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## GRAIN TRADE

# Soviet Agriculture and US-Soviet Grain Agreement

by Nick Butler, London\*

**In August the Soviet government agreed to the second one-year extension of the US-USSR grain agreement, which has regulated grain trade between the two countries since 1976. Although a net exporter of grain for the best part of this century, the USSR has become increasingly dependent on imports since the beginning of the seventies. What are the reasons for this? What should the US be looking for when a new, long-term agreement is negotiated?**

For the best part of this century, as for a hundred years before, Russia was a net exporter of grain, particularly of wheat, to continental Europe and to Britain. For several decades after the revolution of 1917 the Soviet Union remained a net exporter on a limited scale, and as recently as the late sixties was supplying both India and Eastern Europe on a regular basis. Grain exports were a source of export earnings, and in certain cases of political influence<sup>1</sup>.

In the past year, however, the Soviet Union has imported some 44 million tons of food and feed grains, almost a quarter of all internationally traded grain with over a third coming from the USA according to the most reliable estimates.

Grain imports have become a regular feature of Soviet trade since the early 70s and have not fallen below 30 million tons in any year since 1978. In the last decade the US has twice restricted or cut off supplies to the Soviet Union, and in the US the vulnerability of the USSR to such embargoes and the potential for their future use remain live issues of debate<sup>2</sup>. Grain has become a burden on the Soviet balance of payments, and a source of political vulnerability.

There are a number of contributory factors which explain the dramatic switch, and which set the context for the renegotiation of the Grain Agreement, first signed in 1975, and now on the table for renewal. First and foremost are the limitations of Soviet agriculture. Soviet farmland, though equal in acreage to that of the USA, is of limited quality for intensive production. The additions to the cultivated area in the Soviet Union made by successive governments since the 1950s have added land of poorer quality, reducing average yields. Almost two thirds of Soviet grain lands are located in

areas where precipitation and growing seasons are barely adequate for grain production and therefore a relatively small climatic change for the worse can reduce crops drastically. Climatic conditions, including the irregularity of rain fall, and destructive winds, are anything but favourable for a country relying on steady output from these areas.

Soviet agriculture has also suffered over the years from poor management, lack of investment (a policy which the central government has reversed only relatively recently), the forced disruption of the production system based on the Kulaks by Stalin, for purely political purposes in the 1930s, and an excessive, stifling degree of bureaucratic involvement in agricultural decision-making. The result of this combination of factors has been that the resources devoted to agriculture have often been underutilized, or clearly misused. "Every year Soviet factories turn out 550,000 tractors but each year almost as many are scrapped after only a short working life. A high percentage of available tractors, combine harvesters and other expensive machines are always out of action because of insufficient quality control, lack of spare parts and servicing facilities."<sup>3</sup> There are innumerable reports, endorsed by the comments of government directives, of waste in all parts of the Soviet farm system.

Yields, in particular feed conversion ratios have barely improved since the 1960s. Feed conversion

<sup>1</sup> Alec Nove: Food Policy, November 1975.

<sup>2</sup> The debate is not limited to the US. On 26 February of this year, under the heading "Food is Power" the *Times* leader thundered, "We ought not to be protecting the Soviet leaders from the consequences of their unwillingness to change from a warfare state to an agrarian one . . . The Soviet Union knows perfectly well that its dependence on our food production is a major and constant source of weakness. We should show them that we know too".

<sup>3</sup> Financial Times, 27 May 1982.

\* The Royal Institute of International Affairs.

ratios for pigs remain at twice the level achieved in the west. The Soviets have had to use oilseed, meal and cake as protein additives, severely limiting the export availability of these products<sup>4</sup>. Given the now twenty year long freeze on prices to the consumer of foodstuffs, and only limited increases in procurement prices offered by the government, there are few incentives for either the communal sector, or the small private sector to invest in raising production.

Given all these limitations and obstacles it is perhaps legitimate, as some commentators have suggested, to discuss Soviet agriculture in terms of remarkable progress, rather than in terms of relative failure. In terms of calories consumed Soviet averages certainly match the figures for the West, and fall only a little short of US levels. The achievements of the distribution system, which now ensures a physiologically adequate diet for all Soviet citizens, deserve recognition although quality and standards remain poor and shortages endemic. Annual average grain production has risen from 130 million tons during the 1961-65 period to some 205 million tons in the 1976-80 period, although the years of the current five year plan seem likely to show a fall from that figure. Despite these achievements, however, Soviet agriculture has been unable to meet the demands placed upon it.

### Change of Policy

The shift in the pattern of trade began in the late 1960s and early 1970s and followed a conscious change of Soviet policy in favour of the consumer. The change can be traced back to the accession of Mr. Brezhnev, and the March 1965 plenum of the Communist Party central committee, since when there has been a sustained

policy of large-scale financial and technical investments in agriculture<sup>5</sup>. "Sometime in the 1960s the leaders of the Soviet Union decided to increase their people's consumption of meat and dairy products and to keep that increase steady by not slaughtering livestock when harvests failed."<sup>6</sup> The motivation behind this policy was the sharp rise in disposable incomes which accompanied growth in the Soviet economy, coupled with the realisation that provision of other consumer goods was not one of the success stories of the Soviet economy. Housing, in particular, was inadequate and the rapid improvement of housing provision would have meant a diversion of resources including, most importantly, scarce manpower from the industrial sectors of the Soviet economy. The decision to concentrate on increasing meat output and consumption soon began to have its effect. "Between 1968 and 1971 there was a 40 % increase in the use of feed grains in Russia and livestock herds expanded. If there were any doubts, they probably disappeared in 1970 when Polish workers rioted in Gdansk and Szczecin after food shortages and price rises."<sup>7</sup>

Increasing meat consumption was the specific target of the policy – inevitable given the adequacy of staple diets in the Soviet Union, and the already apparent pressure of demand for meat products.

The Soviet farm sector, however, found itself unable to respond to the challenge, despite increased investment, increased effort devoted to mechanization, and the elimination of waste, and despite the

<sup>4</sup> Karl-Eugen Wadekin: Soviet Agriculture's dependence on the West, in: Foreign Affairs, May 1980.

<sup>5</sup> Brezhnev's Report on the Food Programme, in: Summary of World Broadcasts, 26 May 1982.

<sup>6</sup> P. Desai: Estimates of Soviet Grain Imports in 1980 and 1985, in: IFPRI Research Report 22, 1981.

<sup>7</sup> Dan Morgan: Merchants of Grain.

**Table 1**  
**USSR Grain Balance**  
(million tons)

	Production	Imports	Availability	Total use	Feed use	Non-feed use	Stock change
1971-72	181	8.3	183	181	93	88	+2
1972-73	168	22.8	189	187	98	89	+2
1973-74	223	11.3	228	214	105	109	+14
1974-75	196	5.7	196	206	107	99	-10
1975-76	140	26.1	166	180	89	91	-14
1976-77	224	11.0	232	221	112	109	+11
1977-78	196	18.9	213	228	122	106	-16
1978-79	237	15.6	250	231	125	106	+19
1979-80	179	31.0	209	222	123	99	-13
1980-81	189	34.8	223	228	122	106	-5
1981-82	175	43.0	217	217	121	96	0

introduction of some limited new methods of farm control and management. The small-scale, occasional use of the world market to supplement domestic supplies envisaged by Soviet planners when the programme began, has turned into a heavy and regular reliance on imports, including contracts for five year periods with the pattern made unpredictable by climatic conditions and by the unwillingness or inability of the Soviets to rely on the use of stocks. Table 1 shows the pattern of Soviet imports over the last decade, leading up to the three consecutive bad harvests, and hence large scale imports of the last three years, and Table 2 the varying pattern of supply.

To date the Soviets have persisted with their strategy of maintaining herds through all but the worst shortages even at the cost of large-scale imports though there is evidence that concern over the cost and, more important, the degree of external dependence has grown considerably. Recent Soviet statements, including the new agriculture programme<sup>8</sup>, suggest that self-reliance in terms of feed production is being reasserted as a medium term aim and that the Soviet Union has no intention of remaining an importer on the current scale. The programme even talks, somewhat optimistically, of "grain for export".

### Future Trade Patterns

Soviet plans, however, are rarely fulfilled in total and it is worth assessing the various factors which will determine future trade patterns from an objective standpoint.

On the demand side, rising incomes leave the logic which led to the decisions of the early Brezhnev years

unchanged. "According to the official Soviet statistics, total monetary wage incomes per head of the population had risen by 207 per cent by 1980 as compared to 1960, and the population by 24 per cent. Some put the income elasticity of demand for better food, with meat taking the lead, at 0.8 . . . demand for meat must (therefore) have more than trebled."<sup>9</sup> Table 3 shows the relatively favourable position of the East European consumer and makes a comparison which appears to be foremost in the minds of Soviet planners and politicians. Yet the Soviet *target* for 1990 in terms of meat consumption is below the *current* East European average. Fulfillment of the target would leave substantial unsatisfied demand. Price increases, long resisted by the Soviets, could be used to contain the demand but there is so much, "pent up demand (cash) in the USSR that price measures would have to be of an extremely drastic kind if they were to have a real effect"<sup>10</sup>.

On the supply side the problems which have long beset the production system remain. Land use for grain production has fallen back a little from its peak of 130 million hectares, reflecting the fact that the peak use included highly marginal land. There is some evidence that some very poor land is still being farmed, and some land overfarmed. No further major increase of arable land seems possible in the foreseeable future. The addition of newly drained and irrigated land to the stock is barely keeping pace with losses caused by rising salinity, urban growth and mining. Policies for increasing fertilizer use, mechanization and technological development have been reemphasised and have been given greater priority in closely related industrial plans, and in terms of investment. Overall

<sup>8</sup> The Food Programme of the USSR for the Period up to 1990, in: Summary of World Broadcasts, 4 June 1982.

<sup>9</sup> Karl-Eugen Wadekin, op. cit.

<sup>10</sup> Ibid.

**Table 2**  
**USSR Wheat and Coarse Grain Imports, by Source**  
(million tons)

	1971-72	1972-73	1973-74	July-June year		1978-79	1979-80	1980-81	1981-82
				1975-76	1977-78				
USA	2.9	13.7	7.9	13.9	12.5	11.2	15.2	8.0	15.0
Argentina	0.1	0.1	0.3	1.4	2.7	1.4	5.1	11.2	11.0
Canada	3.0	5.1	1.8	4.5	1.9	2.1	3.4	6.9	8.5
Australia	0.5	0.9	0.1	2.0	0.3	0.1	4.0	2.9	2.5
European Community	0.1	1.9	0.5	0.5	0.2	0.2	0.9	1.1	2.5
Others	1.2	0.8	0.3	3.4	0.8	0.1	1.8	3.9	3.0
Misc. Grains (all sources)	—	—	—	—	—	—	0.6	0.5	0.5
Total	7.8	22.5	10.9	25.7	18.4	15.1	31.0	34.5	43.0

Source: USDA.  
— not available.

investment in agriculture will rise from 27 per cent of the national total to 33 per cent by the end of this decade according to the new programme, though as yet it is far from clear which sector will suffer the compensating reduction. Nor is it clear that Soviet agriculture and industry will respond other than in their past sluggish way to large injections of resources. Although decentralization of management and decision-making is promised, the effectiveness of the plan has yet to be seen. The much publicized establishment of a coordinating authority between the various sectors of the industry – from suppliers to marketers at the “raion”, or district, level is potentially valuable but could equally become a further layer of bureaucracy in addition to the many which already exist. No proposals to abolish other layers have been made. The raising of procurement prices, earlier in the period of the current plan may in the end prove a more effective instrument, though the cost to the Soviet taxpayer, coupled with the cost of heavily subsidized consumer prices, could become a major burden, setting a limit to the use of the policy.

Against this picture must be set two factors, in addition to the possible balance of payments constraints<sup>11</sup>, which suggest that Soviet imports will fall from their current levels. The last three years have been exceptionally poor in terms of weather conditions and cannot be regarded as typical, though recent reports

<sup>11</sup> While the Soviet Union appears to have had no major difficulty in financing its imports, it is clear that increasing real grain prices over a sustained period relative to other goods, and in particular to Soviet exports, would create balance of payments problems, which is likely to be one of the concerns motivating current Soviet policy.

from the United States Department of Agriculture now indicate a fourth poor crop<sup>12</sup>.

Secondly, the planned increase in meat production is likely itself to be a victim of Soviet inefficiency. Livestock and poultry numbers will grow but are unlikely to grow at the target rates which have led some commentators to suggest that current levels of imports (i. e. around 40 million tons per annum) will be maintained, or even increased<sup>13</sup>. It is climatic conditions, as much as any other single factor, which will determine Soviet requirements on world markets and, more important, the fluctuations in those requirements. A study by the Moscow Institute of Geography of historic weather patterns has concluded that there is a 50 per cent probability of drought-induced harvest damage at least once in five years in parts of Soviet Europe and Asia, with a 95 per cent probability at least once in ten years. Total drought, and catastrophic crop failures, in all the three major grain growing regions carries a 95 per cent probability once in twenty years and a 50 per cent probability once in ten.

Without looking so far as twenty years ahead it is already clear that the Soviet target of 238 million tons average production in the current five year period will certainly not be achieved and that the target of 255 million tons in the next five year period is highly unlikely

<sup>12</sup> The International Herald Tribune, 13 June 1982, quotes the USDA as reducing their forecast to 185 million tons.

<sup>13</sup> The OECD in its document “Prospects for Soviet Agricultural Production in 1980 and 1985”, and in recent internal papers, takes this argument to the point of suggesting that meat production will grow so slowly that grain imports will be eliminated.

**Table 3**  
**USSR and Eastern Europe: Average Food Consumption**  
(kg per head)

	USSR			Eastern Europe <sup>1</sup> 1980				
	1965	1980 <sup>a</sup>	1990 plan	Bulgaria	Hungary	GDR	Poland	Czechoslovakia
Meat and products	41	58	70	65.9	70.5	89.4	82.1	85.0
Fish and products	12.6	17.6	19	6.6	2.5	7.5	8.1	5.4
Milk and products (in terms of milk)	251	314	330-340	227	162 <sup>b</sup>	—	451	230
Eggs (units)	124	239	260-268	203	342	290	223	316
Sugar	34.2	44.4	45.5	34.2	35.0	40.7	41.4	38.0
Vegetable oil	7.1	8.8	13.2	15.1	6.0	1.7	2.6	7.3
Vegetables	72	97	126-135	126	—	96.8	101 <sup>c</sup>	68
Potatoes	142	112	110	26.1	62	142	158	75
Fruit and berries	28	38	66-70	—	—	—	—	—
Bread products (in terms of flour)	156	139	135	160	115	94.2	127	107

<sup>a</sup> Figures quoted by Brezhnev on 24 May 1982; in some cases these are marginally higher than those reported in the 1980 Soviet statistical handbook.

<sup>b</sup> Excludes butter.

<sup>c</sup> Excludes processed vegetables.

— not available.

<sup>1</sup> Excluding Romania, which does not publish per capita food consumption figures. We estimate that consumption of meat and meat products in Romania was 63.0 kg per head in 1980.

Sources: Narodnoe khozyaistvo SSSR 1980; Statistical Yearbook of CMEA Countries, 1981.

to be reached under anything but exceptionally favourable climatic conditions. The unpredictability of Soviet climate, the use of marginal land which is particularly vulnerable to adverse weather, and the very low current level of stocks, all suggest that Soviet requirements on world markets will continue to be variable, often substantial and potentially destabilizing. It is in this context that the United States must make its calculations in renewing the costs and benefits of the Grain Agreement, first signed in 1975, and now due, and indeed overdue, for renegotiation.

### **Soviet Trade and the World Market**

Both the variations in import levels, and the manner in which the Soviet Union has approached the world market, have tended to be destabilizing over the last decade. From the time of the first large-scale imports, the so called "great grain robbery" of 1972, the Soviets have utilized the advantages of a single trading agency, Exportkhleb, which has conducted its operations in virtual secrecy, and have exploited the rivalries and competition which exist between the various grain exporting nations and the various grain companies. The Soviet Union appears to have held to the letter of contracts signed at all times, but has always been prepared to make the fullest use of the market system. The record of the last decade<sup>14</sup> clearly shows that "the Soviet Union is a most capable importer, effectively using its monopoly of factual information concerning its own situation and intentions"<sup>15</sup>.

Argentina's experience in the spring and early summer of this year is some indication that the strategy

remains unchanged. Having bought heavily from the Argentinians during the US embargo on sales above the 8 million tons stipulated in the Grain Agreement, and having thereby encouraged investment in expanded production, the Soviet Union halted purchases at the height of the conflict over the Falkland Islands. The effect was a fall in prices of significant benefit to Soviet importers seeking substantial quantities on the world market this year. *The Economist* commented at the time that the halting of purchases "looks like being a far bigger blow to Argentina than EEC trade sanctions". The importance of the Soviet Union in the world market makes her trading decisions a key feature of the world market, watched with keen interest by all exporters.

It is important in judging the Soviet view of the world market to assess the impact of the various embargoes and threats of embargoes over the last decade. Although much effort has been devoted, in the Soviet press and elsewhere, to playing down the impact it is clear that the cut-off of supplies in 1980 did bring home to the Soviets their potential vulnerability. Introducing the new programme this year Mr. Brezhnev is reported to have said, "Soviet policy proceeds from the need to reduce imports of foodstuffs from capitalist countries. As you know the leadership of certain states is striving to turn ordinary commercial operations such as grain sales into a means of putting pressure upon us."<sup>16</sup>

The 1980 embargo led to some distress slaughtering of livestock (though only on a small scale), and forced

<sup>14</sup> The record is described in some detail in: Dan Morgan, op. cit.

<sup>15</sup> D. Gale Johnson: The Soviet Impact on World Grain Trade.

<sup>16</sup> International Herald Tribune, 26 May 1982.

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the Soviets to run down stocks to particularly low levels. A sustained embargo from the United States, or a briefer but more coordinated embargo adhered to by Canada, the EEC, and Australia (if not Argentina) would leave the Soviets very short of supplies, and might force them to slaughter cattle on a significant scale in a year of poor domestic crops. Immediate food supplies would not therefore be threatened but the strategy of improving diets and providing meat to Soviet citizens would be set back for many years. Although the threat is not an immediate one, Soviet policy seems likely to be to continue to seek diversified sources of supply<sup>17</sup>, to continue to regard agriculture as "one of the most important component parts of the Party's economic strategy for the next decade"<sup>18</sup> and to continue to devote resources to its own production sector in the hope that imports can once again be reduced to such a level that the temptation to use grain as a political weapon is removed. After a period in which imports became a respectable and accepted part of the Soviet strategy, the 1980 embargo may therefore have revived the Soviet commitment to self-sufficiency as an objective, whatever the short-term circumstances. In the words of Zhores Medvedev, "full self-sufficiency in production clearly motivated several high level agricultural planning decisions taken at the beginning of 1980. The effect of these decisions may be long lasting – far beyond the limits of 1980"<sup>19</sup>.

Having extended the existing Agreement temporarily, what should the United States be seeking in the coming renegotiation, and what are its chances of success?

### Grain Agreement Renegotiations

From the American point of view the Grain Agreement should again specify minimum purchases (perhaps of 12 million tons per year rather than the 6 million agreed in 1975) while retaining the requirement for consultation before purchases which go above another fixed level. A higher level of minimum imports by the Soviet Union, even in good crop years would not only provide a measure of security for the American farmer but would also involve the Soviet Union in sharing the burden of international stockholding. It would help America to restore its position as a stable supplier of the Soviet market and do something to remove the status of a mere

residual supplier – a status which the US has been unable to shake off since the 1980 embargo.

A second requirement must be the removal of secrecy from Soviet grain statistics and the Soviet trading strategy. A regular flow of data, crop forecasts, stock figures and objective assessments of trade requirements would do much to reduce the destabilizing effect of Soviet imports on world markets.

How strong is the American bargaining position? Credit – already sought in the past for a limited proportion of sales – is an obvious carrot, and a guarantee of credit on reasonable terms could be a significant inducement to the Soviets. The United States could in addition offer the privilege of supply in precedence to all other sales, though this would certainly be politically unpopular and detrimental to trading relations with other importers. Its attraction for the Soviet Union lies in the possibility that the run of bumper harvests in the United States will one day be broken, and that in such circumstances, a signed trade commitment would be invaluable.

However, given the range of alternative suppliers, and the relative ease with which the Soviet Union overcame the problems of the 1980 embargo, the US clearly has only a limited hand to play. A number of domestic considerations weaken that hand still further. The granaries of the Mid-West, and the ports, are likely to be full again this year. Another heavy crop is ensuring that all the elements of the American grain lobby – farmers, transporters and traders – appreciate that dependence works both ways, and that the disposal of the surpluses produced in the last four years has remained a profitable business largely as a result of Soviet import needs. Unless the US government is prepared to add to its existing budget deficit by buying grain for its own stores, or for concessional disposal elsewhere, or alternatively is willing in the longer term to contemplate a return to a farm policy which discourages production, it may find a Grain Agreement, and the assured sales it implies, irresistible. The hopes of some that political concessions can be won by grain supply seem likely to be submerged by the economic pressures for trade.

Given the continuing disputes with Western Europe over the gas pipeline and other trade with the Soviet Union and Eastern Europe, and the general resistance to economic detente within the Reagan administration, a new Grain Agreement will indeed be a sign of interdependence between East and West – an interdependence which, ironically, both sides seek to avoid.

<sup>17</sup> Including, potentially, meat supply. Meat imports have risen dramatically in the last decade, particularly from Australia and Argentina. Depending on the transport costs involved, imports of meat might actually prove more cost effective, given the poor feed ratios of the Soviet Union.

<sup>18</sup> Food Programme, in: Summary of World Broadcasts, 4 June 1982.

<sup>19</sup> Quoted in: Wall Street Journal, 24 February 1981.