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Impact of Agricultural Trade Restrictions on the Soviet Union

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ABSTRACT

Report summarizes the impact of the suspension of U.S. agricultural exports to the Soviet Union on the Soviet agricultural economy, specifically on availability in the USSR of supplies of grains, livestock products, soybeans and soybean meal, and fertilizers.

Keywords: Soviet Union, Livestock, Meat, Grains, Soybeans, Fertilizer.

IMPACT OF AGRICULTURAL TRADE RESTRICTIONS ON THE SOVIET UNION

Background

Suspension of U.S. agricultural exports to the USSR—including grain shipments beyond the 8 million metric tons of grain the United States was committed to supply under the U.S.-USSR Grains Agreement--was one of the national security and foreign policy actions initiated by the President on January 4, 1980, following the movement of Soviet troops into Afghanistan.

The suspension affected 13 million tons of U.S. corn, 4 million tons of wheat, about 1.3 million tons of soybeans and soybean meal, and some quantities of poultry and other commodities.

The suspension has major political and economic implications. By halting shipments of most agricultural products to the Soviet Union, the United States disrupted one of the most important aspects of its economic relationship with the Soviets. The suspension was meant to communicate to the Soviet Union that it could not engage in aggression and expect to maintain normal trade and business relations with the United States.

The trade restrictions are directed at the important--but vulnerable--live-stock sector of the Soviet economy. Improved availability of meat, milk, and eggs has been a major goal of Soviet planners and a long-term expectation for Soviet citizens. According to Soviet statistics, their meat consumption has, however, leveled off at about 57 kilograms per capita since 1975, and Soviet citizens continue to lag behind their East European counterparts in meat consumption. Per capita meat consumption in Poland, for example, is about 80 kilograms; the U.S. level is about 111 kilograms.* The Soviets have yet to meet their 1965 goal of 16 million tons of meat production.

Imported grains, largely from the United States, have been an essential element of Soviet strategies since 1972 for realizing animal-product output goals, particularly because of the extreme year-to-year variability in Soviet grain output. It now appears that the Soviets may have been launching another major food policy change in 1979/80. For the first time they had contracted to purchase significant quantities of meats and soybean meal from the United States--in a more direct effort to enhance animal protein supplies.

With 1979/80 grain production down 25 percent from the record crop of the year before, the sales suspension coincides with the Soviets' tightest feed and forage situation since their disastrous 1975/76 harvest.

* One kilogram = 2.2046 pounds.

To offset the reduced availability of feed and fodder, the Soviets must take some, or all, of the following actions: (1) draw more heavily on their reserve stocks; (2) search for non-U.S. grains, other feedstuffs, and meat on the world market, at premium prices; (3) make adjustments in live-stock feeding; (4) slaughter lighter weight animals; (5) reduce herd numbers.

The reduced availability of U.S. agricultural commodities has begun to have an impact on the Soviet economy; the current impact will be influenced by the availability of substitute supplies in the world market. After July, the magnitude of the impact on the Soviet livestock industry will depend, more than anything else, on the size of the 1980 USSR grain harvest.

Cooperation of Other Exporters

On January 12, 1980, representatives of Argentina, Australia, Canada, and the European Community (EC) stated that their governments would not replace, directly or indirectly, the U.S. grains suspended from shipment to the USSR. The latter three also initiated special measures to ensure that the private exporters operating under their jurisdiction would not be permitted to replace the U.S. grains suspended from sale. The Argentine Government declined to take action to restrict the private trade based in its country.

Canada, Australia, and EC have taken measures to control their 1979/80 exports to the USSR and to discourage any attempts to divert their grains to the USSR by way of third countries. The major grain exporting countries including Argentina are cooperating with the United States in the exchange of information on grain trade at regular meetings.

The U.S. Government is monitoring all exports from this country for any violation of the grain export suspension. With the cooperation of its officials stationed abroad and with the information provided by other exporting countries, the United States is also monitoring foreign trade for diversion or transshipment of U.S. grain to the Soviets by other countries.*

The United States has power under the Export Administration Act to levy strict civil and criminal penalties on any violator of the suspension. To date, no documented evidence of any suspension violation has been documented.

Recently reported transshipments of some U.S. grain to the USSR through Western Europe are not in violation of the suspension. There is still U.S. grain in the pipeline to the USSR that was legally licensed under the 8-million-ton commitment. During 1976-1979, about 1 million tons of U.S. grain moved to the USSR by way of European transshipping ports annually. The EC did act promptly to prevent shipment to the USSR of any grain other than that which had already been committed for export prior to the suspension.

* Diversion, in this context, refers to U.S. grain that is purchased by a third country but sent directly to the USSR. Transshipment refers here either to grain purchased from the United States by the Soviets and imported by way of an intermediate country, or to U.S. grain purchased by the Soviets from a third country.

The Canadian Government states that the 2-million-ton grain sale to the USSR its Wheat Board announced in March is in keeping with its traditional levels of exports to the Soviets. While the shipping period is to be July-June 1980/81, some grain may move before June 30 of this year.

Private traders in Argentina are selling substantially more grain than usual to the Soviets, who are bidding the supplies away from Argentina's traditional customers at prices considerably above pre-suspension levels.

The Soviets could buy as much as 5 million tons of grain from Argentina this marketing year, more than double last year's amount. The ultimate amount of additional Argentine sales will depend on its harvest this spring of corn and sorghum, which appear to be doing relatively poorly. Trade sources indicated in mid-April that the Soviets and Argentina are close to signing a multi-year grain agreement.

There have been no significant new sales of Australian grains to the USSR since the January suspension. The Australian Government has blocked some sales of its grain sorghum to the USSR.

The surplus grain producing countries of Eastern Europe, mainly Hungary and Romania, traditionally supply some grain to the USSR. But, because of poor crops this past season, these countries are not expected to be able to supply a substantial amount of grain to the USSR until after this year's harvest.

Other potential sources of grain for the USSR include Brazil, Greece, India, South Africa, Sweden, Thailand, and Turkey.

Impact on Soviet Grain Availability

Some confusion has arisen regarding the impact on the Soviet Union because of the difference between the marketing year for grain, which runs from July 1 to June 30, and the years in the five-year U.S.-USSR grain supply agreement, which begin on October 1 and end on September 30. *

October-September Agreement Year

The suspension denied the Soviet Union access to 17 million tons of U.S. grain during the fourth year (October 1979-September 1980) of the U.S.-USSR Grains Agreement. While the United States had expected the Soviets to purchase about 25 million tons of U.S. wheat and corn during the 1979/80 agreement year, it is now shipping only the 8 million tons it had committed itself to send under the terms of the agreement.

*Estimates of Soviet imports in this paper are actually U.S. calculations of exports from the United States and other exporting countries.

Prior to the suspension USDA had forecast Soviet 1979/80 (Oct-Sept) wheat and coarse-grain imports from traditional suppliers other than the United States at 11 million tons, for total expected imports of 36 million. The Soviets have been able to make up about 6 million tons of the 17-million-ton U.S. cutback from other suppliers, both traditional and non-traditional. This would make total 1979/80 (Oct-Sept) Soviet grain imports about 25 million tons, 11 million tons less than they had probably expected to import.

The current estimate of about 6 million tons of grain the Soviets will be able to purchase to compensate for the suspension compares with USDA's estimate in early January of 4-9 million tons.

July-June Marketing Year

The impact of the grain suspension on the Soviet Union can also be viewed on a July-June marketing year basis. The most immediate effects of the suspension are being felt this spring, before the Soviet winter grain supplies become available to livestock feeders in July. The decisions the Soviets make now in dealing with tight feed and forage supplies will affect their feed-reserve and livestock-inventory situation over the next several years.

The Soviets were aware by mid-1979 that their poor 1979/80 grain crop--58 million tons smaller than the previous year's--would force a massive reduction in livestock herds unless they heavily drew down stocks and substantially increased imports. It now appears that the Soviets were intending to import about 37.5 million tons of grain during July-June 1979/80, 2-1/2 times the 1978/79 total. As a result of the suspension, the Soviets are likely now to receive only about 30.5 million tons over that period.

Through the last half of 1979 the Soviets were able to import about 17 million tons* of the 37.5 million they had been planning to purchase. With the help of the imported supplies and some stock drawdown they were probably able to maintain livestock feeding during the last half of 1979, relative to the same period in 1978, despite the poor 1979/80 harvest. They expected then to be able to import roughly another 21 million tons of grains in the first half of 1980 and, with a substantial further drawdown in grain stocks, achieve a small increase in feed use for July-June 1979/80, relative to the previous year. The USSR thus could have maintained, or even expanded, livestock output in the wake of its worst crop in 4 years.

Because of the suspension, however, the Soviets now are likely to import only about 14 million tons of grain the first half of 1980, 7 million tons less than they had anticipated.

Information on USSR grain stocks and utilization is limited. But it seems probable that the Soviets, in their commitment to maintaining livestock output, will cut more drastically into their grain reserves to minimize the cutbacks in feed use than they would have without the suspension. Their stock drawdown during July-June 1979/80 is likely to be one of their largest ever.

*Based on U.S. Export Sales Report and official statistics of foreign governments.

The impact of the 7-million-ton shortfall in grain imports is being felt most severely in Soviet animal feeding this spring. Even with the sharp stock drawdown, feed use will have to be scaled back to substantially less than the Soviets would have fed during that period.

The major impacts of the suspension on Soviet grain availability could be summarized in these respects:

1. Plans for increased livestock inventories and output will not be met. Feed availability may not even be sufficient to maintain current levels of livestock herds.
2. Greater vulnerability. One of the largest Soviet stock drawdowns on record in 1979/80 leaves them more vulnerable than usual to a poor harvest, despite their largest grain imports to date.
3. Higher cost imports. To compensate for lost U.S. grains, the Soviets are forced to bid supplies away from other importers, generally at prices significantly higher than prevailing market levels.

Impact of Suspension on Soviet Grain Availability,
July-June Marketing Year Basis

Item	1978/79	1979/80 Estimates		Net impact of suspension
		Without	Current	
		suspension		
---Million metric tons---				
Production	237	179	179	---
Imports <u>1/</u>	15.6	37.5	30.5	-7
July-Dec.	6.9	16.9	16.9	0
Jan.-June	8.7	20.6	13.6	-7
Total avail- ability <u>2/</u>	250	215	208	-7
<u>Source of USSR Imports 1/</u>				
July-Dec.	6.9	16.9	16.9	0
From U.S.	4.0	12.2	12.2	0
From others	2.9	4.7	4.7	0
Jan.-June	8.7	20.6	13.6	-7
From U.S.	7.2	15.3	3.1	-12
From others	1.5	5.3	10.5	+5
Total July/June	15.6	37.5	30.5	-7
From U.S.	11.2	27.5	15.3	-12
From others	4.4	10.0	15.2	+5

^{1/} Based on U.S. Export Sales Report, official statistics of foreign governments, and USDA estimates.

^{2/} Excludes beginning stocks.

Impact on Soviet Soybean and Soybean Meal Availability

Prior to the January 4 suspension, it appeared that the Soviets would purchase 2-2.5 million tons of U.S. soybeans and soybean meal for the 1979/80 (Oct-Sept) year. The suspension left the Soviets 1.2-1.7 million tons short. The USSR will, however, have no major difficulty in making up the difference with supplies from other sources.

Since the suspension Argentine traders have apparently contracted with the Soviets for a sale of about 500,000 tons of soybeans. Soviet purchases of Brazilian meal for delivery this year may total about 1 million tons. Some sales out of Western Europe were made in January and further sales could occur.

Purchases of meal rather than beans may imply some shift in Soviet livestock production strategies. Earlier Soviet preference for utilizing its own oilseed crushing facilities may be giving way to a desire to import meals to upgrade livestock rations as rapidly as possible.

Impact on Soviet Livestock-Product Supplies

Domestic Livestock-Product Output

Meat Production. USDA now forecasts Soviet meat production in calendar 1980 at about 15.4 million metric tons, compared with 15.5 million in 1979. This forecast is still highly tentative--factors that will determine final 1980 meat production are the mix of inventory adjustments among the sectors of the Soviet livestock and poultry industry, spring forage and grain harvest conditions, and the USSR's success in procuring feed supplies from sources other than the United States.

Meat production (liveweight basis) on Soviet state and collective farms, which account for about three quarters of total output, was 4 percent higher in the first quarter of 1980 than in the corresponding period of 1979. Beef was up 4 percent; pork, 1 percent; and poultry, 15 percent.

The USSR had entered 1980 in an already tight feed situation due to poor 1979 grain and forage crops. While the suspension did not further reduce actual feed supplies available until late in the first quarter, the higher than usual rates of slaughter probably also reflect Soviet anticipation of even tighter supplies in the spring as a result of the suspension.

Slaughter Weights. Average slaughter weights of both cattle and hogs were lower for the first quarter of 1980 than for the same period in 1979, a further indication of the effects of the poor feed situation. The lighter slaughter weights suggest the Soviets may be planning to minimize curtailment of their herd expansion plans this spring in the hope that improved forage supplies and a successful grain harvest this summer will sustain inventories through the remainder of the year.

Average slaughter Weights
(Kg/head)

	January-March			January	February	March
	1978	1979	1980	1980	1980	1980
Cattle	374	374	367	380	364	357
Hogs	104	104	99	105	97	95

Dairy Production. Milk production on state and collective farms for January-March 1980 was 5 percent below the year-earlier level. Milk cow productivity was 7 percent below the previous year's level for the 3-month period. Butter produced from state resources during the first two months of 1980 was 8 percent less than for the corresponding period in 1979, and apparently is in short supply.

Livestock and Poultry Inventories. During January and February, livestock and poultry inventories in the socialized sector either expanded more slowly than usual or declined. During March, all categories of livestock increased, as they tend to do at this time of year. Cattle and hog increases were about normal for March, but the increases for cows, poultry, and sheep and goats were below normal.

Cattle inventories on April 1 of this year were 2.9 percent above the January 1 level, compared with 3.7-percent average quarterly increases for 1973 through 1979. Poultry inventories on April 1 were up 8.6 percent, the smallest first quarter increase since data became available in 1973.

Hog inventories actually decreased in the first quarter of 1980. A 1.4-percent decline for the quarter compares with a less than one-tenth of one percent average decrease for that quarter over 1973-79.

Because of the reduced feed availabilities, the customary growth in Soviet inventories of livestock and poultry is likely to be checked in 1980. Though cattle and poultry inventories may stabilize or increase slightly, hog inventories are likely to fall.

The critical time for the livestock and poultry sector should be from now until the winter grain crop becomes available in July. The Soviets appear to have tried to make some adjustments in order to bring inventories to sustainable levels. This may cause tight meat supplies in the next few months, but could permit higher levels of meat production in the latter part of the year. Until the 1980 crop is harvested, the U.S. trade suspension may seriously aggravate an already tight feed situation and force some further inventory adjustments. A poor Soviet crop in 1980 would lead to sharp reductions in Soviet livestock herds and, subsequently, to lower meat production.

Meat Imports

The Soviet Union in recent years has supplemented its domestic production with meat imports totaling 3-4 percent of domestic output. It now appears that prior to the January 4 suspension, they were in the process of increasing their meat import volume over the 1978/79 level.

Soviet Meat Imports, 1971-1980 (Thousand metric tons)

1971 :	1972 :	1973 :	1974 :	1975 :	1976 :	1977 :	1978 :	1979 1/ :	1980 2/
224.6	130.6	128.5	515.1	515.2	361.5	616.9	183.7	350-400	500-550

Source: Soviet data

1/ Preliminary. 2/ Forecast.

Before the United States imposed agricultural trade sanctions on the Soviet Union, USDA had estimated the Soviets would import roughly 500,000 tons of meat in 1980--including, for the first time, some poultry and pork from the United States. USDA now estimates the Soviets will import 500,000-550,000 tons in 1980, with no meat shipped from the United States. The current tight world meat supply situation will constrain the amount of meat the Soviets will be able to import this year to compensate for potential declines in domestic production.

Eastern Europe normally provides the largest amount of Soviet meat imports and would be the largest potential supplier of additional supplies. Other traditional suppliers with some potential for added shipments are the EC, Argentina, Australia, and New Zealand.

Meat Consumption

Soviet planners in 1975 called for USSR meat consumption to increase from that year's 57 kilograms per capita to 63 kilograms by 1980. Instead, no increase has occurred since 1975, and no improvement is expected in 1980.

If the Soviets succeed in maintaining livestock herds, then reduced slaughter weights and milk yields will lower production until feed supplies are bolstered by 1980 crops. Consequently, meat and dairy product supplies will be tighter than usual unless production shortfalls are offset in the near-term by imports.

Impact on Soviet Fertilizer Supplies

On February 5, the United States announced an embargo on phosphate fertilizer exports to the Soviet Union. While suspension of phosphate shipments will have only a relatively small impact on the 1980 Soviet crops, reduced U.S. sales of phosphoric acid will significantly curtail their

ability to produce phosphatic fertilizers for the next several years. The Soviets are reportedly already in the process of purchasing phosphatic materials elsewhere in the world and may be seeking a long-term agreement with some other supplying country.

1980/81 Soviet and World Crop Conditions

The Soviets are extremely vulnerable to a poor 1980/81 harvest. A repeat of last year's 179-million-ton harvest would necessitate massive herd liquidation. It would take a near-record crop to rebuild stocks, maintain livestock inventories and output, reduce Soviet vulnerability to fluctuation in its harvest, and check its growing reliance on large imports of grains.

The Soviet 1980/81 winter grain crops have progressed relatively well, despite some unfavorable weather at planting time last November. With adequate snowcover and generally moderate temperatures since that time, winterkill has probably been below normal. However, wet weather in the latter half of March and first half of April has delayed field work in many key areas. Weather during the remainder of April and during May will be critical to winter grain yields and to the progress of spring plantings.

Conditions for the world's 1980/81 winter grain crop have been generally favorable so far. Most Northern Hemisphere winter grain crops are progressing well—they account for about half of yearly Northern Hemisphere production and roughly a third of world grain output.

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