, argued for the urgency of organizing a system to disseminate agricultural knowledge among Soviet peasants. Krupskaya praised American agricultural colleges for serving as centers of agricultural knowledge. Tulaikov's work, she noted, played a great role in the transformation of agricultural education in that it illuminated American experience which "we should carefully take into consideration" and should "widely use for our purposes," while considering "our conditions" and "our communist worldview."<sup>439</sup>

#### ***D. Travel as a Political Instrument***

Prior to the beginnings of forced collectivization, travel experience and agricultural knowledge acquired during these research trips served Soviet agrarians as an instrument of political power. When they returned to the Soviet Union, these agricultural travelers either resumed their administrative posts within Narkomzem or worked closely with the

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<sup>437</sup> David-Fox, *Revolution of the Mind: Higher Learning among the Bolsheviks, 1918-1929* (Ithaca: Cornell University Press, 2016).

<sup>438</sup> Andy Byford and Polly Jones, "Policies and Practices of Transition in Soviet Education from the Revolution to the End of Stalinism," *History of Education* 35, no. 4-5 (2006), <https://doi.org/10.1080/00467600600713070> (accessed on April 18, 2018); Sheila Fitzpatrick, "The 'Soft' Line on Culture and Its Enemies: Soviet Cultural Policy, 1922-1927," *Slavic Review* 33, no. 2 (1974): 267-287.

<sup>439</sup> N. Krupskaya, "Foreword," in Tulaikov, *Organizatsia Rasprostraneniia Selsko-Khoziaistvennykh Znanyi Sredi Naseleniia Soedinennykh Shatov*, 7.

Commissariat and or local administrative institutions while simultaneously teaching at agricultural colleges. Kondratiev, for instance, continued to preside over the Land Planning Commission and the Conjuncture Institute while working closely with leading agricultural economists, such as Alexander Chayanov, Lev Litoshenko, and Nikolai Makarov.<sup>440</sup>

Makarov, who spent some time traveling and even living in the United States, combined his government work with teaching at the Timiriazev Agricultural Academy where he served as the Department Chair of Agricultural Economy. The Timiriazev Agricultural Academy, as well as the newly-established Research Institute of Agricultural Economy, sought to establish connections with foreign agronomists as well as discuss theoretical issues of the new agricultural plan.<sup>441</sup>

While working in these institutions, Soviet “old-school” agronomists exercised their proximity to agricultural policymaking to debate the prospects of Soviet agricultural development.<sup>442</sup> When Kondratiev reported back to Narkomzem about his trip to the United States, he declared that the United States and the Soviet Union were facing “large changes in the world market in terms of redistribution of productive forces.” Kondratiev did not expect the United States to back off from its leading positions despite the agricultural crisis that their farm sector was experiencing. Kondratiev doubted, America would simply say: “I

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<sup>440</sup> Galas, “Voprosy istorii i teorii krest’ianskogo khoziaistva,” 166, 167; RGAE, f 478, op 1, d. 1560; RGAE, f. 771, op. 1, d. 237; E.A. Tyurina, “K istorii lichnogo fonda N.D. Kondratiev v Rossiiskom gosudarstvennom arkhive ekonomiki,” [On the history of the manuscript collection of N.D. Kondratiev at the Russian State Archive of Economics] in L.E. Grinin, A.V. Korotaev, and V.M. Bondarenko, eds., *N.D. Kondratiev: krizisy i prognozy v svete teorii dlinnykh voln. Vzgliad iz sovremennosti* [N.D. Kondratiev: Crises and Forecasts in the Light of the Long Waves Theory. A View from Modernity] (Moscow: Uchitel’, 2017), 63.

<sup>441</sup> Galas, “Voprosy istorii i teorii krest’ianskogo khoziaistva,” 167-169.

<sup>442</sup> Galas, “Voprosy istorii i teorii krest’ianskogo khoziaistva,” 167.

am leaving. Please, take my place.” He expected that there would be “a big fight” for dominance in world grain markets. As a result, he warned Narkomzem about American attempts at expanding its agricultural exports to Southeast Asia and its ability to lower costs of agricultural production by through implementing advance quantitative analysis and implementing technology in the farm sector. Thus, discussing Soviet perspectives, Kondratiev noted that Narkomzem should “understand who we compete with, whom we [should] push away and then create cheap technology and then lower prices.”<sup>443</sup> For Kondratiev, as well as other Soviet agrarians, the Soviet Union’s success on the world market was intertwined with internal gradual agricultural modernization.

Two years later, Kondratiev’s emphasis on gradual development would prove to be fateful. In October 1927, Kondratiev, as well as two other agricultural economists (Aleskei Chayanov and Maslov), received a note from Alexei Sviderskii, Vice-Deputy of Narkomzem and Chancellor of the Timiriazev Agricultural Academy. As experts on the world grain market and “capitalist” countries’s agriculture who visited the United States and Europe, Kondratiev, Chayanov, and Maslov were ordered to complete a report on the agricultural development in western countries, including the United States,” and to compare it to the Soviet one. It is worth mentioning that Vyacheslav Molotov himself, a member of the Politburo and an ardent supporter of Joseph Stalin, was the official that requested this report.<sup>444</sup>

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<sup>443</sup> Doklad professora Kondratieva o poezdke v SShA, Angliiu, Germaniiu i Kanadu, February 25, 1925, RGAE, f.478, op.5, d.3244, list 37.

<sup>444</sup> “Zapiska Kondratieva Molotovu” [Note from Kondratiev to Molotov], October 8, 1927, Russian State Archive of Socio-Political History (RGASPI), f. 17, op. 85, d. 282, l. 29.

In his report, Kondratiev compared the present state of the American agricultural development and the situation of the Soviet farm sector by contrast, as well as the perspectives of implementing collectivization as a solution to Soviet agricultural problems. With regard to the latter, Kondratiev expressed radically negative attitude. He stated that, despite the high speed of agricultural growth in the Soviet Union, Soviet agriculture still looked like it did before the Revolution. He explained that the growth of Soviet agricultural production was high only because of its extensive development. Furthermore, Kondratiev repeated his 1925 argument insisting on the priority of technological development. For him, the technological advancement of the village presented the inextricable step towards collectivization. And, Soviet Russia, in Kondratiev's mind, was not ready for this step.<sup>445</sup> Individual peasant households and cooperation that he witnessed in "capitalist" countries represented Kondratiev's recommendation for the future of agricultural policymaking in the Soviet Union.<sup>446</sup>

Unfortunately for Kondratiev, this view clashed with Stalin's vision of the future for the Soviet countryside. Beginning around 1928, Stalin and his supporters declared that Kondratiev and those who shared his ideas—Chayanov, Makarov, Chelintsev and others—were enemies of the Soviet state. In April 1928, Kondratiev was fired from his position as Director of the Conjuncture Institute of the People's Commissariat of Finances. Kondratiev's name was turned into a pejorative term "kondratievschina" to equate it with

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<sup>445</sup> "Zapiska Kondratieva Molotovu," October 8, 1927, RGASPI, f. 17, op. 85, d. 282, l. 29, 40.

<sup>446</sup> "Zapiska Kondratieva Molotovu," October 8, 1927, RGASPI, f. 17, op. 85, d. 282, l. 46.

the “ideology of kulaks” and the “restoration of imperialism.”<sup>447</sup> Stalin’s repressions of “old-school” agrarians continued at the First All-United Conference of Agrarians Marxists in December 1929 when Stalin declared: “It is unclear why anti-scientific theories of ‘Soviet’ economists, like the Chayanovs, should be freely circulated in our press.”<sup>448</sup> Stalin’s message was clear. Anyone that supported or propagated the ideas of Kondratiev and his cohort were in danger of being repressed themselves. After this conference any opportunities for Chayanov, Makarov, Kondratiev, and their supporters to continue participating in the future development of agricultural policies were effectively eliminated.

The final blow to the Soviet agrarians came in 1930 with the beginning of the Labor-Peasant Party (TKP) case. In early 1930, the OGPU arrested and interrogated Kondratiev, Makarov, Chayanov, Urovsky, A.A. Rybnikov, Doyarenko, Sadyrin, and Litoshenko on suspicion of anti-government activities. According to the OGPU report, the TKP was based in Moscow and had infiltrated several central government institutions, such as Narkomzem, Narkomfin (the People’s Commissariat of Finance), the Conjuncture Institute, the Timiryazev Agricultural Academy, the Moscow Agricultural Society, as well as various institutions in rural areas. The report further stated that TKP members had connections with “white” imperial supporters and discussed “a military revolt” and the establishment of a new government led by Kondratiev.<sup>449</sup>

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<sup>447</sup> V. Goncharov and V. Nekhotin, eds., *Prosim osvobodit’ iz tiuremnogo zakliucheniia: pis’ma v zashchitu repressirovannykh* [We are asking to free them from imprisonment: Letters in defense of the repressed] (Moscow: Sovremennyi pisatel’, 1998), 173-178.

<sup>448</sup> Joseph Stalin, *Sochineniya* [Works], vol. 12 (Moscow: Gosudarstvennoe izdatel’stvo politicheskoi literatury, 1949), 152.

<sup>449</sup> Materialy po delu trudovoi kontr-revolutsionnoi “Trudovoi Krest’ianskoi Partii” i gruppirovki Sukhanova-Gromana (Iz materialov sledstvennogo proizvodstva OGPU) [Materials for the Case of the working counter-revolutionary “Labor-Peasant Party” and the



Historians have established the fabrication of the TKP case in numerous studies explaining that the main reason behind this case was the refusal of Makarov, Chayanov, Kondratiev and their supporters to support and promote Stalin's forced collectivization. The confessions produced during interrogations and trials were extracted through torture or entirely invented.<sup>450</sup> Yet, what was also important about this case and what remains neglected in the literature to date were the foreign connections that the OGPU tried to demonstrate. In addition to various accusations, the OGPU blamed TKP members for having "close contacts with some foreigners" and "informing them about the political and economic state of the USSR, about the goals of the TKP to sway popular opinion in capitalist countries' that the TKP was necessary in destroying Soviet power and the formation of a new government."<sup>451</sup> Thus, Soviet agronomists' travel experience that had fostered foreign connections was transformed from a "precious commodity" in the early 1920s to a mark of treason worthy of purging.

Throughout the summer months of 1930, OGPU interrogators came back again and again to the question of foreign connections of TKP members. In the July 1930 interrogation report, Nikolai Makarov confessed "a number" of TKP members "used their academic acquaintances and connections with foreign scientists" to "inform them about the work and political positions of our party, thus preparing a favorable attitude of foreign

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Sukhanov-Groman group (From the materials of the OGPU investigation)] (Moscow, 1930), 1 in RGASPI, f. 17, op. 71, d. 30, l. 5.

<sup>450</sup> Medvedev, *Soviet Agriculture*, 84.

<sup>451</sup> Materialy po delu trudovoi kontr-revolutsionnoi "Trudovoi Krest'ianskoi Partii" i gruppirovki Sukhanova-Gromana, RGASPI, f. 17, op. 71, d. 30, l. 5.

scientists and governments to a forthcoming... coup.”<sup>452</sup> Makarov admitted that both Kondratiev and he had connections with American (Robinson), German (Augagen), and English scientists. In his interrogation report two weeks later, Makarov stated that “connections of the TKP with foreigners” were established “during professional and scientific communications.” He repeated his confession expanding the list of foreign connections, adding that Yurovsky collaborated with the Americans, English, and French; Chayanov had connections all over the world; he, Makarov, communicated with Kofod (Danish), Augagen (German), Robinson (American); Litoshenko worked with American and German scientists. Makarov further confessed that Robinson was an American economist, who worked in one of U.S. universities and studied the pre-1917 agricultural revolution in Russia. In the 1920s, Robinson visited the Research Institute of Agricultural Economy, which was headed by Makarov, and had personal ties with Chayanov and Makarov himself. Makarov stated that Robinson “brought ideas about the Russian agricultural development” back to the United States.<sup>453</sup> More important, the OGPU forced Makarov to admit that he, as well as other members of the fictitious TKP, used their foreign connections as “a means of propaganda.” “I consider this connection with foreigners,”

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<sup>452</sup> “Protokol doprosa gr. Makarova, Nikolaia Pavlovicha, 30.07.1930,” [The Interrogation Report of N.P. Makarov, July 30, 1930] Materialy po delu trudovoi kontr-revolutsionnoi “Trudovoi Krest’ianskoi Partii” i gruppirovki Sukhanova-Gromana, RGASPI, f. 17, op. 71, d. 30, l. 34.

<sup>453</sup> “Protokol doprosa gr. Makarova, Nikolaia Pavlovicha, 17.08.1930,” [The Interrogation Report of N.P. Makarov, August 17, 1930] Materialy po delu trudovoi kontr-revolutsionnoi “Trudovoi Krest’ianskoi Partii” i gruppirovki Sukhanova-Gromana (Moscow, 1930) 67, RGASPI, f. 17, op. 71, d. 30, l. 39.

Makarov's report concluded, "to be the gravest fact that reveals mine and the TKP Central Committee's criminal activity."<sup>454</sup>

These forced confessions conflated scientific connections made by Kondratiev, Chayanov, and Makarov with espionage, revealing how the relationship between Soviet agricultural science, the state, travel, and the value of foreign expertise changed from the early 1920s to the early 1930s. But Stalin and his supporters feared the political and scientific capital garnered by these well-traveled agrarians more than they feared collusion with foreign powers. More important than the threat of a midnight coup, the Soviet "old-school" agrarians' view on the future development of Soviet agriculture, which adopted some American ideas and practices, clashed with the state's policy of collectivization. As with all those who had garnered influence and clashed with Stalin's vision, these experts paid dearly.

Though originally given an eight-year prison sentence in 1932, Nikolai Kondratiev was sentenced to another ten years in 1938. It was all for naught, however, as he was executed by firing squad shortly after his sentencing.<sup>455</sup> Nikolai Tulaikov was sentenced to labor in one of Stalin's camps on the Solovetskie islands. Despite the attempts of his fellow purged to shield him from the harsh weather and debilitating work they faced, the 63-year-old

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<sup>454</sup> "Protokol doprosa gr. Makarova, Nikolaia Pavlovicha, 17.08.1930," [The Interrogation Report of N.P. Makarov, August 17, 1930] *Materialy po delu trudovoi kontr-revolyutsionnoi "Trudovoi Krest'ianskoi Partii" i gruppirovki Sukhanova-Gromana* (Moscow, 1930) 67, RGASPI, f. 17, op. 71, d. 30, l. 39.

<sup>455</sup> V.M. Bautin, "Nikolai Dmitrievich Kondratiev i ego rol' v stanovlenii agroekonomicheskoi nauki i obrazovania v Rossii," [N.D. Kondratiev and his role in the establishment of the agricultural economics and education in Russia] *Izvestia TSKhA* 2 (2017): 146-147.

former professor perished during the winter of 1938.<sup>456</sup> Until 1937, N. Osinskii occupied some prominent posts in the party and other scientific institutions. Arrested in October 1937, he was eventually linked to the Bukharin-Rykov case and sentenced to death by firing squad. Osinskii was posthumously cleared of all charges in 1957.<sup>457</sup> Nikolai Makarov and Nikolai Chayanov shared a cell for a year and a half after their sentencing in 1932. Chayanov was eventually exiled to Khazakstan where he was arrested a second time in 1936. Though released again in 1937, Chayanov was arrested once more later that year and was summarily executed. Makarov was eventually released after the persistent efforts of prominent Soviet scientists Nikolai Vavilov and G.I. Lomov. After his release, he was exiled in what was known as the “minus 40” – effectively banning him from entering the 40 most prominent cities in the Soviet Union. From 1935 to 1947, he lived in the Rostov oblast working as a local agronomist in a grain sovkhoz in Voroshilovgrad.<sup>458</sup>

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<sup>456</sup> Margarita Shashkina, “Akademik N.M. Tulaikov: Prodolzhenie posmertnoi subdy,” in *Sokhranenie kulturno-istoricheskogo nasledia regiona. Znachimost I perspektivy: mat. Regionalnoi nauchno-prakticheskoi konf. 20 Nov. 2014* [The preservation of the regional historical and cultural heritage. Significance and perspectives] (Saratov, 2014), 231; “Povolzh’e sebya opravdaet... Ono stanet zhitnitsei (K 140-letiyu so dnya rozhdenia Akademika N.M. Tulaikova),” [The Volga region will reveal itself... It will be the breadbasket (To the 140<sup>th</sup> anniversary of N.M. Tulaikov)] *Izvestiya Samarskogo Nauchnogo Tsentra Rossiiskoi Akademii Nauk* 17, no. 3-4 (2015): 447-454, 453; There are several versions of Nikolai Tulaikov’s death. According to one of them, Tulaikov was shot in the Saratov prison where another academic D.B. Ryazanov was killed on January 21, 1938. According to another version, Tulaikov died in the Solovetskiyi camp and this version is presented in this chapter. The author relies on the recent publication of Shashkina’s article in which she provides oral histories of people who were there with Tulaikov. See citation of Shashkina’s article above.

<sup>457</sup> Yuri Slezkine, *The House of Government: A Saga of the Russian Revolution* (Princeton: Princeton University Press, 2017), ch. 28.

<sup>458</sup> Marina Galas, *Sud’ba i tvorchestvo russkikh ekonomistov-agrarnikov i obshchestvenno-politicheskikh deiatelei A.N. Chelintseva i N.P. Makarova* [Fate and work of the Russian agricultural economists and policymakers, A.N. Chelitsev and N.P. Makarov] (Moscow: Akson, 2007), p.

Instead of a gradual introduction of technology and a slow transition from private to collective farms which Kondratiev, Makarov and others endorsed, Stalin threw his weight behind a new generation of Marxist-agrarians that offered fast results that could be achieved only through forced collectivization. This is not to say that the Soviets stopped importing foreign technology and experts to facilitate the rapid industrialization of the countryside. What it meant was that, by the late 1920s, the connections made by Soviet “old-school” agrarians’ in foreign intellectual circles shifted from being highly coveted to being considered politically dangerous. Thus, while the circulation of technology continued between the Soviet Union and the United States, as well as other foreign places, the pre-revolutionary generation of Soviet scientists lost their power in as vehicles of this exchange, being replaced by new forms of circulation between Stalin’s agricultural science and the United States.<sup>459</sup>

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<sup>459</sup> Nikolai Tulaikov; Nikolai Osinskii; Nikolai Makarov; Nikolai Kondratiev; Lev Litoshenko; Andrey Chayanov.

## Epilogue

The period between the end of the First World War and late 1928 represented a dynamic search for a modern agricultural order. In many ways, the war and the revolutionary moment in Russia, as well as other places, sparked debates about the changing role of agriculture. As the First World War affected agricultural production in many parts of the world, solving the problem of food supply became a paramount issue. According to the international community of agricultural experts, economists, and farmers, solutions to this problem lay in the reorganization of agricultural production. This reorganization included the rationalization of modern farming, technological modernization, and the effective introduction of agricultural education. In addition, these discussions led to further debates about the relationship between the countryside and the city as increased wartime and postwar urbanization depleted the farm labor sector. Finally, not only did the problem of food supply bear economic and social significance, but providing food also became a political issue. After all, the war and the Russian Revolutions of 1917 revealed that the problem of food supply was linked to political instability that could potentially lead to the collapse of the liberal order. Thus, concerned with these issues, the international community of agronomists actively sought ways to solve these problems.

While this search took place within the domestic discourse, many agrarians looked for solutions beyond national borders. The period of the 1920s witnessed international exchange of agricultural ideas, technologies, and expertise that forged connections among different geographic regions. Those who participated in agricultural exchange, including the United States and the Soviet Union, perceived foreign spaces as research laboratories that offered opportunities for experimentation. This experimentation revolved around the

organization of agricultural reconstruction projects, seed exchange, and the introduction of farm technologies such as tractors, as well as the establishment of modern agricultural schools. All these experiments revealed a multi-dimensional nature of the 1920s agricultural exchange in that it opened international discussions about large-scale farming and agricultural industrialization as a solution to the postwar farm problem.

Yet, the years of 1928-1929 represented another turning point in the discussions agriculture and the history of agricultural exchange. For the United States and the Soviet Union, the Soviet decision to collectivize the countryside and the onset of the Great Depression in the U.S. changed the nature and language of agricultural exchange between the countries. The possibilities of using foreign spaces for agricultural experimentation were closing, as new conversations about alternative paths for agricultural development were emerging.

Throughout the 1920s, the agricultural sector played a significant role in the total economy, as about thirty percent of the total labor force was employed in agriculture. In the late 1920s, the declining real prices of agricultural products and the inability of farmers to pay their debt led to the world-wide economic depression. The collapse of the countryside adversely affected the banking sector that functioned as a provider of credit and hence had ripple effects throughout the whole economy. This process was particularly noticeable in the United States.<sup>460</sup>

As American agronomists who had already been concerned with the state of the U.S. farm sector began to debate possible solutions, their language turned to the rhetoric of

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<sup>460</sup> Jakob B. Madsen, "Agricultural Crises and the International Transmission of the Great Depression," *Journal of Economic History* 61, no. 2 (June 2001): 328. Madsen included the following countries in his economic analysis: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

planning and the growth of farm radicalism. For instance, after visiting the Soviet Union in 1929-30, M.L. Wilson, Head of the Department of Agricultural Economics at Montana State College (1928-33) and a future Chief Wheat Production Secretary in the Agricultural Adjustment Administration (1933-34), considered American and Soviet experiences. While inspired by Soviet large-scale farm projects, he was skeptical about Soviet state planning and called on his fellow agrarians to create “some system midway between excessive communism and excessive capitalism.”<sup>461</sup> As for Harold Ware, he came back from the Soviet Union in 1931. In his writings, Ware noted when he came to Soviet Russia in 1921, he was titled “a tractor farmer.” Now, in 1931, he became a “foreign specialist.”<sup>462</sup> This change in rhetoric signified the decreasing role of American agricultural experts in the Soviet countryside. Nevertheless, Ware was able to apply the “revolutionary” experience, that he sought to learn in the Soviet Union, to the American farm sector. From 1931 to 1935, Ware became one of the driving forces behind the radical farm movement in the Midwest.

For the Soviet Union, the years of 1928-29 marked the end of the New Economic Policy and the beginning of collectivization. Beyond perceiving the decision to collectivize Soviet farms as the struggle for grain, this decision was motivated by the strengthening of state power and its motivation to bring the October Revolution to the countryside. By engineering the countryside through methods of collectivization, the Soviet central state sought to win the struggle for cultural hegemony where new Soviet institutions and

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<sup>461</sup> As quoted in Jess Gilbert, *Planning Democracy: Agrarian Intellectuals and the Intended New Deal* (New Haven: Yale University Press, 2015), 52.

<sup>462</sup> Harold M. Ware, “Some U.S. Specialists Who Pioneered in USSR,” *Moscow News*, December 1, 1930 in Lement Harris Papers, Box 6, University of Iowa Special Collections.



identities were to replace traditional elites and cultural norms. Further, the process of collectivization could not be explained without mentioning the ideological component and its important role in destroying its social system through the process of dekulakization. Next, the war scare of the late 1920s played one of the central roles that defined the support of the urban sector for forced collectivization. Finally, it was Joseph Stalin himself who viewed moderate and gradual approaches of the New Economic Policy period, and the support of individual households, and the encouragement of individual foreign trade as a threat to the stability of the Soviet state.<sup>463</sup>

Among its many effects on Soviet society, collectivization, undoubtedly, reshaped the contours of the 1920s agricultural exchange. The new period was marked by the declining interest in the U.S. agricultural model among the Soviets. As soon as the decision to collectivize was made, the model for the future of Soviet agricultural development was chosen. Furthermore, the rhetoric of “catching up and surpassing” the United States in agriculture became more noticeable in works of Soviet agricultural economists and experts. Many argued for the divergent paths of American and Soviet agriculture with regard to pursuing the large-scale collective farm organization. According to some experts, the Soviets should not “forget that American agriculture... does not have enough experience in the organization of large-scale farms,” which the Soviet Union was “starting to organize.”

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<sup>463</sup> The historiography of Soviet collectivization is vast. For some works, see: Lynne Viola: *The Best Sons of the Fatherland: Workers in the Vanguard of Soviet Collectivization* (New York: Oxford University Press, 1987); Viola, *The War Against the Peasantry, 1927-1930: The Tragedy of the Soviet Countryside* (New Haven: Yale University Press, 2005); Sheila Fitzpatrick, *Stalin's Peasants: Resistance and Survival in the Russian Village After Collectivization* (New York: Oxford University Press, 1994); Andrea Graziosi, *The Great Soviet Peasant War: Bolsheviks and Peasants, 1917-1933* (Cambridge: Harvard University Press, 1996); Peter Holquist, *Harvest of Sorrow: Soviet Collectivization and the Terror-Famine* (New York: Oxford University Press, 1986).

In that endeavor, Soviet experts argued, the country had to “show big initiative.”<sup>464</sup> Others argued that the Soviet Union could surpass the United States in the technological modernization of the countryside.<sup>465</sup> This language correlated with the official rhetoric of the Soviet state.<sup>466</sup> Thus, this language of Soviet agricultural reconstruction was original for the 1930s period of agricultural exchange between the countries.

Despite the changes in the nature of agricultural exchange between the United States and the Soviet Union, the complete break of relations did not occur. The Great Depression and the Soviet decision to collectivize became the next historical moment when shifting economic, social, and political discourses closed some venues for agricultural exchange and opened others. To examine agricultural exchange, thus, means to identify historical moments of convergence, such as the First World War or the Great Depression, to acknowledge that the farm problem has been an international issue, and to analyze vehicles, as well as engines, that propelled the movement of expertise, technologies, and knowledge across spaces and borders.

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<sup>464</sup> Rose and Sutulov, *Sel'skokhoziaistvennoe mashinostroenie*, 152.

<sup>465</sup> Gennadii A. Studenskii, *Tekhnicheskii perevorot v amerikanskom sel'skom khoziaistve* [Technological Revolution in American Agriculture] (Samara: 1930), 113-115, 123; S.G. Uzhansky, *Amerikanskii vpechatleniia: V svete nashikh zadach po sotsialisticheskomu pereustroistvu sel'skogo khoziaistva* [American Impressions: In the Light of Our Goals for the Socialist Reconstruction of Agriculture] (Moscow: Gosudarstvennoe sotsial'no-ekonomicheskoe izdatel'stvo, 1931), 3. Uzhanskii was arrested in October 1937 for anti-Soviet counter-revolutionary activities in the sphere of collectivization. He was executed by a fire squad on April 13, 1938.

<sup>466</sup> Studenskii was arrested in 1930 together with Kondratiev, Chayanov and others. In 1930, he committed suicide in a Soviet jail.

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