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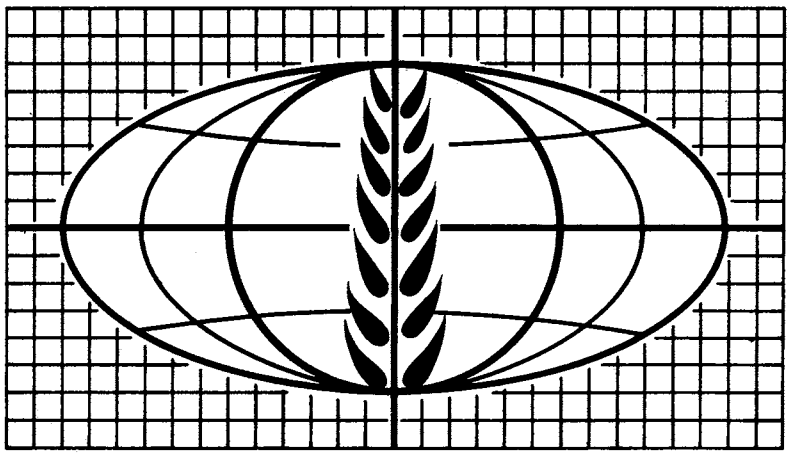

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THE AGRICULTURAL SITUATION IN COMMUNIST AREAS

Review of 1972 and Outlook for 1973

U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE

Washington, D.C.

FOREWORD

This report on the *The Agricultural Situation in Communist Areas* summarizes major developments in the Soviet Union, Eastern Europe, and the People's Republic of China (PRC). Emphasis is on production, trade, and policy changes in 1972, with some outlook for 1973, especially for those matters of greatest interest to the United States.

Authors of the USSR section were Fletcher Pope, Jr. (first three topics and final topic) and Angel O. Byrne (remaining topics). H. Christine Collins was the principal author of the Eastern Europe section, with assistance from Thomas Vankai who wrote on the topic about agricultural policy changes. Marion Larsen was the author of the PRC section. Other supporting analysts included Donald Chrisler, Frederick Crook, Linda Schneider, James Scullen, and Sheldon Tsu. Carolyn Miller developed the appendix tables. The report was prepared under the supervision of the undersigned.

The comments of reviewers in the Economic Research Service and in the Foreign Agricultural Service, and available reports from the U.S. Agricultural Attaches stationed in Moscow, Belgrade, Warsaw, and Hong Kong are acknowledged with appreciation.

Other regional agricultural situation reports currently are being prepared for the Western Hemisphere, Western Europe, the Far East, and Africa and West Asia.

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ABSTRACT

Agricultural production in 1972 declined in the USSR and the People's Republic of China (PRC), due mainly to weather problems which reduced most major crops. Livestock output in these countries changed relatively little, partly because of much larger purchases of foreign grain. Overall, Eastern Europe did well with both crops and livestock. The USSR and PRC plan sharp rebounds in total farm output in 1973, while Eastern Europe hopes for continued agricultural progress.

KEY WORDS: USSR, Eastern Europe, People's Republic of China, Agricultural inputs, Agricultural production, Foreign trade.

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CONVERSION EQUIVALENTS

Pounds per bushel

Wheat and potatoes	60
Rye and corn	56
Barley	48
Oats	32

One kilogram	equals	2.2046 pounds
One centner or metric quintal	"	220.46 pounds
One metric ton	"	10 centners or 2204.6 pounds
One hectare	"	2.471 acres
One acre	"	0.4 hectare
One kilometer	"	0.6 mile

Metric tons to bushels

One metric ton	Bushels
Wheat and potatoes	36.743
Rye and corn	39.368
Barley	45.929
Oats	68.894

Bushels to metric tons

One bushel	Metric tons
Wheat and potatoes	.02722
Rye and corn	.02540
Barley	.02177
Oats	.01452

To convert centners per hectare to bushels per acre, multiply by:

Wheat and potatoes	1.487
Rye and corn	1.593
Barley	1.8587
Oats	2.788

To convert bushels per acre to centners (metric quintals) per hectare, multiply by:

Wheat and potatoes	0.6725
Rye and corn	0.6277
Barley	0.5380
Oats	0.3587

One metric ton of seed cotton = 1.562 bales of 480 pounds.
One metric ton of ginned cotton = 4.593 bales of 480 pounds.

THE AGRICULTURAL SITUATION IN COMMUNIST AREAS

SUMMARY

The 1972 agricultural situation in communist countries was mixed, mostly unfavorable in the USSR and the People's Republic of China (PRC) but good in East Europe excepting Yugoslavia. Adverse weather was the main cause of reduced farm production in the Soviet Union and the PRC, more than offsetting the effects of increased fertilizer and other inputs.

Soviet crop output was down noticeably from the 1971 level, due mainly to sharp drops for grain, potatoes, vegetables, and sunflowerseed. The last slipped for the fourth straight year, while the first three were off for the second year in a row. Cotton did best, reaching another new high. Sugarbeets fared a little better than in 1971, but again were below plan.

The USSR's livestock situation in 1972 showed mixed results. Cattle numbers increased by 1-2 percent. Hogs decreased about 7 percent and the number of sheep and goats declined slightly. Egg production rose. Meat output increased slightly, but would have turned down had it not been for larger than expected livestock slaughter due to reduced feed supplies. Milk production was unchanged and the wool clip a little smaller.

Imports of feedstuffs were mainly responsible for keeping overall slippage in Soviet livestock numbers small. The Soviet Union's huge purchases of grain, mainly for delivery in 1972/73, now total about 28 million tons[1] including some bought for other countries. About 18 million tons were bought from the United States, but some may be delivered after June 30, 1973. Large deliveries of foreign grain plus purchases from domestic production are putting a record amount of grain into Soviet Government hands. Much of this grain probably is being supplied to farms for livestock feeding, since the amount of 1972-crop grain left on farms was about 10 million tons less than a year earlier. The USSR also is importing a million tons of U.S. soybeans.

Soviet agricultural output in 1973 is likely to fall well short of the planned increase of 12.6 percent over the depressed 1972 level. Investments in agriculture are to be raised 7 percent.

Mid-March prospects indicated another relatively small winter grain harvest this year, mainly due to a reduced area. If the seeding of spring grains brings total grain area up to normal, yield trends would suggest a total 1973 grain crop approximating the high 1970 and 1971 levels but short of plan. Soviet exports of cotton will increase in calendar year 1973, but those of oilseeds and products probably will change little unless there are further and sizable oilseed imports. In 1973/74 significant USSR buying of foreign grain and soybeans is foreseen. Timing and amounts cannot be predicted due to lack of information and major uncertainties, but smaller grain purchases than in 1972/73 are expected.

Eastern Europe again harvested record crops of grain and tobacco in 1972. Production of sugarbeets, potatoes, vegetables, and fruits also was larger than in 1971, but output of sunflowerseed and rapeseed was down, reflecting wide weather variations.

Livestock production again increased, due to good feed supplies and additional incentives. Hog numbers grew more than cattle numbers, and sheep and poultry numbers stayed about the same. Meat output, especially pork, rose sharply, and production of milk and eggs registered modest growth. The most important agricultural policy changes last year were intended to raise efficiency in livestock output, especially for cattle.

Eastern Europe continued to be a net importer of agricultural products in 1972. Grain and cotton again were the most valuable imports, and meat and livestock the leading exports. Direct U.S. agricultural shipments to these countries climbed further. Net 1972/73 grain imports are expected to be significantly less than the 1971/72 total, but the U.S. share will be a record high.

The 1973 agricultural production goals for East European countries range from modest to very ambitious, all based on more inputs. Prospects for winter grains were mixed in mid-March. Total agricultural imports from the United States this year will rise sharply.

The PRC in 1972 had reduced output of grain (the PRC also includes the grain equivalent of potatoes), cotton, soybeans, peanuts and sesame seed, all major crops. Increases were indicated for sugar crops,

[1]Tonnage figures are metric.

tobacco, rapeseed, hemp, tea, and fruit. As in the USSR, unfavorable weather hurt more than larger agricultural inputs helped.

PRC livestock production continued to move upward during the first 6 months of last year, but there are indications that it may have slowed or possibly declined in the second half. Little information is available on the latter, but drought in several areas probably limited pasturing and livestock development. No year-end livestock evaluation was contained in the recent official report on the 1972 economy.

The PRC's margin of exports over imports of agricultural commodities likely narrowed in 1972. Indications are that exports of rice, soybeans, other oilseeds, and vegetable oils decreased, while shipments of live animals, livestock products, and some less important commodities increased. Imports of grain and cotton were larger, as were net imports of sugar. U.S. agricultural exports to the PRC, the first in 2 decades, totaled more than $58 million, compared with imports of about $16.5 million.

In 1973, the PRC hopes that increased inputs and better weather will bring a rebound in agricultural production, but specific goals have not been revealed. Special emphasis is expected on grain and cotton. The margin of agricultural exports over imports probably will narrow further. Net agricultural imports from the United States are likely to be much larger.

SOVIET UNION

1972 Farm Production Declined

Soviet gross agricultural output dropped 4-5 percent in 1972 below the record level achieved in 1971, primarily because of unfavorable weather conditions. Losses were focused in grains, sunflowerseed, potatoes, and vegetables. Weather extremes and reduced output of concentrates and roughages hurt livestock production, but the effect was moderated considerably by feed imports and other measures.

Vladimir V. Matskevich, then USSR Minister of Agriculture, chronicled the assaults of bad weather in the December 1972 issue of *Voprosy Ekonomiki*. "Unprecedentedly severe frosts" occurred early in 1972 when there was little or no snow cover to protect winter crops. Then from May through August, there was a severe drought over much of European USSR and a "prolonged heatwave set in." At the same time, weather in the areas east of the Urals was cool and rainy. Finally, "excessive precipitation in the fall period" in this eastern region and in the extreme western part of the country "created difficulties in gathering in the good harvests which had been grown there."

In 1973, the Soviets plan a sharp recovery of 12.6 percent in agricultural production from the reduced 1972 level. If achieved, this goal would exceed the previous high realized in 1971 by about 8 percent. To help achieve the 1973 planned output, agricultural investments are to be increased 7 percent to a total of 25.4 billion rubles.[2]

Grain Output Down Sharply

Gross grain production (including pulses) in the USSR reportedly was 168 million tons in 1972 (table 1), 7 percent less than the 1971 harvest and 10 percent below the 187-million-ton record in 1970.[3] In addition, the relatively poor 1972 grain crop fell 22 million tons short of the goal of 190 million tons.

[2]The official Soviet rate is 1 ruble equals $1.34. In West European exchanges having infrequent dealing in rubles, however, the ruble often is discounted considerably.

[3]The Soviet gross grain production data used in this report are in terms of "bunker weight,", i.e., grain as it comes from the combine containing varying amounts of excess moisture and foreign matter. Waste and probably occasional reporting bias also are involved. A deduction of 15-20 percent is generally felt to be necessary in arriving at an estimate of usable grain.

Table 1--USSR: Gross grain production, averages 1961-65 and 1966-70, annual 1968-72

Grain	Average 1961-65	Average 1966-70	1968	1969	1970	1971	1972 1/
			Million tons				
Wheat	64.2	90.2	93.4	79.9	99.7	98.8	80
Winter	27.8	35.9	34.7	27.2	42.1	47.8	27
Spring	36.4	54.3	58.7	52.7	57.6	51.0	53
Rye	15.1	12.8	14.1	10.9	13.0	12.8	10
Corn	13.1	9.6	8.8	12.0	9.4	8.6	10
Barley	20.3	30.5	28.9	32.7	38.2	34.6	39
Oats	6.1	11.9	11.6	13.1	14.2	14.6	15
Millet	2.6	2.9	2.7	3.3	2.1	2.0	3.0
Buckwheat	0.8	1.2	1.5	1.4	1.1	1.2	1.4
Rice	0.4	1.0	1.1	1.1	1.3	1.4	2/1.6
Pulses	7.5	7.3	7.2	7.8	7.6	7.0	8.0
Other	0.2	0.2	0.2	0.2	0.2	0.0	0
Total grain	130.3	167.6	169.5	162.4	186.8	181.2	2/168

1/ Economic Research Service estimates unless otherwise indicated.
2/ Official USSR figure.

Unfavorable weather conditions contributed to the disappointing grain harvest. The extreme cold and lack of adequate snow cover early in 1972 caused abnormally heavy damage to winter grains. The very dry and unusually hot weather that prevailed over most of European USSR during much of the growing season reduced yields and caused premature ripening of some grains. Winter and spring grains ripened almost simultaneously in a number of areas. The drought reportedly caused some lowering of grain quality because of shrunken, shriveled kernels. East of the Urals, cool, rainy weather delayed grain development and threatened satisfactory completion of the harvest. Excessive precipitation in this area as well as along the western border of the USSR further complicated, but apparently did not prevent, completion of the harvesting work. However, in the frantic efforts to complete harvesting under these conditions, much grain reportedly was harvested with a high moisture content and excessive foreign matter, lowering grain quality.

The 1972 USSR wheat harvest was an estimated 80 million tons, gross basis, close to 20 million tons less than the 1970 and 1971 crops. The decreased wheat harvest was primarily due to winterkill and to hot, dry weather in European USSR. About a third of the winter grains had to be reseeded and the 1972 winter wheat harvested area, estimated at 15 million hectares, was only about three-fourths as large as normally harvested in recent years. Winter wheat yields and quality on the remaining area were below normal. As a result, 1972 winter wheat production was only a little over half the record 48-million-ton crop of 1971. However, the 1972 crop was about equal to the 27 million tons harvested in 1969 when severe winterkill also sharply reduced the size of the crop.

Spring wheat fared much better than winter wheat. We estimated a spring wheat harvest roughly equal to the 1967-71 average of 53 million tons. However, because of weather conditions during harvesting, the discount needed to adjust the gross harvest to a usable grain basis would probably have to be much larger than the usual 15-20 percent.

Feed grains[4] benefited from reseeding of winterkilled areas. In 1972, an estimated 50 million hectares were seeded to feed grains, an area about a fifth larger than in recent years. Spring barley accounted for a large part of the increase in area, but sizable increases are estimated also for corn, oats, millet, and pulses. The effect of this area expansion on Soviet feed grain production was partly offset by reduced yields caused by the hot, dry weather in European USSR. Feed grain production, estimated at 75 million tons in 1972, was about a tenth above the 1969-71 average.

[4]Barley, oats, corn, millet, and pulses.

The USSR purchased abroad roughly 28 million tons of grain mainly for delivery in 1972/73. This was bought to help minimize the effects of the poor 1972 grain and potato crops on food supplies and livestock herds. About 24 million tons were purchased in the summer and fall. By mid-year, the Soviets apparently realized that their grain crop prospects were deteriorating rapidly because of the drought. The remaining 4 million tons represent the estimated residual of about a half-million tons of feed grains from purchases made in the latter part of 1971, and the 3½ million tons of wheat bought from Canada in February 1972. This latter purchase probably was made after a preliminary evaluation of the extent of the winter damage to fall-sown grains.

The United States sold about 18 million tons (about two-thirds of the 1972/73 Soviet grain purchases), including about 11 million tons of wheat.

In addition to purchasing U.S. grain, the USSR quickly moved to apparently attempt purchases of whatever grain was available from many other countries. In early July, the option arranged in February 1972 to purchase an additional 1.5 million tons of Canadian wheat was picked up. Then, over the next 3 or 4 months, grain was bought from Australia, France, Sweden, West Germany, and Romania. These purchases were mainly wheat but also included some barley, rye, and oats. The rye purchases represented a first for the Soviet Union.

How much of the U.S. grain which the Soviets bought can be shipped and delivered by June 30, 1973 is uncertain. As of March 2, however, over 7 million tons, or about 40 percent, of the approximately 18 million tons purchased by the Soviets had been shipped, and the rate of total U.S. grain exports in recent weeks indicated that shipment of most of the grain bought by the Soviets will be completed by next June 30.

The amount of grain directly available to the Soviet Government as a result of domestic procurements and purchases from abroad totals a record 80 million tons (table 2). The previous high was 73 million tons in 1966/67. On the other hand, the procurement by the government of 60 million tons of grain from the relatively small 1972 crop left only about 108 million tons of grain on farms, about 9 million tons less than was left from the 1971 crop. Thus, the Soviet Government probably is supplying the farms with sizable quantities of grain, or mixed feeds containing grains, mainly for livestock feed.

Mixed Results for Livestock

The Soviet livestock industry came through 1972 surprisingly well in view of the unfavorable weather conditions that prevailed. Decreases in hog, sheep and goat numbers were largely offset—in meat-equivalent terms—by increases in cattle and cow numbers. Also, results in 1972 output of livestock

Table 2--USSR: Grain availability and distribution, averages 1961-65 and 1966-70, annual 1970-72

	Average		1970	1971	1972
	1961-65	1966-70			
	Million tons				
Gross production	130.3	167.6	186.8	181.2	168
Left on farms 1/	78.7	101.6	113.5	117.1	108
Government procurements	51.6	66.0	73.3	64.1	60
Net trade	-0.8	-4.6	-5.8	+2.1	+20
Government supplies	50.8	61.4	67.5	66.2	80

1/ Production less government procurements.

products were mixed, with a small increase in meat, a larger increase in eggs, but a small decline in wool. Somewhat less feed was stored on farms in 1972 than in 1971, which is being reflected in the performance of the livestock industry in the first part of 1973. Also, inequities in the feed supply because of drought in some regions necessitated the shipment of livestock from the drought areas to areas with better feed supplies, or vice versa. However, the Soviets took other measures, including the purchase of large quantities of grain and soybeans abroad, in order to maintain the productivity of their livestock.

Cattle numbers on January 1, 1973, reportedly were a record 104.0 million, compared with 102.4 million a year earlier. Cow numbers increased 500,000 to 41.7 million. These increases, although small, are surprising in view of the fact that over a third of all cattle are located in those parts of European USSR which experienced severe drought and unusually hot weather last summer. This weather must have sharply reduced pasture growth and yields of forage crops.

Hog numbers decreased about 7 percent from the record 71.4 million on January 1, 1972, and at the beginning of 1973 were below the level of 2 years earlier. Soviet grain purchases abroad should minimize the adverse effect of the relatively small 1972 Soviet grain harvest on livestock, particularly hogs and poultry. Thus, the decrease in hog numbers in 1972 probably was attributable to a very large decrease in the availability of potatoes for feed. Because of the concern for providing the urban population with potatoes, government potato purchases in 1972 were only slightly less than in recent years, although production was a fifth below the 1967-71 average. As a result, only about 67 million tons of potatoes were left on farms from the 1972 crop, much less than the 84-million-ton average for 1967-71.

The 800,000-head decline in sheep and goat numbers during 1972 was very small relative to the total of 145.3 million present on January 1, 1972. This decrease was apparently due to losses suffered in Soviet Central Asia because of severe cold and an abnormally heavy snowfall early in 1972. Livestock facilities and means of transporting feed to the livestock in that region probably still are not adequate to cope with such winter conditions. About a third of the sheep in the Soviet Union are located in Kazakhstan and the Central Asian Republics.

Changes in numbers of privately-owned livestock were more pronounced than for those on collective and state farms and other socialized-sector enterprises. All types of privately-owned livestock decreased, continuing the recent trend. Increases in cattle and cow numbers in the socialized sector more than offset the small declines in private holdings. Numerically, the decrease in hog numbers was about equally divided between the private and socialized sectors. Finally, the decrease in sheep and goat numbers in the private sector was three times as large as in the socialized sector, but still was only about 2 percent.

Currently, privately-owned livestock account for about 20-25 percent of the total livestock herds in the USSR. On January 1, 1973, the private sector

accounted for 20 percent of the hogs, 22 percent of the sheep and goats, and 24 percent of the cattle. However, within the cattle category, the private sector contained 35 percent of the cows but only 16 percent of the cattle other than cows.

Soviet meat production[5] was 13.6 million tons in 1972, only slightly higher than the 13.3 million tons produced in 1971. Government meat purchases increased somewhat more, from 9.2 million tons to 9.7 million, even though the average weight of livestock sold to the State reportedly was somewhat less than in 1971. This must be the reason why meat production gained so little in relation to increased slaughter numbers, particularly those associated with the decrease in hog numbers. Per capita meat production in 1972 was 55 kilograms, up a little from 1971 but one-third higher than in 1961-65 (table 3).

Soviet meat and poultry imports in 1971 totaled 225,000 tons, about a third larger than in 1970 and over three times as large as in 1967-69. Exports fell by more than a third in 1971, and at 34,800 tons were only one-fifth of the peak amount exported in 1967. These trends in Soviet meat and poultry trade were probably interrupted in 1972. Meat and poultry imports in 1972, at least from noncommunist countries, were sharply reduced and exports of such products may have increased.

[5]Carcass weight including edible offals and fats.

Milk production in 1972 was 83.2 million tons, the same as in 1971 and only about a million tons more than in 1968. Thus, milk yields per cow declined slightly in 1972. Nevertheless, the government procured 48.4 million tons of milk, a little over a million tons more than in 1971. On a per capita basis, the 336 kilograms of milk produced in 1972 were slightly less than the 1966-70 average but 17 percent more than in 1961-65.

Egg production gained most, increasing 7 percent to 48.2 billion eggs. This was equivalent to 195 eggs per person, 30 percent more than the 1966-70 average. Government procurements increased 12 percent to 24.3 billion eggs.

Wool production declined by 2-3 percent to 419,000 tons. This decrease was somewhat greater than the decline in sheep and goat numbers.

In addition to the foreign grain purchases discussed above, the Soviets took other measures to help reduce the impact of the unfavorable weather on their livestock industry. Some livestock reportedly were moved to areas where more feed was available. Last fall there was great emphasis on the collection and utilization of all available materials for supplementing feed stocks. A control unit was organized on each collective and state farm to keep close check on the proper storage and efficient utilization of all feed supplies. Finally, a new "socialist competition" was undertaken to improve

Table 3--USSR: Per capita output of livestock products, averages 1961-65 and 1966-70, annual 1968-72

Livestock product	Average 1961-65	Average 1966-70	1968	1969	1970	1971	1972
				Kilograms			
Beef and veal	15.5	21.8	21.8	23.2	22.2	22.5	NA
Pork	16.9	18.1	18.1	17.0	18.7	21.6	NA
Mutton and lamb	4.7	4.2	4.2	4.0	4.1	4.1	NA
Poultry meat	3.3	3.6	3.6	3.6	4.4	4.9	NA
Other meat	1.1	0.9	0.9	1.1	1.1	1.1	NA
Total meat 1/	41.5	48.6	48.9	48.9	50.5	54.2	55.0
Milk	288	338	346	339	342	339	336
Wool	1.6	1.7	1.7	1.6	1.7	1.8	1.7
				Eggs			
Eggs	128	150	150	155	168	184	195

NA = not available.
1/ Dressed weight including edible offals and fats.

the care of livestock during the 1972/73 winter period, but worthwhile awards offered were mainly for farm and administrative units above the worker level.

Most of these measures should have helped get livestock over the difficult 1972/73 winter in better shape than would have been the case. The control units' close supervision of feed use should result in greater efficiency. However, it is unlikely that the prospect of prizes which generally did not offer material rewards to individuals generated significantly greater initiative among farm workers.

Another Record Cotton Crop

The third USSR bumper cotton crop in succession raised 1972 output to 7.3 million tons (unginned), 3 percent higher than in the previous year and 6 percent more than in 1970. This record was achieved despite some unfavorable conditions. A cold spring somewhat delayed planting in most cotton areas. Heavy rains with hail during May and the first half of June reportedly damaged about 760,000 hectares of sown area, making reseeding necessary. Ripening was also delayed 10-12 days in some areas because of cool weather in late summer and early fall. The 1972 crop contained an estimated 4.7 million tons of cottonseed, up from 4.6 in 1971 and 4.5 in 1970 (table 4).

In the very good 1970 and 1971 years, the cotton area was expanded a total of 230,000 hectares. But the area declined by about 60,000 hectares in 1972, probably as a result of indecision or inability to reseed the entire damaged area so late in the season. During the current 5-year plan, the USSR plans to add about 650,000 hectares of new irrigated land to cotton rowing, bringing the total cotton area to more than 3 million hectares by 1975.

The 1973 plan for cotton production has been set at 6.8 million tons, compared with plans for 6.6 million in 1972 and 7.2 million in 1975. Realization of the planned acreage by 1975, while maintaining a planned average yield of slightly over 25 centners per hectare, could raise production to 7.5 million tons by the end of the current 5-year plan. Since the 1972 crop surpassed the current production target for 1975 of 7.2 million tons, an upward revision of both the 1973 and 1975 plans probably can be expected.

Table 4--USSR: Production of raw cotton, cottonseed, and lint cotton, averages 1961-65 and 1966-70, annual 1968-73

	Average		1968	1969	1970	1971	1972	1973
	1961-65	1966-70						
				1,000 tons				
Raw cotton	4,996	6,099	5,945	5,708	6,890	7,101	7,300	--
Cottonseed 1/	3,247	3,964	3,864	3,710	4,479	4,616	4,745	--
Lint cotton 2/	1,605	2,003	2,042	2,033	1,953	2,359	2,429	2,497

-- = not applicable.
1/ Computed as 65 percent of raw cotton harvested in the previous year.
2/ Computed as 34.2 percent of raw cotton harvested in the previous year.

Cotton lint from the 1971 and 1972 crops totaled almost a half-million tons more per year than estimated domestic utilization in 1972 and 1973. Supplies available for domestic use continued to trend upward in 1971, by 21 percent, and were expected to show further rise in 1972 (table 5).

Despite a second bumper crop in 1971, calendar-year 1971 Soviet cotton exports rose only 6 percent—compared with a 14-percent increase in 1970—and again remained below peak 1968 exports. Net exports, which had dropped in 1970, increased 18 percent in 1971 and were expected to rise again in 1972. The outstanding 1972 crop placed the USSR in a position to expand net exports again in 1973.

Sunflowerseed Continues Decline

Soviet sunflowerseed output in 1972 declined for the fourth straight year, dropping to the lowest level since 1963. Last year's gross output of 5.03 million tons was a tenth lower than in the previous year, a fifth less than the 1966-70 average, and slightly less than the 1961-65 average production (table 6).

The estimated area planted to sunflowers increased slightly above the reduced 1971 level, but remained

Table 5--USSR: Production, trade, and utilization of lint cotton, averages 1961-65 and 1966-70, annual 1970-73

Year	Production 1/	Imports	Exports	Supplies available for domestic utilization 2/	Estimated domestic utilization 3/	Calculated stock changes
			1,000 tons			
1961-65	1,605	169	380	1,394	1,395	-1
1966-70	2,003	176	512	1,667	1,665	+2
1970	1,953	258	516	1,695	1,774	-79
1971	2,359	243	547	2,055	1,829	+226
1972	2,429	NA	NA	NA	1,883	NA
1973	2,497	NA	NA	NA	1,991	NA

NA = not available.
1/ Lint cotton produced from crop harvested in the previous year. One ton of lint cotton equals 4.593 bales of 480 pounds each.
2/ Production plus imports, minus exports.
3/ Linear 1960-70 trend of supplies available for domestic utilization.

Table 6--USSR: Sunflowerseed area, yield, production, and government purchases, 1961-65 and 1966-70, annual 1970-72

Year	Area	Yield	Production	Government purchases	
				Total	Share of production
	Million hectares	Centners/ hectare	1,000 tons		Percent
1961-65	4,494	11.2	5,066	3,372	67
1966-70	4,836	13.2	6,389	4,672	73
1970	4,777	12.8	6,144	4,613	75
1971	4,500	12.6	5,660	4,356	78
1972	1/4,600	2/10.9	5,030	NA	NA

NA = not available.
1/ Estimate.
2/ Calculated.

below 1966-70. The reduced 1972 crop resulted primarily from serious drought conditions last summer in several major sunflower growing areas. Consequently, sunflowerseed yield, which had decreased gradually since 1967, fell a sharp 12 percent to the lowest yield since 1963. The 4-year decline in sunflowerseed production suggests that problems other than weather also are involved.

Government purchases of sunflowerseed fell 6 percent in 1971 and probably dropped again in 1972. Less government buying in 1971 contributed to the 3-percent drop in food industry vegetable-oil production in the September 1971-August 1972 period. The 1972 goal for government purchases of 5.4 million tons of sunflowerseed was above the 1972 output. It is likely that 1973 vegetable oil output will approximate the reduced level of the previous year unless there is further oilseed importing.

Apparently because of the declining output of sunflowerseed, together with the growth in domestic needs for oil as well as for high-protein meal and the desire to maintain sunflower oil exports at the current relatively low levels, the Soviets purchased 1 million tons of soybeans from the United States last August. The added soybean oil processed from part of this purchase, together with earlier processing of sunflowerseed from the 1972 crop and the increase in cottonseed from the record 1972 cotton crop, raised vegetable oil production during the September-December months last fall 2 percent above the corresponding period in 1971. However, output in January and February was about 15 percent lower than in the same months last year, and the lowest for this period of the past 5 years (table 7). Therefore, based on raw materials currently in sight, we foresee output below the 3.1 million tons planned for 1973. Thus, further Soviet imports of oilseeds for domestic processing appear to be a good possibility.

On a calendar year basis, sunflowerseed exports in 1971 dropped 40 percent from the low 1970 level. Sunflowerseed oil exports, which fell sharply in 1970, rose slightly in 1971 but remained well below the high export levels during 1966-69 (table 8). Exports in 1972 probably also remained near the low 1970 and 1971 levels. Furthermore, no substantial increase in 1973 exports is foreseen at this time unless additional oilseeds are imported in sizable amounts.

Small Increase in Sugarbeets

Sugarbeet production increased 5 percent in 1972 to 75.7 million tons, continuing below plan. Weather was the major cause of this below-average crop, offsetting most of the response to increased purchase prices and the 50-percent price bonus for above-quota sales to the government. The planted area, following the introduction of the new incentives, increased about 180,000 hectares. Unusually hot summer conditions, together with insufficient soil moisture during much of the growing season, caused considerable damage to the crop in several major sugarbeet areas, lowering yields. As in the previous 3 years, 1972 sugarbeet output remained far below the record 1968 crop (table 9).

Government sugarbeet purchases, which dropped 10 percent in 1971 because of the poor crop, increased about 6 percent in 1972. Total granulated sugar processed from the 1972 sugarbeet crop is estimated at 7.8 million tons, compared with about 7.4 million tons of granulated sugar from the 1971 crop. Total 1972 sugar production—including the refining of imported raw sugar—dropped 1 percent to 8.9 million tons granulated. This decline was due primarily to low processings of sugar from the poor 1971 sugarbeet crop during the early months of 1972.

The relatively low level of sugar imports during 1970/71 and the need to rebuild heavily drawn-down stocks raised Soviet import requirements for 1971/72. During September 1971-August 1972, Soviet net sugar imports were 1.7 million tons, raw value. Because of lower sugar availability from the smaller 1971/72 Cuban crop—only 1.4 million tons raw value—the Soviets purchased large quantities of sugar from other Communist countries and from western sources. East European countries supplied 200,000 tons and western countries 600,000 tons. It is estimated that Soviet sugar imports from Cuba's average 1972/73 crop may again be at about the same low 1971/72 level. To compensate for the continuing lower Cuban sugar availability, the Soviets in late 1972 purchased approximately 800,000 tons of sugar from western countries for delivery in 1973.

Other Crops Decline

Potato production last year fell to the lowest level since 1963. This came after a 5-percent decline in 1971 from a near-record output in 1970. The 16-percent drop in 1972 was primarily the result of extremely unfavorable conditions during the growing season. Unusually hot, dry weather last summer, with near-critical soil moisture conditions in several major potato growing areas, caused abnormal development and extensive crop losses. With the prospect of a greatly reduced crop and a serious shortage in consumer availability, the Soviets initiated a vast campaign to ensure adequate market supplies and to quell excessive consumer buying and stocking. During the August-September period, large amounts of potatoes were transported long distances from rural areas to industrial centers already experiencing inadequate supplies. In early October the Soviets purchased 1 million tons of potatoes from Poland—the first such purchase from Poland in the past several years.

Vegetable production, which also declined in 1971, fell 8 percent in 1972. Unfavorable weather was again the major contributing factor.

Table 7--USSR: Vegetable oil production from oilseeds purchased internally and abroad by government agencies, 1968/69-1972/73

Season	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
						1,000 tons						
1968/69												
Monthly	174	266	260	267	254	228	252	232	233	197	120	79
Cumulative		440	700	967	1,221	1,449	1,701	1,933	2,166	2,363	2,483	2,562
1969/70												
Monthly	145	254	265	285	220	198	208	185	173	154	114	53
Cumulative		399	664	949	1,169	1,367	1,575	1,760	1,933	2,087	2,201	2,254
1970/71												
Monthly	168	281	289	297	259	231	237	220	225	207	124	77
Cumulative		449	738	1,035	1,294	1,525	1,762	1,982	2,207	2,414	2,538	2,615
1971/72												
Monthly	170	286	291	298	229	221	233	212	211	205	119	55
Cumulative		456	747	1,045	1,274	1,495	1,728	1,940	2,151	2,356	2,475	2,530
1972/73												
Monthly 1/	207	276	287	295	202	195						
Cumulative		483	770	1,065	1,267	1,462						

1/ December and February are estimates.

Table 8--USSR: Exports of sunflowerseed, sunflowerseed oil, and total vegetable oils, 1965-71

Year	Sunflowerseed	Sunflowerseed oil	Total vegetable oils
		1,000 tons	
1965	84	221	241
1966	142	428	456
1967	304	670	707
1968	361	714	770
1969	345	656	696
1970	143	351	372
1971	84	379	408

Table 9--USSR: Sugarbeet area, yield, production, and government purchases, averages 1961-65 and 1966-70, annual 1968-72

Year	Area	Yield	Production	Government purchases	
				Total	Share of production
	1,000 hectares	Centners/ hectare	1,000 tons	1,000 tons	Percent
1961-65	3,606	165	59,170	55,353	94
1966-70	3,583	228	80,994	74,426	92
1968	3,560	266	94,340	84,168	89
1969	3,384	211	71,158	65,283	91
1970	3,368	237	78,924	71,385	90
1971	3,320	219	72,200	64,324	89
1972	1/3,500	2/216	75,700	68,000	90

1/ Estimate.
2/ Calculated.

Agricultural Inputs Increase Modestly

Agricultural inputs, in most instances, showed modest growth in 1972. Delivery of tractors to agriculture reportedly was almost the same as in 1971, and again was short of the goal. Agriculture's percentage share of tractor production, which gradually decreased since 1966, was the lowest since 1960. Total tractor deliveries during 1971 and 1972 were about 8,000 short of the goal. Plans for 1973 call for about a 5-percent increase in the number of tractors supplied to agriculture (table 10). Delivery of trucks and specialized motor vehicles to agriculture increased substantially in 1972—following an 8-percent decrease in 1971—and met its goal. Total deliveries in 1971 and 1972, however, fell short of the 2-year target by 25,000. A 20-percent increase is scheduled for 1973.

Deliveries of fertilizer to agriculture rose 6-7 percent in 1972 but fell short of the year's goal by 400,000 tons. Agriculture's share of total production was unchanged from 1971. Total deliveries during the first 2 years of the current 5-year plan were slightly below the goal. Deliveries in 1973 are planned to increase about 6 percent. During 1971-75, the Soviets plan fertilizer deliveries totaling 302 million tons. If realized, this amount would be 62 percent higher than total deliveries made during 1966-70.

In 1972, the Soviets added 800,000 hectares of newly irrigated land and 900,000 hectares of newly drained land—much more than in 1971.[6] About 5.2 billion rubles were expended on land improvement in 1972, compared with about 4.1 billion in 1971, and 1973 land improvement investments are planned at 6.1 billion rubles. This investment is to provide for the introduction of 701,000 hectares of newly irrigated land and 911,000 hectares of newly drained land.

U.S.-USSR Agricultural Trade Jumps

U.S.-Soviet agricultural trade had been negligible prior to a large sale of grains to the USSR in 1971/72—except for a large wheat sale in 1963/64. From 1968/69 to 1970/71, value of total U.S. agricultural exports to the USSR ranged from $9-17 million, nearly all hides, skins, and almonds.

During 1971/72, however, U.S. agricultural exports to the Soviets increased sharply to almost $137 million. At this time, a major change took place in U.S.-Soviet agricultural trade with a shift in emphasis to grains. This was facilitated by the removal of the U.S. flag shipping requirements in 1971. Of the $137 million in agricultural exports to the USSR in 1971/72, grains (mainly for feed) made up 93 percent of the total, whereas the share of hides, skins, and almonds dropped to a low 7 percent.

[6]These are gross additions. An unspecified area is taken out of use each year in order to repair irrigation and drainage facilities and for other reasons.

The unprecedented and surprisingly large Soviet grain purchase from the United States during 1971/72—especially following the 1971 Soviet bumper grain crop—apparently was a reflection of a major grain policy change by the Soviet Government. The Soviet hierarchy apparently decided to import grain needed to make up for the reduced domestic procurement from the 1971 crop.

U.S. agricultural exports to the USSR are estimated at over $1 billion during 1972/73 mainly in wheat and feed grains, reflecting not only the apparent continuation of the previous year's grain policy change, but more importantly the serious drop in 1972 grain production. Similarly, Soviet purchase of a million tons of U.S. soybeans during 1972/73, the first since 1965, was the result not only of the desire to improve livestock feeding but also of the sharp decline in USSR sunflowerseed output.

U.S. agricultural imports from the USSR have been insignificant, in the range of $2-3 million since 1968/69. Major imports have been furs and skins, with lesser value amounts of mushrooms, licorice root, cotton linters, essential oils, spices, tea, and wine.

A large imbalance of agricultural trade between the U.S. and USSR has existed for several years (table 11).

The imbalance in *total* trade was more pronounced during the peak calendar years 1971 and 1972. U.S. imports from the USSR—including both agricultural and nonagricultural products (primarily rare metals and diamonds)—increased from $57 million to $95 million. On the other hand, total U.S. exports to the Soviets rose from $161 million to almost $550 million—including goods purchased by the Soviets for other countries. Nonagricultural exports from the United States included non-electrical machinery, chemicals, and crude materials such as wool pulp.

Outlook for 1973

Soviet agricultural production in 1973 is expected to rebound from the depressed 1972 level, but likely will fall well short of the 12.6-percent planned increase. This evaluation assumes that weather during the 1973 growing and harvesting season will be more or less normal. Production of such crops as grain, potatoes, sunflowers, and sugar beets should increase sharply, i.e. return to more nearly trend levels, and the cotton crop should continue its uptrend. However, output of livestock products probably will be little, if any, larger than that attained in 1972.

Based on conditions as of mid-March and on past trends, a 1973 Soviet grain crop close to the relatively good grain harvests in 1970 and 1971 seems most likely. However, such a crop would still be well below the planned goal of 197.4 million tons of grain. Developments to date point to more significant

Table 10--USSR: Deliveries of tractors, trucks, and fertilizers to agriculture, averages 1961-65 and 1966-70, annual 1970-72, 1973 plan

Year	Tractors		Trucks 1/		Fertilizers		
	Units	Share of production	Units	Share of production	Gross weight	Nutrient weight	Share of production
	Thousands	Percent	Thousands	Percent	Million tons	Million tons	Percent
1961-65	218.5	70	83.6	22	18.1	4.1	83
1966-70	293.5	70	143.5	31	37.0	8.4	84
1970	309.3	67	156.6	30	46.0	10.4	79
1971	313.2	66	143.5	25	50.6	10.4	82
1972	312.0	65	187.0	31	54.0	NA	82
1973 plan	328.5	65	224.5	NA	57.0	NA	80

NA = not available.
1/ Includes other unspecified specialized motor vehicles.

Table 11--U.S. agricultural trade with the USSR, selected commodities, 1968/69-1972/73

	1968/69	1969/70	1970/71	1971/72	Estimated 1972/73
			1,000 dollars		
U.S. Exports (Total)	9,368	17,763	12,363	136,799	1,041,000
Animals and animal products	9,336	17,525	11,182	8,951	10,000
Hides and skins (incl. furs)	7,819	17,514	11,080	8,589	0
Grains and preparations	18	0	2	126,634	886,000
Wheat	6	0	1	731	658,000
Feed grains	1	0	0	125,903	228,000
Fruits, nuts and preparations	11	193	1,068	1,206	1,000
Almonds	0	193	1,056	1,125	NA
Vegetables and preparations	0	0	108	0	0
Vegetable lecithin	0	0	108	0	0
Oilseeds and products	1	0	0	3	0
Soybeans	0	0	0	1	144,000
Cotton, raw (excl. linters)	0	44	0	0	0
Other	2	1	3	4	NA
U.S. Imports (Total)	1,967	548	3,013	3,060	NA
Animals and animal products	1,057	365	2,665	2,853	NA
Hides and skins (incl. furs)	237	148	2,378	2,740	NA
Grains and grain preparations	0	0	0	0	NA
Fruits, nuts and preparations	3	0	1	0	NA
Vegetables and preparations	22	44	46	81	NA
Mushrooms (dried, whole)	22	44	44	81	NA
Spices	0	0	20	0	NA
Wines	0	0	3	3	NA
Tea (crude or prepared)	2	0	0	8	NA
Drugs (vegetable origin)	445	1/	159	23	NA
Licorice root	436	0	129	0	NA
Cotton linters	317	48	0	0	NA
Essential oils	112	89	111	91	NA
Other	9	2	8	1	NA

NA = not available.
1/ Negligible.

deviations from normal in the composition of the 1973 grain crop than in its size.

Current prospects point to another relatively small winter grain harvest in 1973, the second in 2 years. Dry soil conditions last fall interfered with seeding. As a result, only about 27 million hectares of the 34 million planned were actually sown to winter grains. Furthermore, about half of the area seeded was sown about a month later than in recent years. Precipitation and temperatures were both above normal in October and November permitting growth of the winter grains to continue later in the fall than normal. The above-normal temperatures continued through December 1972 and into January 1973, which resulted in a lack of adequate snow cover for the winter grains increasing vulnerability to damage from extreme cold. As of mid-March there was little evidence that winterkill of grain had been abnormally heavy. However, the difference between the 1961-71 seeded and harvested areas of winter grains in the USSR averaged about 15 percent.

The combined effect of the fall seeding problems and normal difference between seeded and harvested area suggests a final 1973 winter wheat area approximating the winterkill-reduced area harvested in 1972. Also, these factors may have resulted in a winter rye area only a little over half as large as in recent years. Given normal yields, the 1973 winter grain harvest, primarily winter wheat, would not be much larger than the small 1972 crop.

As in 1972, spring barley will probably be used extensively both in seeding those areas not sown last fall and in reseeding the winterkilled areas. Consequently, the increase in production of spring barley and other spring-sown grains will make up for a large part of the winter wheat and rye that would have been produced on the areas involved.

Prospects for further advances in output of livestock products during 1973 are not too bright, based on inputs now in sight. Livestock productivity during much of the first half of 1973 probably will not be as good as during the corresponding period of 1972, even though the winter was less severe. The feed situation early this year was poor relative to that a year ago. For the first half of the year, the average weight of livestock slaughtered and milk yield per cow in 1973 is expected to be less than in 1972.

Improved performance in the livestock industry during the second half of 1973 should tend to offset lags in the first half. More or less normal weather during the 1973 growing season should result in better livestock productivity in the second half, compared with the same period in 1972, when hot, dry weather adversely affected pasture growth, yields of forage crops, and productivity per head of livestock.

The Soviets have revised downward, except for eggs, their original livestock product goals for 1973 as follows:

Item	Unit	1972	1973 targets	
		Actual	Original	Revised
Meat (carcass weight	Mil. tons	13.6	14.3	12.9
Milk	Mil. tons	83.2	92.1	86.2
Eggs	Bil.	48.2	46.8	47.5
Wool	1,000 tons	419.0	463.0	434.0

The original meat goal was reduced by 10 percent, and the milk and wool goals by 6 percent, but that for eggs was raised 1 percent. The revised 1973 goals, if achieved, would represent a 5-percent decrease in meat production compared with 1972, but milk and wool output would be 3-4 percent higher. Egg production in 1973 would about equal that in 1972.

The Soviets are expected to continue to be net importers of grain and soybeans in 1973/74. Soviet 1973 grain production under normal weather conditions will be some 10-15 million tons less than the amount planned, based on past trends, but will exceed the relatively low 1972 crop by 10-15 million tons. Thus, the amount of grain purchased by the Soviets for 1973/74 delivery is expected to be less than that purchased in 1972/73, but the relative importance of feed grains in the purchases is expected to increase. Lack of information about Soviet grain supplies and needs, plus a history of wide weather fluctuation and other uncertainties, make it impossible to predict the amount and timing of future Soviet grain purchases. Another purchase of soybeans for 1973/74 delivery seems likely because of the need for protein supplements in livestock feed and the need for vegetable oil, but the high price of soybeans is expected to keep any purchase from exceeding the 1972 purchase of 1 million tons by any substantial amount.

EASTERN EUROPE

Major Gains in Agricultural Output

Rapid strides in both the crop and livestock sectors made 1972 a good year for Eastern Europe. In terms of gross agricultural output, Romania registered a 9-percent increase and Poland, 8 percent; other increases ranged from 4 percent in Hungary to 7 percent in East Germany. Only Yugoslavia, whose crops were damaged by weather, had a shortfall and that was just 1 percent.

Good feed supplies of grains, forages, and potatoes, coupled with beneficial livestock policies, gave impetus to continued growth in the livestock sector.

In the crop sector, grain and tobacco set records and sugarbeets and potatoes made comebacks from 1971. Fruits including grapes and vegetables also improved. But sunflowerseed production dropped slightly, and rapeseed output sharply.

Weather varied widely, contributing to large fluctuations in crop production. For example, severe winterkill wrecked the Polish rapeseed crop, and a fall and winter drought—which enveloped most of Eastern Europe in varying degrees—lowered Yugoslav wheat production, yet heavy summer rainfall which increased grain harvest losses and damage in the northern countries (East Germany, Poland, and Czechoslovakia) brought corn production in the southern countries (Yugoslavia, Bulgaria, Romania, and Hungary) to record levels. In the southern countries, heavy rainfall persisted into the fall, also prolonging the harvest and causing unusually large harvest losses.

Grain Output and Imports of U.S. Grain Set Records

Eastern Europe had a record 1972 grain crop of 87 million tons. Estimated net imports will add about 7 million tons of grain in 1972/73, 1.7 million tons less than net imports in 1971/72. The U.S. share of East European grain imports is at a record level, as part of the Soviet grain purchases are shipped to the northern countries, and direct U.S. shipments to Eastern Europe continue at high levels.

All except Czechoslovakia and Yugoslavia had outstanding grain harvests. In the northern countries, a mild, dry winter and spring permitted early completion of seeding. While precipitation was unseasonably low until the spring growing period, April and May rains sufficiently replenished soil moisture to boost grain yields to record levels. Heavy summer rainfall, however, prolonged the harvests, causing larger than usual losses and some deterioration of grain quality.

The growing season in the southern countries was mixed. Romania had a nearly ideal growing season for wheat and barley. In contrast, Yugoslav wheat was hit by the winter and spring drought which enveloped most of Eastern Europe. Summer and fall rainfall was sufficient to bring all of the southern areas's corn crop to a record level, but made the harvest late and difficult. The corn is reported to be of poor feeding quality. In Yugoslavia, for example, the harvested tonnage has a higher-than-average moisture content. Morever, some of the stored corn has already spoiled and become unsuitable for feeding.

Growing livestock inventories and the poor feeding quality of some domestically produced grain are keeping 1972/73 grain imports at a high level. However, imports of the northern countries are expected to decline from 1971/72 purchases by nearly 1 million tons (table 12). Because the USSR, the major grain supplier to these countries, is at least partially fulfilling its commitments with U.S. grain, direct shipments and transshipments of U.S. grain to the northern region could approximate 4 million tons. We shipped 750,000 tons directly in 1971/72 (table 13).

Because of the large Romanian grain exports—which include 500,000 tons of wheat to the USSR—the southern countries will at least balance their grain trade. The 1972/73 fiscal year began with heavy purchasing, however. Yugoslavia bought 850,000 tons of U.S. wheat and corn; Romania—165,000 tons of U.S. corn; and Hungary—245,000 tons of barley from the European Community (EC).

Prospects for the fall-sown winter grains for 1973 harvest are mixed. The northern countries were able to sow grain with little difficulty. In the southern countries, fall field work was late but was extended into a mild, dry December. Yugoslavia's fall grain area nevertheless is down by 13 percent from 1971/72. Romania and East Germany reported snowfall by January, but other countries through March 14 experienced a winter with little or no snow cover. Czechoslovakia has indicated some concern about winterkill damage in the grain areas.

Oilseed Crops Down

Production of *sunflowerseed*—the major oilseed crop in the southern countries—dropped slightly last year to 1.7 million tons. Adverse weather during planting and harvest reduced yields; area was also down slightly. Only Romania, the major producer, had a record crop. Despite the decline in production, the southern countries' calendar year 1973 net exports of sunflowerseed and oil (oil-equivalent basis) could be a record (table 14). Most of these exports go

Table 12--Eastern Europe: Grain trade, 1968/69-1972/73

Trade 1/	Czechoslovakia 2/	East Germany 3/	Poland	Northern countries	Bulgaria	Hungary	Romania	Yugoslavia	Southern countries	Eastern Europe
					Million tons					
Imports										
1968/69	1.9	2.0	1.9	5.8	0.7	0.4	4/	0.1	1.2	6.9
1969/70	1.9	2.3	2.7	6.8	0.4	0.3	0.1	0.1	0.9	7.7
1970/71	2.3	3.2	3.0	8.5	0.2	0.6	1.1	0.5	2.2	10.7
1971/72 5/	1.9	3.2	3.2	8.3	4/	0.6	0.4	1.0	2.1	10.4
1972/73 6/	1.6	2.7	2.8	7.1	4/	0.4	0.4	1.5	2.3	9.4
Exports										
1968/69	4/	0.3	0.2	0.5	0.4	0.2	1.5	0.2	2.3	2.8
1969/70	4/	0.3	0.2	0.5	0.5	1.0	1.3	0.4	3.2	3.6
1970/71	4/	0.3	0.2	0.5	0.2	0.2	0.3	0.2	0.8	1.4
1971/72 5/	4/	0.3	0.3	0.6	0.2	0.3	0.6	0	1.1	1.7
1972/73 6/	4/	0.3	0.2	0.5	0.2	0.4	1.4	0	2.0	2.5
Net imports										
1968/69	1.9	1.7	1.8	5.3	0.3	0.2	-1.5	-0.2	-1.1	4.2
1969/70	1.8	2.0	2.5	6.4	-0.2	-0.7	-1.1	-0.3	-2.3	4.0
1970/71	2.2	2.9	2.9	8.0	0	0.4	0.8	0.3	1.4	9.4
1971/72 5/	1.9	2.9	2.9	7.7	-0.1	0.4	0.2	1.0	1.0	8.7
1972/73 6/	1.6	2.4	2.6	6.6	-0.2	0	-1.0	1.5	0.3	7.0

1/ Year beginning July 1.
2/ Excluding malt.
3/ Including interzonal trade with West Germany.
4/ Less than 100,000 tons.
5/ Preliminary.
6/ Estimated.

Table 13--Eastern Europe: Grain imports of the northern countries, by source, 1968/69-1972/73 1/

Importing country and sources	1968/69	1969/70	1970/71	Preliminary: 1971/72	Estimated 1972/73
			1,000 tons		
Poland	1,920	2,700	3,050	3,235	2,800
U.S.	345	150	255	335	NA
USSR	1,120	1,135	1,920	980	NA
Canada	180	195	195	370	NA
France	210	545	445	1,150	NA
West Germany	0	515	125	240	NA
Hungary	0	40	30	0	NA
Sweden	0	0	15	100	NA
Other	65	120	65	60	NA
Czechoslovakia	1,877	1,870	2,261	1,885	1,600
U.S.	0	0	240	70	NA
USSR	1,320	1,250	1,395	1,080	NA
Canada	140	0	0	0	NA
France	0	0	0	90	NA
West Germany	40	440	420	165	NA
Hungary	10	40	50	50	NA
Sweden	0	0	0	30	NA
Romania	185	10	50	0	NA
UAR	35	30	40	30	NA
Argentina	0	0	0	20	NA
Other	122	50	66	35	NA
East Germany	1,975	2,265	3,175	3,195	2,700
U.S.	515	530	265	525	NA
USSR	1,245	1,620	1,845	1,550	NA
Canada	0	0	0	65	NA
Sweden	55	25	0	180	NA
Mexico	5	10	0	0	NA
Australia	0	0	230	475	NA
Denmark	65	0	0	30	NA
Romania	0	0	0	300	NA
Poland	40	25	25	0	NA
Brazil	0	0	55	0	NA
Other	50	55	2/755	70	NA

NA = not available.

1/ July/June. Includes wheat, feed grains, rye, and rice. Also includes transshipments through West Germany, Canada, and Netherlands.

2/ Barley, probably from France or West Germany.

Table 14--Eastern Europe: Foreign trade in sunflowerseed and sunflowerseed oil of the southern countries, 1965-72

	Bulgaria	Hungary	Romania	Yugo-slavia	Southern countries
			1,000 tons		
Exports of sunflowerseed					
1965	91.5	10.4	35.0	9.0	145.9
1966	155.8	13.7	30.9	1.4	201.8
1967	99.9	17.0	58.6	7.3	182.8
1968	130.0	18.2	82.7	12.3	202.5
1969	128.2	35.8	55.0	11.9	230.9
1970	97.3	24.1	65.0	118.4	304.8
1971	50.0	24.1	40.0	16.9	131.0
1972 1/	35.0	20.0	20.0	0	75.0
Imports of sunflowerseed					
1965	0	0	0	0	0
1966	0	0	0	0	0
1967	0	17.0	0	0	17.0
1968	15.1	12.9	5.0	27.9	60.9
1969	18.3	62.9	8.0	9.9	99.1
1970	4.6	11.4	3.0	0.1	19.1
1971	2.0	3.4	0	0.6	6.0
1972 1/	0	0	0	0	0
Exports of sunflowerseed oil					
1965	1.0	15.0	33.0	0	49.0
1966	17.3	24.7	76.5	0	118.5
1967	40.5	30.9	110.0	7.0	188.4
1968	45.7	32.3	115.8	9.8	203.6
1969	60.1	43.4	143.5	0	247.0
1970	46.9	18.9	119.0	3.4	188.2
1971	40.0	7.1	131.7	2.8	181.6
1972 1/	35.0	0	155.0	0	190.0
Imports of sunflowerseed oil					
1965	0	5.5	0	1.5	7.0
1966	30.1	16.0	1.8	0	47.9
1967	32.7	17.1	1.0	39.2	90.0
1968	24.3	22.1	5.4	46.7	98.5
1969	18.3	15.9	0	0	34.2
1970	3.0	5.6	6.6	6.7	21.9
1971	2.0	0.5	1.4	4.3	8.2
1972 1/	0	0	0	0	0

1/ Preliminary.

to West European countries. Yugoslavia, the southern region's net importer, will again rely on U.S. soybeans and oil to compensate for the 20-percent decline in its domestic sunflowerseed production. In 1973, Yugoslavia is expected to import at least 100,000 tons of soybean oil.

For the 1973 crop year, Romanian plans again call for an increased sunflowerseed area. The Yugoslav Government is encouraging sunflowerseed production by increasing farm prices, making the new price more competitive with that of alternative crops. The Yugoslavs are also planning to introduce a financial assistance program to mills, which in early 1972 were in arrears to farmers for the previous year's crop. On the other hand, Hungarian officals have slated an 18-percent decline in their crop area.

In the northern countries, *rapeseed* production fell 19 percent to 720,000 tons. Poland, the region's primary producer, experienced a sharp shortfall because of winterkill. Poland's net imports of oilseeds and oils could reach 65,000 tons (in oil equivalent) in 1973, up from the low net imports of 1972. With good rapeseed crops, East Germany and Czechoslovakia will probably import about the same reduced levels as in 1972. In recent years the northern countries have relied primarily on Soviet sunflowerseed and oil exports, but in 1973, as in 1972, they are facing a further reduced Soviet supply. During 1972, the U.S. shipped directly 81,000 tons of soybeans to Poland, up from 60,000 tons the previous year, and during January-September 1972 Brazil exported 51,000 tons to East Germany.

Improved livestock feeding and continued growth in livestock production are increasing Eastern Europe's rapidly expanding imports of *oilseed meal.* U.S. exports to this market, including transship-

Table 15--Eastern Europe: Imports of major oilseed meals and fish meal, 1969-72

	1969	1970	1971	1972 1/
		1,000 tons		
Oilseed meals				
U.S. soybean meal				
Direct shipments	303	552	449	2/552
Transshipments 3/	81	116	98	90
Interzonal trade 4/	314	389	478	2/610
West German soybean meal 5/	3	13	151	182
Brazilian soybean meal	0	38	166	190
Netherlands soybean meal 5/	33	14	33	40
Indian oilmeals				
Peanut meal	298	318	366	500
Other oilseed meals	88	82	57	50
Total oilseed meals	1,400	1,776	2,017	2,300
Fish meal				
Peruvian fish meal	231	424	523	2/264
Other fish meal	97	102	90	110
Total fish meal	328	526	613	374

1/ Estimates unless otherwise indicated.
2/ Preliminary.
3/ Through Hamburg.
4/ West German-East German interzonal trade.
5/ Soybean meal processed from U.S. or Brazilian soybeans.

ments and interzonal trade, reached 1.15 million tons in 1972 (table 15). East Germany is the largest buyer of foreign oilseed meal, importing nearly 700,000 tons in 1971. Poland, Czechoslovakia, and Hungary followed, having imported 350,000 tons each (table 16).

While U.S. soybean meal is the dominant oilseed meal used in Eastern Europe, the outlook for 1973 is mixed. West Germany, processing largely U.S. and Brazilian soybeans, and Brazil, with native beans, exported more than 300,000 tons in 1971, at least 550,000 tons in 1972, and have good supplies for 1973. India, facing short peanut meal supplies in 1973, has less oilseed meal to offer Eastern Europe. Moreover, the decline in Peruvian *fish meal* availabilities—which began in mid-1972—will boost oilseed meal imports. Burgeoning prices for oilseed meal are a constraining factor on the continued rapid expansion of their use.

Other Crops Up

Eastern Europe's 1972 *sugarbeet* production recovered with a 23-percent increase over the previous year, but did not reach a record level. The turnabout in production was the result of better weather late in the season and the national sugar production policies of several countries. Eastern Europe will probably be a sizeable net sugar exporting region in 1973, with Poland and Czechoslovakia having the region's largest net exportable surpluses. While Eastern Europe was a net importing region in 1972, Poland sold 108,000 tons of sugar to the USSR during the January-August period. During the same months the USSR, for the first time in several years, exported no sugar to the region. Cuban exports to the region were down 15 percent in the January-March quarter of 1972.

Tobacco production again reached a new high, with the largest gain in Yugoslavia. Bulgaria, with about 40 percent of the region's production, had an outstanding 135,000-ton crop. Tobacco, primarily oriental, continued to be a leading agricultural export from the southern countries. Bulgaria's 1972 exports of oriental leaf were slightly higher than the 59,000 tons exported in 1971. Yugoslav exports were 18,000 tons, 11,000 tons of which went to the United States.

Potato production rose 16 percent, but like sugarbeets fell short of a record. Poland's output gain to 48 million tons accounted for most of the increase. The rise in Polish potato production plus a record grain crop permitted expansion of the country's hog industry in 1972.

Other vegetables also registered a production upturn, as did *fruits*.

Livestock Output Continues on Uptrend

The 5-year goal of strengthening the livestock sector is being realized. The region's hog and cattle inventories have increased for the third consecutive year; beginning-year hog numbers were up 6 percent over the previous year and cattle by 2 percent. Sheep and poultry numbers remained about the same. Poland, with a progressive livestock program and good feed supplies, had a record 19 million hogs on January 1, 1973. Cattle increased by 3 percent to 10.9 million head. Hungary's livestock inventories, in contrast to those of other countries in the region, were lower than on January 1, 1972. Realizing that burgeoning hog production was overloading marketing facilities, Hungarian policymakers chose to limit hog numbers by raising feed prices more than hog prices. Cattle production, which had been relatively unprofitable in Hungary, continued to fall in early 1973 despite increased prices to producers.

Hungarian hog and cattle inventories may have declined because of foot-and-mouth disease. An outbreak began in Romania last summer, and spread to all the other East European countries except Poland.

Continued growth in East European livestock production has boosted meat output by 10 percent, including a 15-percent increase in pork and a 1-percent growth in beef. Milk production grew by 3 percent, and eggs by 2 percent.

Except for Hungary's program of limiting hog production, the region's policymakers have attempted to continually improve the economic climate for livestock production. During last year, nearly every country raised producer prices for livestock and products. Hungarian state and collective farms became eligible for a 3,000-forint[7] ($110) grant for every calf raised and 2,000 forints (about $70) for every cow raised, plus bonuses for high milk deliveries. In June 1972, Romanian farmers were being offered State procurement prices of 9.8 lei[8] per kilogram (about 80 cents per pound) liveweight for first quality cattle of more than 400 kilograms liveweight.

The Yugoslavs have restricted slaughter of cattle less than 400 kilograms liveweight since October to build cattle herds; Poland has initiated a program of granting farms long-term loans at 4-6 percent interest for improvement of livestock facilities. On the feed side, the Romanian government has made specified quantities of corn available to farmers who sell cattle and hogs to state processing firms. The Polish feed

[7]Officially 27.60 forints equal $1.00.
[8]Officially 5.53 lei equal $1.00.

Table 16--Eastern Europe: Imports of oilseed meals and fish meal, by country, 1969-72

Kind of meal and importing countries	1969	1970	1971	1972 1/
		1,000 tons		
Oilseed meals	1,400	1,776	2,017	2/2,300
Czechoslovakia	170	283	350	NA
East Germany 3/	456	534	688	NA
Poland	278	313	316	NA
Bulgaria	81	85	90	NA
Hungary	258	336	368	NA
Romania	29	29	17	NA
Yugoslavia	139	196	188	NA
Fish Meal	328	526	613	2/374
Czechoslovakia	13	104	110	78
East Germany	72	98	216	69
Poland	123	126	115	114
Bulgaria	10	28	28	15
Hungary	52	44	56	49
Romania	2	8	18	15
Yugoslavia	55	119	70	34
Total	1,728	2,302	2,630	2/2,674
Czechoslovakia	183	387	459	NA
East Germany	516	632	903	NA
Poland	402	439	431	NA
Bulgaria	91	112	119	NA
Hungary	310	380	424	NA
Romania	31	37	36	NA
Yugoslavia	194	315	258	NA

NA = not available.
1/ Preliminary unless otherwise indicated.
2/ Estimated.
3/ Includes interzonal trade.

industry has taken steps to import 14 feed mills with annual capacity of 60,000 tons of mixed feed each, for operation by 1975, and will build 2 mills of 110,000 tons each.

Continued efforts in livestock production have increased exports and improved domestic meat supplies. Meat and livestock exports—East European agriculture's principal hard currency earner—amounted to nearly 900,000 tons carcass-weight equivalent in 1971 (table 17). Meat and livestock exports were on the upswing in 1972 but have mixed prospects for 1973. Poland, the region's largest meat exporter, sold 190,000 tons of meat and products in 1972; Yugoslavia exported 110,000 tons. Slaughter animal exports—largely beef cattle destined for Italy, a market developed in the late 1960's—continued their upward climb. Slaughter livestock exports on a carcass-weight basis reached a new high of 300,000 tons in 1972. Exports were especially heavy until late summer, when most Eastern European countries placed restrictions on the movement of livestock and livestock products to prevent the spread of foot-and-mouth disease. Yugoslavia, also fearing a domestic meat shortage, banned the export of calves in the latter part of the year. Hungary was the region's leading slaughter livestock exporter, with livestock sales of 91,000 tons carcass-weight equivalent in 1972.

Trade negotiations undertaken in 1973, as well as domestic supplies, will influence prospects for continued East European livestock and meat exports. Yugoslavia, with its export-oriented beef industry, will be renegotiating the 3-year old baby beef protocol with the EC. Admission of the United Kingdom to the EC, calls into question the fate of Poland's quota in the U.K. Bacon Agreement. Polish bacon exports to the United Kingdom, which averaged 52,000 tons in 1966-70, dropped to 34,000 tons in 1972. Except for Yugoslavia, domestic meat supplies were also improved, but several countries have announced plans to increase consumer meat prices. Yugoslav meat prices rose in early 1973, but the country continues to face meat shortages. Only restricted amounts of fresh beef were exported during March and pork exports are being nearly halted through June. Live animal exports also are being restricted. As a stopgap, Yugoslavia is importing 12,500 tons of beef, 25,000 tons of pork, and 5,000 tons of chicken in 1973. During the early months of 1973, the Hungarians also faced meat shortages.

Agricultural Policy Changes

The most important agricultural policy measures instituted in Eastern Europe in 1972 were aimed at increasing efficiency in livestock production, especially for cattle. Increased producer prices ranked first among various kinds of incentives and assistance. Other significant policy developments included increases in retail food prices made or indicated, new model statutes for collective farms, additional collectivization, changes in cropping structure or methods, rural administrative changes, and tax reforms. Some of these changes also were related to promotion of interfarm cooperation and vertical integration, and to assurance of adherence to government policy in farm decisions.

In recent years several countries took steps to revitalize *cattle raising and dairying,* the least efficient and least profitable enterprises in the livestock sector. Hungary increased grants and loans for calves raised and cows added to herds, and revoked a restriction on cow slaughter, imposed in 1971, to allow for proper culling and replacement. Importing breeding cattle was another step taken. Yugoslavia once again imported U.S. registered Holsteins and Hungary also purchased some of our Holsteins, for the first time.

Poland introduced a marketing arrangement involving special allocations of coal for delivery to state agencies of feeder slaughter cattle with a liveweight of 200-250 kilograms. To assure orderly feed supplies, livestock production, and marketing, Yugoslavia established a "Fund to Improve Production and Marketing of Livestock and Livestock Products".

East Germany changed the basis for compulsory marketing of all staple foods, including livestock products, making quotas dependent on the economic condition of farms rather than size and type of farm. Officials hope this change will be an incentive to increase farm production through more intensive specialization. But the previous basis for quotas in East Germany still applies to the simplest type of collective farm, if it does not enter into partnership with a more advanced form of collective or with a state farm.

Producer price increases were the principal means of promoting more production of selected commodities. Such price increases were widespread in Yugoslavia. Average intervention purchase prices were raised by 8-10 percent for agricultural commodities and 25 percent for cotton. The minimum purchase price for soybeans more than doubled, and in Hungary, sugarbeet and tobacco prices were increased by a fifth. Bulgaria is in the process of restructuring all producer prices to reflect more the actual cost of production. Most prices are expected to be adjusted upward, but for poultry and sunflowerseed a downward revision is foreseen. East Germany standardized producer prices by eliminating various types of bonus payments. Fixed prices were increased, leaving price variations dependent only on quality differences. In Romania, a "Law on Regulation of Prices and Rates" was enacted in 1972 to replace an outdated law in effect since 1953. Slaughter livestock price increases of less

Table 17--Eastern Europe: Meat and livestock trade, 1969-72

Category and year	Czecho-slovakia	East Germany 1/	Poland	Northern countries	Bulgaria	Hungary	Romania	Yugo-slavia	Southern countries	Eastern Europe
				1,000 tons						
Exports of meat and meat products 2/										
1969	15.7	47.8	176.0	239.5	74.5	107.0	79.5	112.3	373.3	612.8
1970	19.1	40.0	156.0	215.1	64.4	116.3	55.3	99.3	335.3	550.4
1971	24.5	30.0	172.0	226.5	3/70.0	155.0	3/60.0	101.7	3/386.7	3/613.2
1972	NA	NA	190.0	NA	NA	NA	NA	110.0	NA	NA
Exports of slaughter animals 4/										
1969	17.4	19.7	36.8	73.9	25.8	82.6	24.0	23.8	156.2	230.1
1970	5.0	25.2	44.9	75.1	22.9	75.1	20.2	28.0	146.2	221.3
1971	3.2	25.5	55.8	84.5	3/40.0	95.3	20.1	37.6	3/193.0	3/277.5
1972	0	3/23.0	3/60.0	3/83.0	3/50.0	91.0	3/20.0	48.5	3/209.5	3/292.5
Total exports										
1969	33.1	67.5	212.8	313.4	100.3	189.6	103.5	136.1	529.5	842.9
1970	24.1	65.2	200.9	290.2	87.3	191.4	75.5	127.3	481.5	771.7
1971	27.7	55.5	227.8	311.0	110.0	250.3	80.1	139.3	579.7	890.7
1972	NA	NA	NA	NA	NA	NA	NA	158.5	NA	NA
Imports of meat and meat products 2/										
1969	115.2	67.5	36.2	218.9	11.2	29.3	5.0	2.0	47.5	266.4
1970	119.2	86.7	43.9	249.8	16.1	62.7	7.9	13.7	100.4	350.2
1971	5/73.6	56.8	152.4	5/282.8	3/10.0	13.1	3/5.0	5.4	3/33.5	5/316.3
1972	NA	NA	3/10.0	NA	NA	NA	NA	NA	NA	NA
Imports of slaughter animals 4/										
1969	1.8	0	2.7	4.5	0	2.3	0	0	2.3	6.8
1970	13.9	0	6.5	20.4	0	2.3	0	0	2.3	22.7
1971	5/	0	12.9	3/12.9	0	0	0	0	0	3/12.9
1972	NA	0	NA	NA	0	0	0	0	0	NA
Total imports										
1969	117.0	67.5	38.9	223.4	11.2	31.6	5.0	2.0	49.8	273.2
1970	133.1	86.7	50.4	270.2	16.1	65.0	7.9	13.7	102.7	372.9
1971	73.6	56.8	165.3	295.7	3/10.0	13.1	3/5.0	5.4	33.5	3/329.2
1972	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA = not available. 1/ Includes intérzonal trade. 2/ Includes offals but excludes fats. 3/ Estimated. 4/ Carcass weight estimated on basis of liveweight trade data. 5/ Includes imports of slaughter animals.

than 5 percent were announced in April in Poland. Hungary increased prices for pork and poultry 2-3 percent in October, to partially defray mixed-feed-price rises triggered by world-market price increases for protein-feed components. Cattle received the principal price boost in Hungary. Effective January 1, 1973, average producer prices for slaughter cattle were increased by 22 percent, and milk by 32 percent.

Most East European countries did not allow any increase in *retail food prices* to help offset the producer price increases.. To balance the additional budget outlays, some tax increases had to be introduced. Bulgaria, East Germany, Hungary, and Romania are committed to maintain prices of basic foods at present levels until 1976. Czechoslovakia and Poland have a price freeze in effect until the end of 1973. However, recent statements of East European officials in Czechoslovakia, East Germany, Hungary, and Poland indicate that the costly subsidizing of retail food prices will increase no further. Hungarians already have disclosed that meat prices will be increased for the next 5-year plan period.

Yugoslavia and Hungary were exceptions to the maintainance of stable food prices in East European countries. Food prices in Yugoslavia were gradually reset at higher levels. In Hungary, vegetable and fruit prices, which are not controlled, increased 4 and 9 percent, respectively. Among fixed-priced commodities of agricultural origin, prices for dairy products, alcoholic beverages, and cigarettes were increased. The producer-price increase for milk wiped out the spread between wholesale and retail milk prices, making it unfeasible to maintain existing retail prices for dairy products.

Producer-price standarization in Bulgaria and East Germany became necessary to facilitate cooperation among the different types of farms. In Bulgaria in June, a decree on "The Uniform Introduction of the Economic Mechanism in the Rural Economy" empowered the management of agro-industrial complexes to play a leading role in coordinating farm operations, furthering cooperation among farms, planning, and developing wage and price norms.

In East Germany, both interfarm cooperation and cooperation between farms and industry accelerated. One of the most significant manifestations of the rural specialization process is the growing number of agro-chemical centers, which have complete responsibility for purchasing, storing, distributing, and applying fertilizers and other chemicals according to soil test results. Farms cooperating with other farms or with industries in joint ventures maintain their identities, and profits are distributed among the contributing farms according to their inputs of investment and labor. Interfarm cooperation is also in process in Czechoslovakia, but it is not as widespread as in East Germany and Bulgaria.

Bulgaria, Czechoslovakia, and East Germany introduced *new model statutes for collective farms* last year, to answer a need for guidelines on forming and operating different types of partnerships. The statutes define employee rights and duties in the new entities, state the rules for profit distribution, and clarify many legal aspects.

In Czechoslovakia, approximately 100,000 hectares of the remnants of private farming in remote mountainous regions of Slovakia were collectivized.

Machine stations were reorganized in Romania, the only East European country where these organizations had been maintained as independent units. These stations were combined into trusts, and the trust managers will be authorized to exert influence in all aspects of land cultivation.

Changes in *cropping structure or methods* were minor. Hungary intends to increase the sugarbeet and tobacco areas. Romania plans to boost the acreage of all industrial crops and of orchards. Hungary provides a subsidy of 70 percent for purchases of machinery used for the cultivation of sugarbeets and tobacco. Hungary is going to expand the so-called corn production system (CPS), a joint venture with U.S. companies which supply the machinery and production know-how to one Hungarian state farm, and share in the profits. In 1972, 60,000 hectares of corn were grown under the CPS system. The crop yielded 51-52 quintals per hectare, 10 quintals above the national average. The Hungarian Government approved $5.8 million for purchasing additional machinery from the U.S. companies to double the area under CPS in 1973.

Poland revamped its *rural administration* as of January 1, 1973, transforming 4,313 village units into 2,381 "gminy." Each "gmina," a unit roughly comparable in size and administrative functions to a U.S. county, will be headed by an appointee of the central government, replacing the local village leaders. The office of the gmina will be staffed with agricultural specialists, and will be given authority to influence planning, cooperation of private farmers with the socialized sector, and all facets of farm production. The gminy can even take over land neglected or not used efficiently by its owners. In Czechoslovakia, the agricultural associations, arms of the Ministry of Agriculture, were replaced in July 1972 with regional and district organizations. Despite this decentralization, there is now more administrative control of farms than in the past.

Several countries introduced *tax reforms* to remove tax discrimination. Assessments now are based on land value, gross income, and net personal income. In Hungary, the new land tax is expected to yield 15 percent more, and the income tax an additional 27

percent more revenue from farmers. In Poland, the elimination of the progressive land tax, which penalized the larger private farms, is designed to prevent further land fragmentation.

Record U.S. Agricultural Exports to Region

With record amounts of U.S. grain being delivered to East European destinations in 1973, the total value of U.S. agricultural exports to the region will continue its strong upward trend. In 1972, direct U.S. agricultural shipments were valued at about $284 million. Transshipments through Hamburg and Canadian ports and interzonal trade between East Germany and West Germany play an integral part in U.S. exports to Eastern Europe. For example, transshipments in 1971, the latest year for which data are available, totaled $22 million, compared with 1971 direct shipments of $248 million (table 18).

Poland and Yugoslavia were our leading East European customers in 1972. Romania, whose imports soared from less than $1 million in 1963 to $45 million in 1972, was the region's third-largest market for U.S. farm products. In 1972, Romanian purchases of U.S. wheat dropped sharply to a more "normal" low level. Hides and skins rose by a remarkable $15.5 million and feed grains grew from nil to $9.6 million. For the first time, Romania also bought sizable quantities of soybean meal.

For all of Eastern Europe, hides and skins (mainly reflecting sharply higher prices) and feed grains were the fastest growing commodity groups (table 19).

U.S. imports from the region in 1972 increased one-fifth to a value of $111 million. Canned hams and pork products valued at $72 million continued to lead other imports. Poland, with 30,000 tons, and Yugoslavia, with 7,000 tons, were the region's leading suppliers of canned pork (table 20).

With respect to Eastern Europe's *total agricultural trade* in 1973, total imports are expected to slow down, but imports of U.S. commodities should increase to a new record. Since 1970, grain has vied with cotton as the region's leading import commodity. Grain imports, valued at about $700 million in 1971 and big again in 1972, could taper off in 1973 to once again trail cotton. Cotton imports have run about $500 million per year. Eastern Europe took only about 4 percent of its cotton imports from the United States in 1972, with Romania purchasing 14,000 tons and Poland, 11,000 tons. A U.S. cotton delegation visit to nearly all the East European countries was an attempt to gain a larger share of the 640,000-ton market. Two-thirds of the East European cotton was purchased from the USSR; the remainder from the Middle East (largely the United Arab Republic) and Pakistan. The opportunities for balancing trade bilaterally without expending hard currency make these sources especially attractive to East European customers. Eastern Europe also imported large quantities of oilseed meal, wool, fresh and frozen meat, coffee, sugar, and fresh fruit.

Meat and livestock valued at $800 million in 1971 continued as the region's leading export commodities. Fresh and processed meat accounted for 70 percent of the value, but livestock exports—largely cattle—continued their upward trend. Other large exports were tobacco and wine.

Eastern Europe continued to be a net importer of agricultural products (table 21), but Yugoslavia made a dramatic turnabout by nearly balancing its agricultural trade in 1972. In 1971, Yugoslavia, facing an agricultural trade deficit of more than $100 million, devalued its currency twice and raised tariffs on key agricultural imports. Moreover, agricultural exports rose rapidly while imports were held in check.

In 1972, Eastern Europe continued to move farther from a policy of autarchy. Romania became a member of the World Bank and International Monetary Fund, and made overtures for closer ties with the EC. Cuba became a member of the Council for Mutual Economic Assistance, which includes the USSR, Mongolia, and all East European countries except Yugoslavia, and Yugoslavia was drawn closer to this trade organization. Moreover, Yugoslavia and Hungary signed a trade protocol permitting both countries foreign trade clearing accounts to be in U.S. dollars. In February 1973, a trade mission, including the Yugoslav Vice Premier for Economic Affairs, began talks with U.S. officials to increase U.S.-Yugoslav trade. East Germany joined the Economic Commission for Europe as it continued its detente with the West.

Yugoslavia lowered customs rates on key agricultural commodities as supplies fell to low levels and prices for these commodities rose at inflationary rates. Butter, soybean oil, sunflowerseed oil, sugar, fish meal, and oilseed meal were added to cotton, grains, breeding stock, and milk on the list of commodities for which customs duties were abolished. Morever, a 6-percent import surtax which had been placed on many of these items in 1970 was reduced to 2 percent for some items. Nevertheless, many of these basic items are on a commodity contingent list, meaning that the amount imported must still fall within government-approved import quotas.

Outlook for 1973

East European countries view 1973 with a wide range of ambitions and expectations. Hungary, Poland, and Czechoslovakia, apparently not believing themselves in position for another banner year, have scaled down planned increases in gross agricultural production to within the range of 1-3 percent over 1972 results. East Germany plans a 5-percent upturn. Bulgaria, after rapid growth in recent years, is planning a further expansion of 7 percent,

Table 18--United States: Agricultural trade with Eastern Europe, 1970-72

	U.S. 1970 exports			U.S. 1971 exports			U.S. 1972 exports			U.S. imports		
	Direct	Trans-shipments	Total	Direct	Trans-shipments	Total	Direct	Trans-shipments	Total	1970	1971	1972
	Million dollars											
Czechoslovakia	9.3	12.1	21.4	27.8	6.5	34.3	39.4	NA	NA	2.5	1.9	1.1
East Germany	12.2	13.9	26.1	19.4	7.0	26.4	11.6	NA	NA	0	0.2	0.2
Poland	50.4	0.2	50.6	62.3	0.9	63.2	79.9	NA	NA	52.5	49.6	64.6
Northern countries	71.9	26.2	98.1	109.5	14.4	123.9	130.9	NA	NA	55.0	51.7	65.9
Bulgaria	5.4	0	5.4	1.1	0	1.1	1.6	NA	NA	1.7	1.8	2.3
Hungary	20.2	0	20.2	18.9	0	18.9	10.5	NA	NA	3.3	4.5	5.7
Romania	27.8	9.9	37.7	37.0	1.6	33.6	44.8	NA	NA	1.1	1.7	5.3
Yugoslavia	42.3	2.0	44.3	86.2	6.2	92.4	95.7	NA	NA	26.6	31.1	32.2
Southern countries	95.7	11.9	107.6	138.2	7.8	146.0	152.6	NA	NA	32.7	39.1	45.5
Total	167.6	38.1	205.7	247.7	22.2	269.9	283.5	NA	NA	87.7	90.8	111.4

NA = not available.

Table 19--United States: Agricultural trade with Eastern Europe, by commodity, 1969-72

Commodity	1969	1970	1971	1972
	Million dollars			
Exports				
Soybean meal 1/	34.0	63.0	49.4	2/53.5
Soybeans 3/	14.2	20.2	18.4	2/9.9
Soybean oil	0	15.9	27.7	28.0
Soybean products	48.2	99.1	95.5	91.4
Feed grains 3/	41.3	44.4	82.0	2/60.2
Wheat 3/	0	9.8	43.1	2/31.5
Grains	41.3	54.2	125.1	91.7
Cotton	10.3	12.5	8.4	15.1
Hides and skins	12.8	14.6	19.0	50.8
Tobacco	2.0	1.1	2.1	3.7
Inedible tallow	0.7	4.5	4.4	1.5
Donations relief or charity	3.6	2.0	0.9	0.1
Other	4.3	17.7	14.5	29.2
Total	123.2	205.7	269.9	283.5
Imports				
Hams and shoulders, canned	47.0	52.2	49.9	66.6
Other canned pork	8.6	8.4	7.2	5.5
Canned pork	55.6	60.6	57.1	72.1
Tobacco	11.2	11.6	15.8	11.1
Spices 4/	2.2	2.7	1.3	1.0
Hops	2.6	2.1	1.5	3.7
Cheese	1.7	1.5	1.7	2.3
Feathers and downs	1.5	1.1	2.0	2.7
Other	8.7	8.1	9.3	18.5
Total	83.5	87.7	90.8	111.4

NA = not available.
1/ Includes interzonal trade unless otherwise indicated.
2/ Direct shipments only.
3/ Includes transshipments unless otherwise indicated.
4/ Largely paprika, poppyseed, sage, and caraway.

Table 20--Eastern Europe: Exports of canned pork products to the United States, 1966-72

Item	Czecho-slovakia	East Germany	Poland	Northern countries	Bulgaria	Hungary	Romania	Yugo-slavia	Southern countries	Eastern Europe
					1,000 tons					
Hams and shoulders, canned										
1966	0.8	0	17.6	18.4	0	0	0	3.0	3.0	21.4
1967	1.1	0	19.9	21.0	0	0	0	4.9	4.9	25.9
1968	1.1	0	18.5	19.6	0	0	0	5.2	5.2	24.8
1969	0.9	0	19.4	20.3	0	0.1	0	5.0	5.1	25.4
1970	1.1	0	20.8	21.9	0	1.6	0	4.7	6.3	28.2
1971	0.8	1/	20.9	21.7	0.2	2.1	0.2	4.8	7.3	29.0
1972	0.3	1/	27.0	27.3	0.3	2.8	1.8	6.8	11.7	39.0
Pork, canned										
1966	0.2	0	5.8	6.0	0	0	0	1.0	1.0	7.0
1967	0.1	0	5.8	5.9	0	0	0	0.6	0.6	6.5
1968	0.1	0	6.2	6.3	0	0	0	0.9	0.9	7.2
1969	0.2	0	4.8	5.0	0	0	0	0.4	0.4	5.4
1970	4.3	0	4.3	8.6	0	0	0	0.8	0.8	9.4
1971	1/	0	4.0	4.0	0	0	1/	0.4	0.4	4.4
1972	0	0	3.2	3.2	0	0	0.2	1/	0.2	3.4

1/ Less than one-half ton.

Table 21--Eastern Europe: Agricultural trade, 1969-71

Countries	1969	1970	1971
		Million dollars	
Exports			
Czechoslovakia	286	282	303
East Germany	192	167	1/170
Poland	465	514	491
Northern countries	943	963	964
Bulgaria	794	853	933
Hungary	530	591	619
Romania	527	497	576
Yugoslavia	305	370	365
Southern countries	2,156	2,311	2,493
Total	3,099	3,274	3,457
Imports			
Czechoslovakia	848	899	942
East Germany	1,184	1,396	1,334
Poland	648	592	742
Northern countries	2,680	2,887	3,018
Bulgaria	244	251	266
Hungary	399	503	541
Romania	225	305	336
Yugoslavia	309	359	491
Southern countries	1,177	1,418	1,634
Total	3,857	4,305	4,652

1/ Estimated.

and Romania's plan for a 9-percent increase is even more ambitious.

Continued strides in seed improvement, fertilizer applications, and irrigation are the principal media for raising crop production.

Wheat production exemplifies production increases due to *seed improvement.* Most East European countries introduced the high yielding *Bezostaya* and *Mironovskaya* winter wheat varieties in the late 1960's, boosting yields. As a second stage, they are now bringing in *Kavkaz* and *Aurora* to further boost output. In East Germany, for example, over half of the fall-sown wheat in 1972/73 is of these varieties.

Hungary is an outstanding example of the region's growing use of *mineral fertilizers,* having increased fertilizer applications last year by 11 percent and planning a 10-percent growth in fertilizer availability for 1973. Similarly, fertilizer use in Poland rose by 12 percent in 1972, and 1973 plans call for an additional 11 percent. Throughout Eastern Europe, jumps in mineral fertilizer applications are occurring. Moreover, proportions of nitrogen, phosphorus, and potassium nutrients are being improved. However, individual countries continue to vary widely in fertilizer use and technology. In 1971, the Romanians at one extreme used 67 kilograms of nutrients per hectare of arable land, while the East Germans used 330 kilograms per hectare.

Romania is currently making rapid strides in *irrigation* development. According to current plans, Romania will prepare an additional 272,000 hectares for irrigation in 1973, following 230,000 hectares prepared for irrigation in 1971. Bulgaria, which has 16 percent of its agricultural land under irrigation, plans to add 36,000 hectares of irrigated land in 1973.

Increases in inputs to the livestock sectors of these countries are undergoing parallel growth.

In the trade picture, at least five of the East European countries chose to officially revalue their currencies in response to the February 1973 devaluation of the dollar, 3 of them as shown below:

Country	Currency basic unit	Currency units per dollar	
		Old rate	New rate
Bulgaria	leva	1.07	.97
Romania	lei	5.53	4.97
Poland	zloty	22.08	19.92

Hungary and East Germany revalued their currencies 10 percent in relation to the dollar. Yugoslavia chose to devalue the dinar with the dollar, keeping its official rate at 17 dinars per dollar. These charges overall will probably favorably affect U.S. export opportunities in Eastern Europe, but other terms of trade often override exchange rates in Eastern Europe's purchasing decisions.

Agricultural Output Down

The performance of agriculture, the major Chinese economic sector, fell short of some goals in 1972 and total output declined. Optimism generated by the overall successes of 1970 and 1971, which began the Fourth Five-Year Plan, waned as the worst weather since 1968 reduced output of most major crops.

Whether the drop in agricultural output was sufficient to blunt agriculture's upward trend cannot yet be determined, but the momentum has slowed and agriculture appears to have reached a new, but higher, plateau of production. Although much larger amounts of inputs (chemical fertilizer, water conservancy, agricultural chemicals, improved seeds, and other) were applied in 1971, and still larger amounts in 1972, total production has not increased commensurate with inputs. In fact, in 1972 few of China's principal food, fiber, and commercial crops managed to equal or even approach 1970's performance. Thus, in the face of unfavorable weather, 2 years of intensified efforts to increase total agricultural production did not maintain the level attained in 1970 when weather conditions were favorable. However, the 1971 and 1972 outputs were notable achievements in view of the adverse weather experienced.

The full impact of the decline in last year's harvest may not be known for some time. An early indication was the doubling of grain import purchases (mostly wheat) to almost 6 million tons in 1972/73; purchases may remain high for the next year or two.

Following some apparent official uncertainty last fall about the estimate of 1972 grain production, the offical year-end report (*People's Daily,* Peking, December 31, 1972) stated 240 million tons. This amount, believed to be in gross terms, was 2.4 percent less than the 246 million tons claimed for 1971. These two figures were the first official releases since China's self-imposed blackout of statistics in 1959. There was no breakdown by individual grains, and the announcement was made before countrywide reports could have been analyzed. Therefore, we do not know what is included in the total grain figure. The estimate presumably included potatoes at one-fourth raw weight, as previous estimates did. Some northern provinces included soybeans in their grain statistics in the 1950's and 1960's, but there is no indication as to whether or not this practice has been continued.

Production of other crops and of livestock was mixed in 1972. Such important industrial crops as cotton, soybeans, peanuts, and sesame declined, while hemp, tea, sugar crops, tobacco, and fruits registered increases. Silk cocoons and livestock output increased, but at a much slower rate than in 1971.

The economic effects of agriculture's slowdown probably will be more evident in the months ahead as other sectors adjust, especially the light industry sector, which depends on agriculture as its major source of raw materials and as its main market. Light industry ranks next in priority to agriculture in the program of economic development, both in its role in the rural reconstruction program and in the processing of agricultural products.

While a full accounting of the country's economic development is not possible, there are indications of a continued gradual slowing in 1972 from the relatively high rate of increase in 1970 despite growth in foreign trade and some other sectors of the economy, notably light industry.

During the past 2 years the government has made a concerted effort to reverse the deficit trade balance of 1970. According to preliminary information, foreign trade continued to grow rapidly in 1972, with exports (including a minor amount which started going to the United States in 1971 for the first time in over 2 decades) showing a much greater increase than imports. Agricultural products accounted for much of the growth in exports.

Grain Crop Smaller

We estimate China's total grain production[9] in 1972 at approximately 210 million tons, a small decline from estimated production of the past 2 years. The decline occurred in spite of increased inputs. Official claims and other available information indicate that only one major grain crop, wheat, increased in 1972. With most wheat matured at the onset in late June of the extended dry period, the crop suffered only marginally in the northern fringes of the winter wheat area. All other major grain crops declined in varying amounts, mainly because of drought conditions. Crops grown north of the Yangtze River in areas of lower precipitation were particularly affected.

The dominant impact of weather on China's 1972 grain production began with cropping operations in the fall of 1971, when prolonged rainfall in North China prevented the fulfillment of the winter wheat sowing plan. This failure prompted increased efforts to expand the planting of other winter grains in South China, in turn reducing acreage of early rice.

Though North China's weather turned from rain in

[9]Composed of rice, wheat, miscellaneous grains (corn, barley, sorghum, millet, oats, buckwheat and other minor grains) and potatoes (reduced to one-fourth of raw weight as grain equivalent).

the fall to drought by early summer, it had little effect on the harvest of winter wheat. But drought affected spring wheat somewhat, and disrupted and reduced planting of coarse grains (corn, sorghum, millet, oats, and buckwheat) and subsequently delayed their growing season in the northern areas. The combined production of these crops normally constitutes about one-fourth of the total grain output. Better growing conditions later in the year prolonged the maturation period for coarse grains, thus delaying the harvest. This in turn caused some delay in the autumn sowing of winter wheat for 1973 harvest.

Multiple cropping rotations in North China depend on timely farm operations in order to provide each separate crop and the intertilled crops the optimum time for maturation. After this timetable was upset in many areas in North and Central China, mainly because of the weather, catch crops—faster maturing and more drought resistant than traditional crops—were planted. In some areas of South-central China, sweet potatoes were planted in place of intermediate and late rice because of drought conditions.

The expansion of industrial crops at the expense of grain acreage also probably had a negative effect on grain production in 1972. Although there is no indication of the extent of other shifts within the grain area, it is likely that a net area reduction occurred for grain from both weather and shifts in acreage, and further, that both factors had a greater adverse effect on those miscellaneous summer grains produced in North China than on other grain crops.

It is now apparent that the extensive purchases of wheat and other grain in the summer and fall of 1972 were prompted more by the expected shortfall in miscellaneous grains and the Canadian dock strike than by the possible effect of the weather on the winter wheat crop. Heavy rains that fell in the northern coastal areas in the fall further delayed the harvest of miscellaneous grains, but likely did not otherwise reduce these crops.

Rice and potatoes are the other two major food crops. Production of rice, which supplies almost half of total grains, probably declined somewhat. On top of smaller acreage, problems included effect of cold, dry weather at seeding time on early rice, followed by insect damage and disease; the effect of drought on some areas of the intermediate and late rice crops in South-central China; and damage to the late rice crop by waterlogging and typhoons in the southeastern coastal areas. The production of tubers probably was down slightly. Irish potato output probably declined in the north due to dry conditions, and sweet potatoes north of the Yangtze River may have been affected by dry weather. On the other hand, some increase in the acreage of sweet potatoes south of the Yangtze River probably occurred as a substitute for rice in drier areas.

The major shortages of grain in China, therefore, appear to be confined primarily to the traditional deficit areas—the diversified grain areas of northern China including the provinces of Shantung, Hopeh, Shansi, Shensi, Kansu, Inner Mongolian Antonomous Regions and, to a lesser extent, the former area of Manchuria. Essentially all of China's imports of grain in the past have entered through the northern ports. That pattern is continuing in 1972/73, but the volume has been increased substantially. Imports of wheat in 1971/72 amounting to nearly 3 million tons followed good harvests in 1970 and 1971. In 1972/73, the estimated amount will about double that for wheat, and imports of total grains—including corn—are expected to be somewhat larger.

Other Crop Results Mixed

The year-end report on crops by the New China News Agency indicated 1972 increases for hemp, tea, sugar-bearing crops, tobacco, rapeseed, and fruit, and declines for cotton, peanuts, and sesameseed. No mention was made of soybeans, but other sources showed them down. Although the planted acreage of many of these crops was increased, in line with the policy of greater diversification favoring commercial crops, the setbacks resulted from both smaller harvested area and lower yields.

Production of cotton, peanuts, sesame, and soybeans—China's major industrial crops—declined in 1972. These are grown in the general area of agricultural diversification north of the Yangtze River, most affected by the 1972 drought.

Estimated 1972 cotton production of 6.5 million bales (1.42 million tons) was 15 percent below 1971's level, marking a second year of decline for China's foremost industrial crop. The setback was due primarily to the effect of drought in the northern and western sections of the North China Plain, where supplemental irrigation generally is necessary. The non-irrigated area also was affected, reducing harvested area. Available information indicated that planted acreage was no larger than in 1971. Much lower yields in the northern area offset claims of increased yields by some provinces in the South, reducing the average yield. This was the second year in succession in which cotton production declined.

Since production of cotton has not increased as planned in recent years, increased imports of cotton along with increased production of man-made fibers has been necessary to meet domestic and export textile needs. Purchases of cotton for import have more than doubled to record levels during 1972/73.

Total oilseed production was somewhat below the 1971 level. The drop in oilseed output from peanuts, sesameseed, and cottonseed was caused mainly by drought. Production of rapeseed rose substantially

due to increased area and good growing conditions in southern China.

Soybeans, the second ranked industrial crop, fared poorly in 1972. Planted acreage never regained the pre-Leap Forward level and was expanded only slightly last year, while harvested acreage may have declined. The crop was dealt a double blow. In the North China Plain and Central China, soybeans suffered from drought, while in Northeast China (Manchuria), comprising over a third of the total crop, soybeans were affected at harvesttime by unusually heavy and continuous rain. Crop losses must have been larger than usual, and high moisture content and water damage likely reduced bean quality.

Estimated PRC harvests of soybeans, peanuts, cottonseed, and rapeseed in recent years were as follows:

Year	Soybeans	Peanuts	Rapeseed	Cottonseed
	Mil. tons	*Mil. tons*	*Mil. tons*	*Mil. tons*
1967 . .	6.95	2.30	0.80	3.60
1968 . .	6.50	2.15	0.80	3.40
1969 . .	6.20	2.35	0.70	3.25
1970 . .	6.90	2.65	0.80	3.40
1971 . .	6.70	2.58	0.83	3.20
1972 . .	6.30	2.40	1.00	2.83

Other important industrial crops fared better. Bast fibers (hemp), tobacco, sugar crops, tea, and fruits reportedly gained in 1972, since the bulk of these crops was grown in areas less affected by drought, and acreage increased for all of them. The largest relative increases in production were for sugarcane, tea, hemp, and tobacco. Little is known about sugarbeets, but drought occurred in some producing areas. Special emphasis has been directed toward increasing sugar crops. We believe that acreage of sugarbeets has risen in recent years, but the magnitude has not matched that of the increase in sugarcane. Domestic sugar output evidently has not grown fast enough to satisfy demand. During the past few years, China's net imports of sugar have been increasing.

Livestock Gains Modest

Growth in livestock production in 1971 continued into the first half of 1972, but growth appears to have slowed or possibly declined during the second half. No year-end evaluation of livestock conditions was made in China's annual economic reports, and since then fewer reports than usual have been noted on a provincial basis. This contrasts with unusually numerous provincial reports that surfaced subsequent to June 30, 1972.

Reports that have come to light since the end of 1972 have dealt primarily with small units, generally at the commune, brigade, and team level. Generalizations are difficult, if not impossible, to make from such information. Since 1957—when China changed the inventory date for livestock from June 30 to December 31—no firm, reliable figures for the various categories of China's livestock have been reported on a national basis, and few provincial figures have surfaced. The negative effects of rapid collectivization and communalization, the Great Leap Forward, the crisis years of 1959-61, and the Cultural Revolution (following a few year's respite during 1962-66, when significant gains in livestock development occurred) have deterred the fulfillment of national goals.

In 1972, isolated reports claimed that some of the smaller units had attained national guidelines for livestock as set forth in the 1956 National Program for Agricultural Development. Among other things, the plan called for the production of 1½-2 pigs per household in the countryside by 1962 and an average of 2½-3 pigs per household by 1967. Sufficient pens and shelters were to be constructed to accommodate all livestock by 1967. These goals have not been met by a wide margin on a national basis. Greater incentives in the form of additional feed to producers, purchases of meat at reduced prices by producers, and extra income from the sale to state agencies of hog manure have been factors stimulating peasants to raise more hogs. However, data on exports of hogs and pork and on the availability of pork for consumption do not indicate as rapid an increase in hog production as officially claimed.

Weather conditions probably had an adverse effect on livestock. The problem was primarily drought, which occurred mainly during the second half of the year in North, Northeast, Northwest, and Southwest China. Some areas claimed the driest weather in decades. Breeding stock and the young of draft animals, except water buffalo, and sheep and goats, all produced in the pastureland areas of China's hinterland, were most affected. Inner Mongolia and Tsinghai earlier had reported severe snowstorms and windstorms during the winter of 1971/72. The drought there was more severe in the pastoral areas than in the cropping areas. Effects of the 1972 weather may become more apparent in the spring, especially at calving and lambing time when shortages of feed would be more critical.

Livestock raised in the cropping areas—buffaloes, hogs, and poultry—probably were less affected by weather, but may suffer from reduced feed availabilities, particularly hogs, before the first 1973 harvests of feed and forage crops.

Major emphasis on livestock production, particularly in the first half of 1972, meant continuing attempts at improving pastureland with such measures as expanding irrigation facilities, rodent control, seeding of improved grasses, and managing grazing land more efficiently to yield more

fodder for winter feed. However, these efforts probably were not as successful as anticipated due to drought. In Inner Mongolia, Kansu, Tsinghai, and Sinkiang, much effort was directed to the construction of winter shelters for livestock. Countrywide programs for all livestock included continued herd improvement, efficiency in breeding programs, control of disease, developments in crossbreeding, and development of stronger and larger oxen, the major source of draft power in northern areas. Despite efforts to mechanize, the government has been careful to direct peasants to continue to increase the production of draft animals of all kinds, i.e., buffaloes, cattle, horses, mules, and donkeys.

Changes in Agricultural Inputs and Policies

Policy changes relating to agriculture and the economy in 1972 conformed rather closely to the pattern of normalcy and regular palnning that emerged after the turbulent Cultural Revolution. Official exhortations for a successful conculsion of the Third Five-Year Plan (1966-70) which, in turn, would provide a strong base for the current Plan (1971-75), called for sharp rates of increase in agricultural and industrial production and accelerating achievements in technology. Some adjustments were made during the waning months of 1972 to meet problems caused by the shortfalls in agricultural output. But basically, policies conformed more to the usual functions of determining current needs and activating the necessary administrative machinery at the commune, brigade, and production-team levels to meet current and anticipated problems of government collections and disbursement of foods and other farm commodities.

The Government maintained strong support for factors which affect peasant status in the communes, reiterating the importance of maintaining autonomy of production teams; supporting peasants' rights to private plots, so long as they do not interfere with peasants' work in the collective sector; and encouraging peasants to participate in private sideline production and collective sideline production, but not at the expense of collective farm output. Most livestock production, particularly hogs and poultry, still comes from the private sector.

Economic policies continued to refer to "agriculture as the foundation and industry as the leading sector," with industry continuing to supply a steady and increasing flow of fertilizer, machinery, and equipment to the agricultural sector. All farm production units did not benefit equally, however, since local farming units (communes, brigades, and production teams) were required to finance their own improvement projects and to pay for the various inputs furnished by state and locally operated factories. However, some financial benefits accrued to farm production units from the continuing policy (established in late 1971) of reduced prices for chemical fertilizer, machinery, farm tools, and draft animals, and increased prices paid by state purchasing agencies for certain farm commodities, especially industrial crops.

These economic policies were designed to not only diversify production, but also to encourage farmers to increase production, thereby enabling the government to increase the level of exports under the policy of self-sufficiency and favorably balanced trade. Agriculture still provides the largest potential of any economic sector for increasing exports. Despite disappointing results from this program because of reduced production of some industrial crops, the program appeared partly successful in 1972. Early returns from major trading partners indicate that by mid-year, the level of China's exports had increased about 10 percent, essentially all from the agricultural sector. Results in the last half of the year probably were less favorable.

On the other hand, smaller production of essential food crops last year, primarily grains—attributable to the shifting of acreage to increase output of industrial crops as well as to the harmful effects of weather—may have repercussions at planting time in 1973. Then teams and brigades must decide on the amount of commercial crops they can produce in light of the need for staple food crops. If food shortages are becoming serious, sowing plans for industrial crops could be scaled down even though these crops bring higher prices. Self-sufficiency at the farm and production team levels, a constant national aim, also will be a strong factor to consider in consolidating sowing plans for the new crop year. Many signs point to an increase in the acreage of winter grains.

Last year was the logical time from the PRC viewpoint to introduce diversified agricultural production on a larger-than-usual scale. For years 1970 and 1971 the country had been officially declared self-sufficient in grains, despite continued imports. The level of inputs appeared sufficient to provide an acceptable output of basic crops under average weather conditions. Therefore, continued increases in inputs applied to grains were expected to raise production sufficiently to meet the grain self-sufficiency requirement even on reduced acreages, thus providing for an expansion of industrial crop acreage. Greater diversification now apears to be the thrust of agricultural production for the foreseeable future. Major emphasis was directed toward increasing production of oilseeds, sugar crops, tea, silk cocoons, cotton, bast fibers, tobacco, and fruits, which are entering world markets in increased volumes.

Although mechanization has been an agenda item each year at almost all provincial conferences on crop production, there is evidence that the 1970's may

finally be the decade devoted to significant mechnization of agriculture. While no specific target dates were announced in the various provincial conferences in late 1971 and early 1972, the original target of 20 to 25 years set by Mao Tse-tung in 1956 has not been changed. Now that much of the production capacity for farm machine building and farm tool production has been diversified under the rural reconstruction programs since 1968, the basic producing units are in a stronger position to accelerate output and probably could speed production if capital and raw materials were available.

Progress in water conservancy in the winter and spring of 1971/72 was the greatest since the Cultural Revolution, and may have topped all previous years. It is now claimed that the Huai, Pearl, and Haiho Rivers, which affect large cropping areas in China, are virtually under the control of irrigation and flood control projects, and that much has been accomplished to prevent flooding along the Yellow River. The Yangtze River, surveyed in 1956 for its irrigation potential and flood control needs, is the next important river to be tamed.

Data on the production of chemical fertilizer have not been published, but it was officially claimed that 1972 output was up about 18 percent. The rapid increase in output is in line with plans to increase total domestic production from the 14 million tons claimed by Premier Chou En-lai in 1970 to 25 million tons in 1975. Even if the goal is accomplished, it will not meet requirements, estimated by various analysts to be between 30 and 50 million tons. Of particular significance is the increase in factory capacity and output of phosphoric fertilizers. Since production claims have not been described in terms of nutrient values, it is not possible to evaluate the effectiveness of China's fertilizer production in terms of nutrient content. Various reports suggest that aggregate production includes ground phosphate rock, ammonia water, and more highly refined fertilizers including urea. It was claimed that small plants produced half of the country's nitrogenous fertilizer in 1972. A large proportion of chemical fertilizer used in China is imported, primarily from Western Europe and Japan. Imports have held fairly steady in recent years, but may decline in 1973 unless the PRC is able to find alternate sources of supply to replace the volume formerly supplied by the Nitrex consortium, comprising a group of European chemical manufacturers. On the other hand, with the world chemical fertilizer situation shifting to a seller's market rather than the buyer's market of the past few years, significant changes may occur in China's imports of chemical fertilizers. The increase in domestic production may be a major factor in decisions made.

Recent information on PRC seed development indicates that a long-range program of seed selection and breeding is beginning to pay dividends in the form of higher yields. The program, covering more than a decade, has resulted in new strains of essentially all the important grains and most of the oilseeds and other industrial crops. New rice strains developed locally have been a major factor in the extension of double rice-cropping, increased yields, and a broader area—even farther north—of planting and rotation with dryland crops. A winter wheat to be grown on the Tibetan Plateau has been developed with higher yields than the traditional spring wheat and barley. Both drought-and cold-resistant spring wheat varieties have made possible a larger planted area in northern China. The new varieties of rapeseed have increased the output of that crop. Other crops whose yields have been increased through seed development include corn, sorghum, peanuts, soybeans, sweet potatoes, sugarcane and cotton.

U.S.-PRC Agricultural Trade Increased

U.S. agricultural trade with the PRC, renewed after 2 decades with small imports through third parties in late 1971, included major U.S. exports in 1972 which put the position for this trade much in the U.S.'s favor. Shipments to the PRC of grain and vegetable oil worth more than $58 million were considerably larger than imports from China valued at about $16.5 million. The U.S. exports apparently were needed to supplement the reduced PRC production of several basic farm commodities. A PRC purchase of over 400,000 tons of U.S. wheat through an international firm started this indirect buying in September, followed a month later by the purchase of 300,000 tons of corn by similar arrangements, and then by the buying of some soybean oil in November. Additional purchasing of U.S. wheat and corn came later. The U.S. imports from the PRC consisted mainly of hog bristles, silk, spices, and feathers and down.

The PRC continued to be a net agricultural exporter in 1972. However, the net export margin for agricultural commodities probably was not as large as in recent years. A big cause of this change was the increase in net grain imports, with more wheat and corn imported and less rice exported. On a fiscal year basis, we estimate 1972/73 PRC imports of wheat will double to about 6 million tons. Canada again is the main source, but the U.S. has shipped about 600,000 tons (table 22). Rice exports in 1972 are believed to have approximated 600,000 tons, the lowest level in 7 years (table 23). Another import that will be substantially larger in 1972/73 is cotton, approaching a record 1.6 million bales, more than double the 1971/72 amount (table 24) including an estimated 500,000 bales of U.S. cotton, the first since the 1940's.

Among the other PRC agricultural exports,

Table 22--People's Republic of China: Imports of wheat and wheat flour 1/ by country of origin, average 1960/61-1964/65, annual 1965/66-1972/73

Year	Australia	Canada	Argentina	France	Other	Total
			Million tons			
1960/61-1964/65	2.00	1.44	0.36	0.33	0.29	4.42
1965/66	2.02	1.99	2.22	0.04	0.03	6.30
1966/67	2.17	2.46	0.32	0.07	0	5.02
1967/68	2.42	1.37	0	0.36	0	4.15
1968/69	1.18	2.10	0	0.26	0	3.54
1969/70	2.52	1.83	0	0.78	0	5.13
1970/71	1.31	2.35	0	0	0	3.66
1971/72	0	2.97	0	0	0	2.97
1972/73 2/	0.50	4.60	0	0	3/0.90	6.00

1/ Wheat flour in terms of grain equivalent.
2/ Preliminary, partly estimated and partly based on trade agreement, and purchases for delivery.
3/ Includes an estimated 600,000 tons from the U.S., of which 535,000 tons had been shipped by the end of 1972.

Compiled by the Grain and Feed Division, Foreign Agricultural Service, USDA, March 1973.

soybeans probably decreased in 1972. Bigger shipments to Western Europe boosted soybean exports in the previous year but the trend since 1965 has been downward (table 25). Partial data from receiving countries indicate that the PRC's 1972 exports of live animals and animal products, including fresh meat, probably increased. Exports of fresh meat had been slipping during the preceeding 3 years (table 26). Net imports of sugar rose again in 1972. We estimate that the PRC imported more than 600,000 tons of sugar while exporting a considerably smaller amount. PRC exports of oilseeds other than soybeans and vegetable oils are believed to have declined in 1972. Gains likely were realized for a number of other agricultural exports for which data are not available.

Outlook for 1973

Although specific goals have not been revealed, it is obvious that the PRC hopes that more inputs and better weather will cause a rebound in agricultural output in 1973. Following a January 16-28, 1973, national cotton conference, it appears that cotton production may receive the same major emphasis as grain beginning this year. Next in importance will come the attention to oilseeds. The livestock industry also will continue to get considerable emphasis.

In general, policies and programs related to agricultural production in 1973 include the expansion of capital construction in developing water conservancy and reclaiming dry and hillside land through terracing, increasing application of

Table 23--People's Republic of China: Exports of rice by major importing countries, 1966-72 1/

Country	1966	1967	1968	1969	1970	1971	1972 2/
				1,000 tons			
Cuba	130	130	130	3/130	3/130	3/130	3/130
Srilanka (Ceylon)	227	183	200	221	310	129	---
Pakistan	100	100	29	---	100	120	---
Hong Kong	116	86	105	87	93	111	110
Malaysia and Singapore	173	203	158	139	98	84	95
Japan	313	203	105	---	---	---	---
Other	157	245	159	149	154	171	265
Total 4/	1,216	1,150	886	726	935	745	600

1/ As reported by importing countries.
2/ Preliminary, based on incomplete data and partly estimated based on trade negotiations and available recipient country reports.
3/ Estimated on basis of previous negotiations.
4/ Excludes exports to North Vietnam.

Source: Food and Agriculture Organization of the United Nations (FAO): Study Group on Rice: OCP: RI 71/C.R.S./3, May 19, 1971, and FAO: Rice Trade Intelligence, Vol. 16, No. 6, December 10, 1972.

Table 24--People's Republic of China: Imports of lint cotton by country of origin, average 1959/60-1971/72 1/, annual 1964/65

Year	UAR	Pakistan	Syria	Sudan	East African Community 2/	Other	Total
				1,000 tons			
1959/60-1963/64	24.5	18.8	17.1	9.2	10.6	1.3	81.5
1964/65	23.0	25.4	43.5	15.1	38.4	25.3	170.7
1965/66	18.1	21.5	33.3	11.3	26.1	7.7	118.0
1966/67	19.8	30.0	20.9	13.6	17.9	7.1	109.3
1967/68	8.5	18.8	11.7	8.7	17.2	4.4	69.3
1968/69	6.6	19.8	13.9	14.9	6.8	1.0	63.0
1969/70	10.2	10.7	24.2	11.7	19.8	2.3	78.9
1970/71	15.5	11.1	15.9	33.1	24.4	5.4	105.4
1971/72 3/	17.0	18.3	15.0	37.4	20.0	46.6	154.3
1972/73 4/	7.8	31.6	15.2	36.4	9.4	5/237.7	338.1

1/ As reported by exporting countries. 2/ Includes Kenya, Uganda, and Tanzania. 3/ Preliminary. 4/ Based on sales for 1972/73 delivery, compiled by Cotton Division, FAS, USDA, February 1973. 5/ Includes about 110,000 tons from the U.S., 45,000 from Iran, 26,130 from Brazil, 32,660 from Turkey, and almost 21,000 from Mexico.

Source: Compiled by the International Cotton Advisory Committee.

Table 25--People's Republic of China: Exports of soybeans by major importing countries, 1965-71 1/

Importing country	1965	1966	1967	1968	1969	1970	1971 2/
				1,000 tons			
Japan	375.9	392.5	391.8	412.2	376.7	290.8	283.0
Hong Kong	2.0	11.9	14.1	16.4	15.7	15.6	17.4
Malaysia	11.8	11.9	12.4	13.3	13.5	14.7	NA
Singapore	11.8	10.0	12.5	11.1	13.7	12.2	13.7
Western Europe	169.2	135.0	105.0	100.0	69.0	36.0	93.7
Other	5.9	0	32.2	38.8	0	54.7	52.2
Total	576.6	561.3	569.0	564.0	488.6	424.0	460.0

1/ As reported by importing countries. 2/ Preliminary.

Source: FAO, Trade Yearbook, Vol. 25, 1971; USDA, Foreign Agricultural Service Circular, FFO/8-72, Oct. 1972; Importing country trade statistics, 1972.

Table 26--People's Republic of China: Exports of fresh meat by selected importing countries, 1965-71 1/

Importing country	1965	1966	1967	1968	1969	1970	1971 2/
				1,000 tons			
Hong Kong	20.2	28.0	26.3	37.2	35.6	39.4	38.3
Poland	18.1	20.3	24.1	35.1	16.5	9.0	11.8
Czechoslovakia	5.6	19.3	14.0	18.0	25.0	16.0	8.0
USSR	87.3	69.1	1.3	0	0	0	0
Other	8.4	32.9	43.3	23.4	39.7	33.3	34.0
Total	139.6	169.6	109.8	117.7	116.8	97.7	92.1

1/ As reported by importing countries.
2/ Preliminary.

Source: FAO, Supplementary Economic Statistics, April 1971; 1970 importing country trade statistics.

fertilizers (both organic and chemical), continued expansion of multiple cropping, utilization of improved seeds, and increased mechanization. Special attention is to be directed to equitable distribution of grain and other foods in rural areas. The grain ration in areas that produce primarily industrial crops is not to be lower than that in adjacent grain-producing areas. Commune and production brigade cadres now are not supposed to transfer or use production team workers. This apparently means that a guaranteed labor force at the production team level is a must in the agricultural campaign ahead. Finally, the renewed stress on late marriages and family planning may be a signal that a serious birth control campaign finally may be getting underway in rural areas in China.

Implementation of plans for 1973 so far includes an expansion of the winter wheat area in both North and South China, and probable increases in acreage of other winter crops (barley, beans, peas, rapeseed, and possibly green manure crops) in the Yangtze River area and South China. Timely and fairly heavy snowfall occurred in the major part of the winter wheat area in North China, providing protection from winter damage and later moisture to a large area of wheat in the northern fringes of the winter wheat area subject to inadequate moisture at planting time last fall. Water conservancy projects and other off-season activities, including the gathering of natural manures and compost in preparation for spring planting, reportedly are ahead of a year earlier. Increased supplies of farm implements, chemical fertilizer, and other agricultural chemicals also are available for spring farm work.

Although much of China's imports of agricultural products for 1973 already have been programmed, at least through the first half of the year, some imports of grain from Australia and Canada will be delivered in the second half of the year under present contracts. The PRC Government probably will not move again into the world wheat market until after a review of prospects for winter wheat and miscellaneous grains based on planting results and general growing conditions. Assuming average crop-season weather in 1973, it appears that imports of grain and cotton probably will continue at higher levels than during recent years. The level of 1972/73 imports, however, may not be repeated in 1973/74. Greater sensitivity of the government to domestic needs, plus the uncertainty of the world wheat market expected in the second half of 1973, will weigh heavily in determining the volume of these imports.

Imports of vegetable oils probably will remain at about the present increased levels, placing China in a net import position, and may continue until solution of the problem of oilseed production which has persisted since the drought years of 1959-61. Net imports of sugar likely will be at a lower level than in 1972 as domestic production continues to increase. Little change in other imports such as rubber, dates, hemp, wool, and animal fats is expected in 1973.

Exports of rice, livestock, and livestock products are expected to increase in 1973, while those for soybeans probably will decline. Exports of a large array of agricultural base products from light industry will continue to increase, but probably at a slower rate in 1973. Such items as fruits, nuts, vegetables, and crude vegetable and animal materials are among these products. Attempts will be made to maintain as high a level of agricultural exports as possible in order to gain foreign exhange to pay for the increased 1972/73 imports of grains and cotton. In addition, modifications may be necessary in future imports of industrial goods and machinery, and some developments in credit arrangements may occur.

Net imports of U.S. agricultural commodities in 1973 probably will be well above 1972, including the large amount of U.S. cotton.

Table 27--Eastern Europe and Soviet Union: Area of selected crops, annual 1968-72 1/

Commodity and year	Bulgaria	Czecho-slovakia	East Germany	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe	USSR
	1,000 hectares								
Wheat									
1968	1,060	999	570	1,328	1,844	2,817	2,010	10,628	67,231
1969	1,039	1,054	560	1,321	1,965	2,759	2,019	10,717	66,427
1970	1,014	1,081	598	1,274	1,985	2,321	1,831	10,104	65,230
1971	1,008	1,103	633	1,273	2,060	2,501	1,929	10,507	64,035
1972	1,000	1,196	640	1,311	2,050	2,522	1,929	10,648	60,000
Rye									
1968	24	338	735	190	4,263	44	132	5,726	12,269
1969	24	275	690	183	4,174	42	124	5,512	9,237
1970	22	219	680	149	3,413	45	112	4,640	10,020
1971	20	234	668	127	3,711	48	110	4,918	9,507
1972	20	232	665	119	3,550	45	110	4,741	8,500
Barley									
1968	402	712	595	386	628	292	312	3,327	19,400
1969	412	780	642	381	759	308	299	3,581	22,484
1970	403	803	640	284	924	288	280	3,620	21,300
1971	438	851	656	298	899	330	280	3,752	21,600
1972	410	854	645	298	1,025	330	300	3,862	25,500
Oats									
1968	96	409	256	54	1,365	132	285	2,597	9,000
1969	76	400	272	48	1,367	131	273	2,567	9,300
1970	71	378	210	44	1,530	131	283	2,647	9,200
1971	70	344	230	45	1,330	128	265	2,412	9,600
1972	70	326	210	45	1,346	125	280	2,402	10,500
Corn									
1968	557	138	1	1,258	5	3,344	2,460	7,763	3,350
1969	578	127	1	1,255	5	3,293	2,397	7,656	4,167
1970	635	128	5	1,189	5	3,084	2,352	7,398	3,353
1971	672	142	3	1,321	5	3,131	2,422	7,696	3,332
1972	700	148	25	1,390	5	3,264	2,382	7,914	4,200
Total grains 2/									
1968	2,154	2,596	2,345	3,238	8,457	6,657	5,224	30,670	121,472
1969	2,141	2,636	2,347	3,210	8,671	6,563	5,139	30,705	122,703
1970	2,274	2,609	2,286	2,920	8,346	5,901	4,884	29,220	119,261
1971	2,209	2,674	2,322	3,064	8,452	6,167	5,046	29,934	117,937
1972	2,201	2,756	2,333	3,063	8,470	6,316	5,016	30,155	121,000
Potatoes									
1968	31	372	672	150	2,720	334	332	4,611	8,301
1969	29	325	604	140	2,718	321	330	4,467	8,100
1970	31	338	667	137	2,732	286	329	4,520	8,064
1971	29	332	658	129	2,669	290	326	4,433	7,894
1972	29	321	657	119	2,630	296	325	4,377	8,000
Sugar beets									
1968	54	188	204	104	414	185	79	1,228	3,560
1969	58	176	192	97	410	188	95	1,216	3,384
1970	57	178	192	76	408	170	85	1,166	3,368
1971	42	185	211	73	421	178	85	1,195	3,321
1972	42	187	220	79	420	195	79	1,222	3,400
Cotton (unginned)									
1968	43	0	0	0	0	0	12	55	2,445
1969	44	0	0	0	0	0	11	55	2,540
1970	42	0	0	0	0	0	14	56	2,746
1971	41	0	0	0	0	0	12	53	2,770
1972	40	0	0	0	0	0	12	52	2,710
Tobacco									
1968	114	6	4/	21	46	36	57	280	143
1969	117	5	4/	20	46	36	54	278	143
1970	118	4	4/	17	47	34	53	273	152
1971	134	4	4/	14	42	33	49	276	166
1972	134	5	4/	15	45	33	54	286	166
Oilseeds 3/									
1968	280	52	120	78	361	520	161	1,572	4,860
1969	287	35	106	85	149	533	219	1,414	4,772
1970	278	35	98	91	298	604	194	1,598	4,777
1971	266	52	104	118	362	548	183	1,633	4,498
1972	250	52	100	110	260	556	172	1,500	4,600

1/ 1972 data are preliminary. 2/ Includes buckwheat, millet, spelt, mixed grains, and rice; also pulses in the USSR. 3/ Sunflowerseed only for Bulgaria, Hungary, Romania, Yugoslavia, and USSR. Rapeseed only for Czechoslovakia, East Germany, and Poland. 4/ Not reported.

Table 28--Eastern Europe and Soviet Union: Production of selected crops, annual 1968-72 1/

Commodity and year	Bulgaria	Czecho-slovakia	East Germany	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe	USSR
				1,000 tons					
Wheat									
1968	2,549	3,153	2,377	3,361	4,567	4,848	4,360	25,215	93,393
1969	2,569	3,257	1,987	3,585	4,710	4,349	4,880	25,337	79,900
1970	3,032	3,174	2,132	2,723	4,608	3,356	3,790	22,815	99,734
1971	3,053	3,878	2,490	3,922	5,456	5,595	5,604	29,998	98,760
1972	3,510	4,400	2,800	4,082	5,200	6,047	4,841	30,880	80,000
Rye									
1968	24	769	1,936	240	8,438	48	138	11,593	14,120
1969	29	687	1,544	239	8,166	47	135	10,847	10,945
1970	28	454	1,483	158	5,433	43	127	7,726	12,972
1971	24	619	1,754	182	7,827	65	134	10,605	12,787
1972	24	450	1,900	206	8,200	50	120	10,950	10,000
Barley									
1968	807	2,113	2,121	906	1,478	590	450	8,465	28,940
1969	905	2,499	2,067	909	1,948	544	459	9,331	32,652
1970	1,167	2,280	1,926	553	2,149	514	402	8,991	38,172
1971	1,257	2,851	2,286	785	2,450	789	464	10,882	34,500
1972	1,428	2,400	2,400	801	2,800	849	487	11,165	39,000
Oats									
1968	76	869	864	72	2,831	114	295	5,121	11,639
1969	78	969	841	86	3,063	137	308	5,482	13,070
1970	98	776	558	61	3,209	117	309	5,124	14,203
1971	100	902	807	91	3,195	161	312	5,568	14,600
1972	88	900	740	61	3,200	160	267	5,416	15,000
Corn									
1968	1,768	453	2	3,814	13	7,105	6,810	19,965	8,828
1969	2,415	495	3	4,820	11	7,676	7,821	23,241	11,954
1970	2,375	513	14	4,072	12	6,536	6,933	20,455	9,428
1971	2,800	524	9	4,732	13	7,850	7,443	23,371	8,597
1972	3,245	580	100	5,724	14	9,548	7,906	27,117	10,000
Total grain 2/									
1968	5,264	7,357	7,830	8,434	17,946	12,769	12,092	71,692	169,540
1969	5,985	7,907	6,922	9,689	18,574	12,824	13,653	75,554	162,402
1970	6,644	7,197	6,456	7,612	16,262	10,631	11,630	66,432	186,800
1971	7,138	8,774	7,740	9,779	19,870	14,530	14,028	81,859	181,175
1972	8,260	8,730	8,540	10,874	20,400	16,657	13,600	87,061	168,000
Potatoes									
1968	369	6,526	12,639	1,632	50,280	3,706	2,890	78,042	102,184
1969	357	5,180	8,832	2,013	44,935	2,165	3,144	66,626	91,779
1970	374	4,793	13,054	1,813	50,301	2,064	2,964	75,363	96,783
1971	383	4,621	9,412	1,797	39,801	3,783	2,952	62,749	92,655
1972	367	4,970	11,500	1,620	48,400	3,620	2,421	72,898	77,800
Sugar beets									
1968	1,407	8,098	6,998	3,471	14,800	3,936	2,910	41,620	94,340
1969	1,628	5,809	4,856	3,303	11,321	3,783	3,636	34,336	71,158
1970	1,714	6,644	6,135	2,175	12,742	3,175	2,948	35,533	78,942
1971	1,519	5,832	5,128	2,023	12,557	4,321	2,961	34,341	72,185
1972	1,864	7,170	7,525	2,868	14,300	5,309	3,274	42,310	75,700
Cotton (unginned)									
1968	31	0	0	0	0	0	9	40	5,945
1969	41	0	0	0	0	0	9	50	5,708
1970	36	0	0	0	0	0	12	48	6,890
1971	49	0	0	0	0	0	10	59	7,101
1972	45	0	0	0	0	0	9	54	7,300
Tobacco									
1968	114	10	7	27	83	32	44	317	216
1969	95	7	6	27	91	24	47	297	196
1970	122	5	5	18	86	22	49	307	228
1971	128	6	5	16	70	30	44	299	200
1972	135	6	5	16	85	30	66	343	234
Oilseeds 3/									
1968	459	73	265	97	712	730	309	2,645	6,685
1969	545	48	164	119	204	747	390	2,217	6,358
1970	407	63	180	96	566	770	264	2,346	6,144
1971	455	101	197	152	595	791	347	2,638	5,663
1972	475	100	220	121	400	848	277	2,441	5,030

1/ 1972 data are preliminary. 2/ Includes buskwheat, millet, spelt, mixed grains, and rice; also pulses in the USSR. 3/ Sunflowerseed only for Bulgaria, Hungary, Romania, Yugoslavia, and USSR. Rapeseed only for Czechoslovakia, East Germany, and Poland.

Table 29--Eastern Europe and Soviet Union: Livestock numbers, 1968-73 1/

(January of each year)

Commodity and year	Bulgaria	Czecho-slovakia	East Germany	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe	USSR
					1,000 head				
Cattle total									
1968	1,363	4,437	5,018	2,049	10,123	5,332	5,693	34,015	97,167
1969	1,297	4,249	5,109	2,017	10,530	5,136	5,261	33,599	95,735
1970	1,333	4,223	5,171	1,914	10,285	5,035	5,029	32,990	95,162
1971	1,353	4,288	5,190	1,911	10,220	5,216	5,138	33,316	99,225
1972	1,458	4,349	5,293	1,900	10,562	5,528	5,148	34,238	102,434
1973	1,520	4,400	5,379	1,882	10,921	5,766	5,180	35,048	104,000
Cows									
1968	586	1,929	2,188	785	5,801	2,218	2,855	16,362	41,567
1969	579	1,908	2,166	751	6,057	2,202	2,865	16,538	41,180
1970	615	1,884	2,167	746	6,045	2,229	2,786	16,472	40,527
1971	628	1,881	2,163	763	5,829	2,276	2,774	16,314	41,012
1972	647	1,900	2,173	750	5,904	2,385	2,786	16,549	41,221
1973	660	1,900	2,169	750	5,857	2,837	2,790	16,963	41,700
Hogs									
1968	2,314	5,601	9,254	6,647	14,384	5,752	5,865	49,817	50,867
1969	2,140	5,136	9,523	5,806	14,677	5,853	5,093	48,228	49,047
1970	1,967	5,037	9,237	5,700	14,755	5,972	5,544	48,212	56,055
1971	2,369	5,530	9,684	7,312	13,863	6,359	6,562	51,679	67,483
1972	2,805	5,935	9,995	7,594	16,946	7,742	6,216	57,233	71,434
1973	2,610	6,100	10,361	7,260	19,284	8,782	6,500	60,897	66,500
Sheep									
1968	9,905	770	1,818	2,300	2,700	14,380	10,346	42,289	138,461
1969	9,652	906	1,794	2,277	2,787	14,298	9,730	41,444	140,587
1970	9,223	977	1,696	2,251	2,631	13,836	8,974	39,588	130,655
1971	9,678	981	1,598	2,316	2,661	13,818	8,703	39,755	138,059
1972	10,110	932	1,607	2,054	2,653	14,071	8,326	39,753	139,916
1973	9,890	900	1,657	1,940	2,653	14,442	8,400	39,792	139,200
Goats									
1968	384	410	236	79	175	732	2/	2,016	5,600
1969	376	364	204	80	163	632	2/	1,819	5,554
1970	350	318	158	80	139	565	2/	1,610	5,148
1971	335	285	135	80	127	536	2/	1,498	5,362
1972	320	260	113	80	115	563	2/	1,451	5,417
1973	310	240	100	75	100	560	2/	1,385	5,300
Horses									
1968	224	166	219	276	2,590	715	1,126	5,316	8,026
1969	199	156	188	251	2,649	702	1,109	5,254	7,975
1970	182	144	148	236	2,618	686	1,076	5,090	7,522
1971	170	131	127	222	2,569	668	1,048	4,933	7,429
1972	155	118	106	211	2,469	654	1,015	4,733	7,300
1973	150	105	90	200	2,345	650	950	4,490	7,200
Poultry									
1968	27,726	31,208	37,976	44,200	80,117	47,148	35,974	304,349	528,200
1969	24,874	32,544	38,802	42,800	84,269	47,618	37,142	308,049	546,900
1970	29,590	34,870	42,565	53,400	85,498	53,894	40,854	340,671	590,300
1971	33,706	39,187	43,034	64,000	87,561	54,333	44,954	366,775	652,700
1972	34,138	38,238	43,343	65,280	88,900	61,262	44,584	375,745	NA
1973	34,820	38,000	43,343	61,400	88,900	67,300	45,000	378,763	NA

NA = Not available.
1/ 1973 data are preliminary.
2/ No breakdown for goats; included in sheep numbers.

Table 30--Eastern Europe and Soviet Union: Production of principal livestock products, annual 1968-72 1/

Commodity and year	Bulgaria	Czecho-slovakia	East Germany	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe	USSR
					1,000 tons				
Beef and veal 2/									
1968	126	376	313	195	638	257	304	2,209	5,513
1969	112	361	328	220	679	235	289	2,224	5,569
1970	108	362	343	204	661	221	255	2,153	5,425
1971	107	382	331	202	646	219	262	2,149	5,500
1972	108	393	344	196	627	234	265	2,167	5,600
Mutton, lamb, and goat meat 2/									
1968	102	6	11	15	30	62	59	285	1,029
1969	100	6	12	19	30	65	55	287	969
1970	94	8	11	17	28	64	48	270	1,009
1971	88	8	11	16	28	63	52	276	1,000
1972	86	8	11	16	28	64	49	262	1,000
Pork 2/									
1968	234	596	858	644	1,330	420	516	4,598	4,079
1969	201	559	847	560	1,354	417	457	4,395	4,094
1970	178	586	815	586	1,322	450	540	4,477	4,542
1971	214	620	832	744	1,348	481	561	4,800	5,300
1972	240	700	930	796	1,672	670	527	5,535	5,600
Poultry meat 2/									
1968	70	78	76	182	124	98	107	735	817
1969	78	80	83	190	134	116	120	801	866
1970	93	103	85	223	137	122	142	905	1,055
1971	107	118	90	241	149	129	150	984	1,150
1972	103	126	103	246	177	146	152	1,053	1,200
Total meats 2/									
1968	534	1,096	1,274	1,045	2,156	837	1,063	8,005	11,648
1969	493	1,047	1,287	996	2,234	834	990	7,881	11,770
1970	476	1,098	1,271	1,036	2,202	857	1,059	7,999	12,298
1971	518	1,168	1,281	1,094	2,238	892	1,095	8,286	13,272
1972	549	1,230	1,390	1,260	2,545	1,115	1,000	9,089	13,600
Milk 3/									
1968	1,587	4,559	7,227	1,933	14,642	3,952	2,821	36,721	82,295
1969	1,581	4,751	7,232	1,888	14,758	3,875	2,807	36,892	81,540
1970	1,632	4,794	7,091	1,863	14,950	3,912	2,737	36,979	83,016
1971	1,688	4,924	7,150	1,803	15,053	3,990	2,732	37,340	83,183
1972	1,710	5,100	7,500	1,835	15,700	4,000	2,720	38,565	83,200
Wool									
1968	29	3	9	11	9	31	14	106	415
1969	28	4	9	11	9	31	13	105	390
1970	29	4	8	10	9	30	12	102	419
1971	30	4	8	9	9	29	11	100	429
1972	31	4	8	8	9	30	11	101	419
					Millions				
Eggs									
1968	1,627	3,270	4,046	2,792	6,315	3,113	2,186	23,349	35,679
1969	1,519	3,430	4,194	2,714	6,700	3,315	2,476	24,348	37,190
1970	1,770	3,733	4,442	3,280	6,941	3,537	2,781	26,484	40,700
1971	2,020	3,996	4,504	3,475	7,080	3,984	2,937	27,996	45,100
1972	2,000	4,050	4,460	3,300	7,450	4,300	3,100	28,610	48,200

1/ 1972 data are preliminary. 2/ Includes fats and offals and exports of live animals for slaughter. 3/ Cows milk only for Czechoslovakia, East Germany, Hungary, and Poland. In East Germany, milk production is given in 3.5 percent fat content equivalent.

Table 31--Selected agricultural imports and exports of Eastern Europe, USSR, PRC, North Korea, and North Vietnam, 1965-71

Country by commodity	1965	1966	1967	1968	1969	1970	1971
	1,000 tons						
BULGARIA							
Imports:							
Meat, fresh, frozen, and chilled	15.1	8.5	25.6	14.3	11.2	16.1	NA
Wheat	149.0	314.6	3.7	272.5	401.0	52.2	NA
Rice, milled	25.9	18.9	16.1	30.0	11.0	1.5	NA
Barley	133.4	1/	1/	53.7	21.8	105.6	NA
Corn	28.7	76.4	26.4	38.6	82.8	0.7	NA
Sugar, refined	154.6	158.1	181.9	335.2	329.1	NA	NA
Cattle hides, undressed	2.8	8.1	3.5	9.2	7.6	6.2	NA
Rubber, crude	21.8	24.6	25.5	31.8	24.8	37.7	NA
Wool, scoured	1.5	2.2	2.4	3.1	3.2	2.3	NA
Cotton, lint	47.8	54.0	50.7	58.3	62.0	60.6	NA
Exports:							
Calves 2/	84.9	63.0	69.9	91.6	52.7	45.1	NA
Hogs, for slaughter 2/	321.6	379.4	127.6	128.4	39.5	9.6	NA
Pork	8.3	12.3	14.4	16.6	10.4	7.9	NA
Poultry meat	9.7	10.1	17.0	25.1	23.7	25.7	NA
Cheese	15.1	12.3	22.7	22.8	29.0	25.8	NA
Eggs 3/	508.0	479.8	580.0	555.5	391.8	490.9	NA
Wheat	9.5	400.2	533.8	364.9	237.9	211.1	NA
Corn	43.4	186.7	306.3	123.7	297.5	250.3	NA
Fruit, fresh 4/	352.1	192.5	223.5	211.1	327.2	255.6	NA
Fruit, canned	51.2	47.4	66.1	68.5	74.4	80.3	NA
Jams and jellies	39.5	28.9	18.2	24.4	29.0	37.7	NA
Fruit puree	32.3	24.9	23.9	26.8	27.3	31.4	NA
Vegetables, fresh 5/	226.4	218.0	246.0	241.1	228.9	225.7	NA
Vegetables, canned	93.5	134.5	144.3	129.5	133.9	178.0	NA
Tomato puree	36.1	43.9	33.8	33.0	25.7	33.6	NA
Wine, grape 6/	545.7	899.8	894.2	937.6	1,049.6	1,039.1	NA
Tobacco, oriental	78.2	71.7	75.6	67.6	59.4	56.4	NA
Sunflowerseed	91.5	155.8	99.9	47.9	128.2	9.7	NA
Cotton, lint	2.6	7.2	17.5	16.1	10.6	11.6	NA
Sunflowerseed oil	1.0	17.3	40.5	NA	1/	1/	NA
CZECHOSLOVAKIA							
Imports:							
Meat and slaughter animals	48	75	81	83	110	121	67
Poultry meat	7.8	8.7	7.6	5.8	7.0	12.1	6.6
Butter	12	11	13	13	8	11	12
Eggs 3/	48	64	70	68	105	58	10
Wheat	924	1,032	1,205	1,371	1,226	1,026	1,205
Rice, milled	73	92	60	68	77	77	80
Barley	595	135	162	125	197	139	133
Corn	155	282	138	263	217	122	480
Rye	32.1	53.4	174.6	117.9	85.7	76.0	NA
Fruits	241	190	241	234	289	263	296
Nuts	6.6	7.7	7.8	7.2	7.1	9.8	4.2
Vegetables	144	132	149	118	150	107	133
Sugar, raw equivalent	209.5	263.2	188.0	200.2	207	1/	1/
Coffee	10.3	10.6	11.6	13.3	15.5	14.8	18.1
Cocoa beans	14.1	19.3	15.5	12.8	16.8	21.8	18.7
Tea	1.4	1.9	0.9	1.1	1.1	1.6	1.4
Oilseed cake and meal	168.4	204.7	250.3	NA	NA	NA	NA

Continued

Table 31--Selected agricultural imports and exports of Eastern Europe, USSR, PRC, North Korea, and North Vietnam, 1965-71--Continued

Country by commodity	1965	1966	1967	1968	1969	1970	1971
				1,000 tons			
CZECHOSLOVAKIA--Continued							
Imports--Continued							
Wine 6/	471	468	498	534	594	558	420
Tobacco	17	13	18	22	19	16	17
Cattle hides, raw	44	44	40	40	38	43	50
Peanuts	37	53	26	33	14	19	18
Soybeans	25	26	22	22	22	20	21
Sunflowerseed	17	43	59	86	72	65	31
Wool, scoured	23	21	17	21	22	20	20
Cotton, lint	100	113	103	107	82	114	106
Jute	14	15	15	16	11	16	13
Exports:							
Meat, fresh, frozen, and chilled	28.1	8.0	17.2	NA	NA	NA	NA
Eggs 3/	66	60	41	47	15	47	148
Malt	178	192	205	207	214	199	204
Hops	4.7	5.0	5.3	5.3	5.5	6.3	6.4
Sugar, refined	513	325	392	287	276	296	299
Beer 6/	321	542	750	841	886	1,072	1,259
EAST GERMANY 7/							
Imports:							
Meat and meat products	76.6	78.4	75.3	68.8	67.4	86.7	56.8
Butter	29.2	18.5	17.2	18.2	29.4	1/	1/
Cheese	14.0	14.3	12.5	10.8	10.4	10.6	8.4
Eggs and egg products 3/	19.5	40.1	63.3	43.5	1/	1/	1/
Wheat	1,225.0	1,350.0	1,184.0	1,075.0	1,311	2,084	1,867
Rice	40.4	62.0	49.8	46.7	45.8	29.8	44.0
Barley	289.0	126.0	203.0	170.0	218	799	187
Corn	168	295	327	378	288	376	656
Rye	1.0	111.0	1/	1/	1/	1/	1/
Fruit, tropical	114.3	152.3	199.0	164.0	207.3	166.0	224.0
Fruit, fresh	169.1	137.0	139.3	142.2	172.3	193.8	159.9
Nuts	13.1	15.5	13.6	25.2	17.7	19.2	17.4
Fruit juice	9.6	13.2	11.4	16.2	19.9	20.9	20.6
Fruit, canned	30.7	33.3	30.3	39.3	43.6	40.0	47.6
Potatoes	84.4	93.2	107.6	141.0	136.7	205.6	58.9
Pulses, for food	5.8	10.3	11.3	10.2	12.6	22.4	7.8
Vegetables, fresh	88.6	104.2	90.3	97.8	136.7	114.7	102.9
Vegetables, canned	57.4	57.3	78.1	78.1	104.5	98.0	96.2
Sugar, raw equivalent	169.9	207.2	322.9	298.2	223	NA	NA
Honey	1.8	2.5	2.9	2.7	2.2	7.0	11.4
Coffee	35.8	37.4	40.2	0.2	39.6	45.4	43.8
Cocoa beans	15.3	18.0	16.2	19.2	16.1	19.5	16.9
Tea	1.9	1.1	1.2	1.5	1.5	1.6	1.8
Forage 8/	10.3	13.2	9.1	8.8	4.9	4.3	3.4
Oilseed cake and meal	199.2	236.1	345.1	379.3	455.5	525.1	637.1
Wine and champagne 6/	676.3	782.1	852.4	807.9	1,023.2	1,035.8	960.9
Beer 6/	78.1	80.8	82.1	82.5	79.8	80.4	102.8
Spirits 6/	6.3	51.4	35.6	35.5	38.7	33.6	49.4
Tobacco, smoking and cured	27.8	22.5	26.1	21.3	17.4	15.7	19.1
Cattle hides and skins, salted	19.2	18.4	17.2	14.6	11.4	16.0	16.1
Oilseeds	139.6	163.6	148.4	132.2	130.3	203.7	209.9
Wool, scoured	24.7	18.8	19.2	21.8	22.1	19.9	20.2

Continued

Table 31--Selected agricultural imports and exports of Eastern Europe, USSR, PRC, North Korea, and North Vietnam, 1965-71--Continued

Country by commodity	1965	1966	1967	1968	1969	1970	1971
				1,000 tons			
EAST GERMANY 7/--Continued							
Imports--Continued							
Cotton, lint	99.9	90.3	84.7	87.2	78.7	105.8	90.6
Vegetable oils, refined and unrefined	106.1	120.3	110.7	112.1	103.7	117.3	98.9
Exports:							
Meat, fresh	21.0	18.9	22.8	NA	NA	NA	NA
Sugar, refined	97.5	191.0	145.6	155.2	152	NA	NA
HUNGARY							
Imports:							
Meat, fresh	34.2	31.0	58.2	18.1	20.6	57.0	10.5
Meat, canned	3.5	2.6	1.2	1.8	3.1	3.1	2.8
Butter	5.7	4.5	5.4	2.5	4.3	6.6	9.8
Wheat, including feed wheat	207.7	152.4	217.0	310.5	301.9	178.5	405.3
Rice, husked and broken	21.4	40.6	24.6	17.6	18.8	20.6	17.9
Barley	382.0	40.7	10.2	73.9	44.9	23.3	209.3
Corn	70.8	55.8	0.2	75.4	1.5	.8	162.4
Rye	1/	1/	50.0	1/	9/	1/	1/
Flour and grits	8.8	5.7	1/	1/	1/	1/	1/
Fruit, tropical	40.8	47.1	48.8	61.8	61.2	79.8	69.3
Coffee	12.6	13.5	17.4	20.5	20.7	25.4	23.1
Cocoa beans	12.5	9.8	9.8	10.9	8.8	11.3	10.6
Tea	2.2	0.8	0.6	0.9	0.9	0.6	1.0
Oilseed cake and meal	183.7	228.7	245.3	266.7	258.2	336.4	NA
Lard, rendered	5.4	6.5	25.6	7.2	7.8	12.1	4.1
Tobacco	4.9	8.1	15.6	12.3	10.3	7.6	7.7
Hides and skins	24.6	24.1	24.4	25.2	18.3	24.9	NA
Wool, scoured	2.8	4.0	4.8	6.7	4.3	3.4	2.8
Cotton, lint	72.1	78.2	88.6	74.8	64.1	97.7	65.8
Jute	8.8	12.1	6.5	9.8	4.8	3.2	3.3
Exports:							
Cattle, for slaughter	71.8	80.7	91.9	95.6	124.4	112.9	111
Hogs, for slaughter	28.8	28.3	9.7	5.9	1.2	2.7	49.6
Meat, fresh	41.0	49.7	48.8	47.7	41.7	43.4	61.7
Meat, canned	7.5	6.5	7.9	8.1	5.6	7.8	11.4
Poultry, dressed	35.5	33.7	38.5	47.2	44.8	56.6	72.5
Butter	5.9	5.1	10.6	6.0	3.4	3.8	2.3
Cheese	6.2	7.5	9.3	6.0	7.3	9.6	5.7
Eggs 3/	344.3	287.7	423.4	364.5	223.6	389.9	452
Wheat	96.2	1.0	170.5	115.3	379.0	466.8	92.9
Corn	92.6	42.7	19.7	18.6	96.0	208.7	49.1
Flour and grits	10.8	12.6	13.7	13.9	13.4	14.0	NA
Fruit, fresh	182.1	180.5	243.7	207.6	376.4	305.1	326.3
Fruit, canned	52.4	52.2	52.9	58.3	73.7	24.0	NA
Potatoes	30.8	37.2	113.8	32.4	21.2	85.9	19.2
Beans	28.3	6.6	8.7	1.5	0.6	1.3	5.3
Peas	28.8	19.5	25.6	11.6	13.1	18.0	29.0
Vegetables, fresh	114.0	147.4	122.9	86.4	97.5	62.0	77.0
Vegetables, canned	124.4	154.5	184.9	183.5	201.8	175.5	NA
Sugar, refined	138.6	63.3	42.2	16.6	47.4	20.8	1.8
Honey	5.0	5.0	5.7	5.8	5.6	5.7	NA
Wine 6/	689.0	720.0	728.2	788.4	858.5	974.6	1,088.0
Tobacco	9.5	7.2	10.7	6.6	7.3	8.6	5.7

Continued

Table 31--Selected agricultural imports and exports of Eastern Europe, USSR, PRC, North Korea, and North Vietnam, 1965-71--Continued

Country by commodity	1965	1966	1967	1968	1969	1970	1971
				1,000 tons			
HUNGARY--Continued							
Exports--Continued							
Sunflowerseed	10.4	13.7	14.0	18.2	35.9	24.1	24.1
Sunflowerseed oil	14.0	14.1	29.4	32.3	43.4	18.9	7.1
POLAND							
Imports:							
Meat and meat products	39.4	52.8	43.2	79.0	36.2	43.9	152.4
Butter	2.4	1/	3.0	9.4	9.8	12.8	9.3
Wheat	1,378.2	1,566.7	1,353.0	1,067.7	1,181.0	1,098.5	1,909.9
Rice, milled	67.2	67.2	65.3	59.0	62.4	60.2	74.1
Barley	485.3	139.2	417.6	545.4	375.2	1,093.1	615.8
Corn	784.5	187.6	199.8	295.3	246.6	231.1	266.7
Rye	1/	70.3	1/	63.9	71.7	55.8	111.2
Oats	32.9	1/	1/	1/	1/	1/	1/
Fruit, citrus	60.1	85.8	75.9	84.6	96.8	80.4	95.5
Grapes	39.6	11.5	12.9	15.2	25.3	19.2	24.6
Fruit, fresh	48.4	29.9	34.9	25.4	60.5	24.8	NA
Vegetables, fresh	37.2	30.3	31.8	53.1	37.8	21.4	37.2
Vegetables, canned and frozen	3.3	8.6	5.3	6.8	7.0	7.4	NA
Coffee beans	15.4	19.5	20.1	27.8	30.3	34.5	30.0
Cocoa beans	17.3	12.3	20.0	22.6	20.8	14.3	23.6
Tea	5.7	7.7	7.3	6.5	8.4	8.1	9.7
Oilseed cake and meal	157.8	184.1	215.5	299.0	278.4	312.7	315.9
Tobacco	16.6	13.8	10.7	5.5	3.8	3.5	3.1
Cattle hides, green	34.3	47.2	52.1	41.2	35.0	42.1	45.2
Oilseeds	144.3	69.3	64.6	52.4	140.1	82.3	NA
Rubber, crude	38.8	45.1	43.5	46.8	53.6	55.2	NA
Wool, washed	15.8	14.1	15.4	15.7	15.7	16.4	18.3
Cotton, lint	142.8	156.0	133.4	156.4	132.1	149.6	NA
Vegetable oils, edible	31.9	24.0	50.5	45.5	41.3	42.0	NA
Exports:							
Cattle, for slaughter 10/	16.2	12.1	4.0	4.3	4.9	6.0	8.8
Hogs, for slaughter 10/	9.2	2.4	1.9	0.3	1/	1/	1/
Meat, frozen	64.0	18.6	31.7	33.7	44.8	29.8	32.5
Poultry meat	19.2	18.8	17.3	18.0	13.7	13.8	28.7
Bacon	51.9	52.4	54.9	53.8	50.5	47.2	42.0
Ham, canned	22.3	23.2	24.4	24.1	23.5	23.4	26.6
Meat, canned	25.6	27.3	27.8	29.2	25.3	25.4	26.0
Butter	18.3	19.3	23.4	19.6	9.3	12.6	5.9
Eggs 3/	750.6	513.5	551.2	326.8	447.8	403.0	456.5
Barley	56.9	89.6	57.7	31.9	50.7	144.5	78.4
Rye	1/	19.5	65.5	23.7	68.4	38.7	17.0
Potatoes	532.8	453.3	423.7	529.4	137.3	397.0	138.1
Vegetables, fresh	92.0	74.4	53.1	70.0	70.7	65.2	61.9
Sugar, raw	90.1	100.9	140.8	162.6	87.0	134.6	19.8
Sugar, refined	383.3	227.5	214.9	485.8	215.0	171.8	72.2
Lard	5.4	27.4	16.0	0.5	1/	1/	1/
Beer 6/	203.6	182.6	142.3	172.2	144.6	114.1	186.5
Rapeseed	60.4	88.1	106.2	175.4	85.5	44.4	50.7
ROMANIA							
Imports:							
Rice	36.7	29.5	32.0	29.7	32.2	35.7	61.1
Fruit, citrus	22.0	26.2	30.1	27.3	28.7	27.3	42.6

Continued

Table 31--Selected agricultural imports and exports of Eastern Europe, USSR, PRC, North Korea, and North Vietnam, 1965-71--Continued

Country by commodity	1965	1966	1967	1968	1969	1970	1971
				1,000 tons			
ROMANIA--Continued							
Imports--Continued							
Olives	6.9	5.3	5.8	5.5	5.5	5.0	6.1
Sugar, refined	1/	1/	1/	50.5	62.8	90.5	118.9
Cocoa (including powder cocoa)	5.4	5.1	5.4	7.1	5.7	5.9	7.4
Hides and skins	14.4	20.8	21.8	18.3	24.1	42.7	33.5
Rubber, crude	19.2	24.9	26.7	30.5	36.8	37.1	26.9
Wool, scoured	1.4	1.5	1.8	2.0	2.1	2.3	3.0
Cotton, lint	67.0	76.7	71.9	76.1	84.3	83.2	91.1
Vegetable oils, edible	0.8	2.9	2.1	5.4	7.8	6.6	1.4
Exports:							
Animals, for slaughter 2/	28.4	98.0	62.5	NA	1/	1/	1/
Meat, fresh	33.2	31.1	56.8	NA	1/	1/	1/
Meat, prepared or preserved	2.4	4.8	7.4	NA	1/	1/	1/
Butter	5.6	10.4	115.0	NA	1/	1/	1/
Eggs 3/	245.8	286.2	290.0	311.8	339.3	312.0	319.6
Grain, total (excluding seed)	882.2	1,303.0	2,339.4	1,561.6	1,376.6	372.8	704.2
Grapes	60.3	37.8	46.3	48.6	60.3	46.1	63.3
Fruit, fresh	96.5	54.6	67.0	64.6	81.5	52.5	45.7
Fruit, canned	86.0	97.2	100.8	83.8	99.9	74.8	89.6
Potatoes	11.1	21.1	31.4	27.7	26.6	14.9	23.6
Vegetables, fresh	136.8	127.6	127.1	193.9	185.7	140.3	221.6
Vegetables, canned	25.9	35.9	40.5	43.7	50.4	47.9	50.9
Sugar, refined	34.5	106.0	192.2	63.3	104.1	39.4	10.0
Wine	43.3	46.0	52.7	57.9	67.5	68.8	80.1
Sunflowerseed	35.0	30.9	58.6	61.9	1/	1/	1/
Wool, scoured	1.1	1.6	1.5	2.4	2.4	1.4	1.2
Animal fats, edible	19.3	44.3	48.6	46.9	29.8	25.5	17.9
Vegetable oils, edible	33.3	76.5	110.0	115.8	143.5	119.1	131.7
YUGOSLAVIA							
Imports:							
Hogs, for slaughter	21.5	27.6	6.8	1/	1/	1/	1/
Meat, fresh	1.3	9.7	32.9	5.6	1.7	7.7	0.3
Milk, powdered	13.3	14.2	2.7	16.7	9/	2.3	4.1
Eggs	4.0	10.5	9.7	1.1	0.1	5.0	0.6
Wheat	1,192.6	1,357.2	409.0	78.7	1/	0.2	546.9
Rice, milled	26.4	27.3	9.7	28.1	69.6	12.6	26.0
Barley	1.1	0.6	1/	1/	32.2	100.1	125.0
Corn	0.7	1/	1/	2.5	7.2	1.4	308.4
Fruit, citrus	66.3	82.9	98.6	85.0	86.5	101.3	109.2
Potatoes	24.2	14.6	0.3	1/	1/	1/	0.6
Sugar, refined	94.2	246.2	131.2	67.7	34.4	10.1	89.5
Coffee	17.7	24.7	30.5	29.6	39.3	35.3	36.3
Cocoa beans	13.8	13.9	8.9	9.7	9.4	14.6	10.1
Oilseed cake and meal	137.9	74.7	155.9	121.5	139.4	196.2	48.6
Lard	0.4	2.4	11.4	9.1	7.6	6.7	NA
Tobacco	0.1	1.0	1/	0.1	2.7	4.4	19.3
Hides, raw	25.1	26.7	35.7	21.5	20.2	36.3	0.8
Oilseeds	28.2	26.2	7.5	30.9	14.6	3.6	50.6
Rubber, crude	16.5	15.4	14.4	15.7	21.6	17.8	1/
Wool, greasy	16.1	11.4	12.6	12.7	16.5	20.8	NA
Cotton, lint	90.5	87.4	90.7	72.0	111.4	69.6	78.7
Jute	13.6	13.9	8.7	10.7	6.1	7.4	1/

Continued

Table 31--Selected agricultural imports and exports of Eastern Europe, USSR, PRC, North Korea, and North Vietnam, 1965-71--Continued

Country by commodity	1965	1966	1967	1968	1969	1970	1971
				1,000 tons			
YUGOSLAVIA--Continued							
Imports--Continued							
Tallow	16.1	0.3	12.4	24.2	6.2	3.1	0.6
Vegetable oils, edible	19.1	21.8	92.1	46.9	0.2	18.6	NA
Exports:							
Cattle, for slaughter	11.2	21.9	33.9	33.2	1/	1/	1/
Sheep, for slaughter	1.9	3.4	5.5	9.0	1/	1/	1/
Hogs, for slaughter	0.4	0.2	0.6	0.1	1/	1.3	1/
Horses, for slaughter	11.9	16.3	23.6	20.8	26.9	20.9	28.2
Meat, fresh	126.0	112.6	103.6	94.8	99.6	71.2	79.7
Meat, canned	36.9	23.8	24.2	19.8	23.8	25.4	19.6
Cheese	1.2	1.8	1.2	0.5	0.5	0.5	0.3
Eggs	2.0	4.6	2.5	0.2	0.2	0.1	1.5
Barley	36.6	85.1	101.8	21.1	1.0	1/	1.0
Corn	51.4	356.9	786.7	388.9	317.6	297.5	62.6
Fruit, fresh	35.2	19.5	29.2	14.3	44.4	15.7	25.5
Prunes	13.0	4.9	7.3	14.5	4.6	20.6	22.9
Fruit pulp	13.2	13.2	13.6	12.5	14.6	9.9	13.5
Potatoes	0.3	9.6	3.4	1.2	43.3	70.5	44.6
Beans, dry	7.8	7.6	11.1	9.0	2.8	2.5	3.5
Hops	4.9	4.4	4.3	4.0	5.0	3.9	3.7
Sugar, refined	1/	2.2	11.8	13.2	43.2	56.4	1/
Wine	40.0	37.0	44.1	29.8	47.0	42.2	57.0
Tobacco	23.2	20.9	19.2	15.9	13.6	18.9	19.6
Oilseeds	13.0	4.6	9.7	19.2	23.0	134.5	33.2
Hemp, all	8.8	3.7	4.6	4.8	4.1	1.2	0.8
SOVIET UNION							
Imports:							
Cattle, for slaughter	91.5	107.4	91.8	67.4	29.1	20.1	14.4
Sheep, for slaughter	58.4	73.6	63.1	42.6	37.4	40.5	38.9
Horses, for slaughter	5.6	8.6	10.2	13.0	13.8	14.8	15.7
Meat and meat products	252.2	133.2	57.5	59.6	75.8	164.9	224.6
Eggs 3/	706.1	609.3	749.0	672.4	474.9	602.3	946.6
Wheat	6,375.1	7,582.8	1,827.8	1,339.7	38.4	1,846.3	2,300.0
Rice, milled	237.9	275.4	397.3	260.0	326.5	322.9	332.4
Corn	1/	163.5	356.8	264.2	498.5	303.8	880.8
Flour, wheat	289.1	322.4	211.8	263.4	273.2	258.8	279.4
Fruit, fresh	500.9	447.3	538.8	527.1	720.3	679.3	690.8
Fruit, dried	85.3	69.4	100.4	107.6	104.1	128.9	130.1
Vegetables, fresh	167.8	139.0	151.0	169.4	182.0	163.4	200.2
Vegetables, canned	127.6	203.4	239.9	210.9	213.9	249.3	310.5
Sugar, raw	2,330.7	1,840.9	2,479.7	1,752.2	1,331.9	3,003.3	1,500.0
Coffee	30.9	28.3	24.7	31.4	48.0	41.5	43.0
Cocoa beans	88.8	56.5	81.7	109.0	98.6	99.9	138.3
Tea	36.3	21.3	23.1	22.7	28.0	29.2	42.6
Tobacco	104.1	65.2	61.0	62.3	55.0	70.3	71.5
Hides and skins 11/	22.8	26.9	30.2	24.2	27.0	30.0	24.6
Oilseeds	156.8	48.9	44.2	56.2	58.0	43.2	45.4
Rubber, crude	271.2	311.1	278.5	325.9	295.0	316.5	246.1
Wool, scoured	52.8	61.3	49.8	70.8	75.8	82.7	86.1
Cotton, lint	182.9	172.7	144.5	136.8	170.5	257.7	242.7
Vegetable oils, edible	68.1	47.4	27.7	41.2	23.6	64.6	64.1

Continued

Table 31--Selected agricultural imports and exports of Eastern Europe, USSR, PRC, North Korea, and North Vietnam, 1965-71--Continued

Country by commodity	1965	1966	1967	1968	1969	1970	1971
				1,000 tons			
SOVIET UNION--Continued							
Exports:							
Meat and meat products	31.7	118.4	175.4	130.6	98.0	54.8	34.8
Butter	43.0	54.1	63.4	75.6	74.3	73.0	24.3
Wheat	1,662.6	2,805.3	5,284.0	4,355.0	5,978.8	4,732.9	7,616.6
Barley	2,067.9	290.4	452.4	614.4	748.4	503.3	687.7
Corn	551.1	174.4	164.7	209.0	246.8	280.7	117.6
Rye	36.9	275.1	336.2	221.9	222.5	172.5	207.9
Oats	11.8	11.5	10.7	6.1	8.2	8.6	9.8
Flour	266.7	305.6	376.8	564.4	593.0	772.5	654.2
Sugar, refined	604.1	992.8	1,032.3	1,299.6	1,080.8	1,079.2	1,002.1
Oilseed cake and meal	129.2	390.5	387.9	325.1	1/	1/	1/
Tobacco	2.1	1.3	2.0	4.3	4.1	4.5	2.5
Oilseeds	88.2	147.2	341.2	404.8	345.3	142.7	84.1
Wool, scoured	26.4	27.8	20.1	26.0	23.8	17.7	14.4
Cotton, lint	457.7	507.8	534.4	554.4	452.3	516.5	546.8
Vegetable oils, edible	242.1	455.7	701.2	770.4	695.9	372.3	408.3
PEOPLE'S REPUBLIC OF CHINA							
Imports:							
Wheat	5,249.8	6,375.2	3,329.1	5,194.2	3,200	4,980.0	NA
Rice	112.3	51.5	22.4	33.4	5.4	NA	NA
Barley	23.6	1/	1/	0.3	1/	1/	NA
Corn	71.8	20.2	130.5	19.8	NA	NA	NA
Oats	41.9	1/	1/	1/	1/	1/	NA
Flour	16.9	-	1/	1/	1/	1/	NA
Dates	35.3	59.8	59.5	59.2	55.8	76.0	NA
Sugar, raw equivalent	419.1	619.7	556.1	431.1	445.3	530.4	NA
Cotton, raw	168.5	107.0	88.2	66.4	83.1	66.0	NA
Jute	60.6	52.2	63.6	56.8	48.3	47.4	NA
Sisal	7.2	13.1	6.3	8.3	8.6	8.0	NA
Fats and oils, animal	17.7	16.2	5.5	12.5	5.2	NA	NA
Exports:							
Cattle, for slaughter 2/	94.8	6.2	111.4	112.0	116.0	95.0	NA
Sheep and goats, for slaughter 2/	12.4	10.9	8.6	9.1	9.8	13.7	NA
Hogs, for slaughter 2/	1,879.2	1,951.5	1,816.0	1,830.3	1,800.0	1,700.0	NA
Meat, fresh	139.5	169.5	109.8	119.7	116.8	97.7	NA
Meat, dried and salted	4.5	4.8	10.7	4.5	7.4	6.9	NA
Meat, prepared or preserved	39.3	41.8	22.2	20.9	21.0	22.0	NA
Eggs, in shell	42.4	50.0	41.7	40.5	39.0	37.0	NA
Eggs, not in shell 12/	26.6	23.0	13.2	23.8	22.8	8.8	NA
Cereals, unmilled, n.e.s	9.9	10.8	15.4	17.9	19.2	17.0	NA
Rice	752.6	1,215.7	1,150.0	885.0	725.8	885.0	NA
Corn	244.5	146.3	75.4	51.4	1.4	0.2	NA
Oranges and tangerines	39.5	42.9	56.3	60.1	60.2	51.2	NA
Fruit, other citrus	6.4	7.2	4.9	5.8	9.5	4.8	NA
Bananas, fresh	19.0	32.2	25.0	19.0	15.3	25.9	NA
Apples, fresh	89.1	89.4	91.1	62.6	59.0	56.7	NA
Pears, fresh	28.7	36.4	34.0	49.0	51.9	52.3	NA
Potatoes, fresh	35.2	53.6	42.6	58.1	38.5	35.3	NA
Beans and peas	102.2	148.0	129.0	101.0	135.8	80.0	NA
Onions, fresh	15.9	23.7	17.5	24.6	22.8	20.5	NA
Sugar, raw equivalent	426.6	509.9	338.0	265.7	166.0	87.1	103.2
Tea	32.2	37.3	29.4	34.8	32.4	31.4	NA

Continued

Table 31--Selected agricultural imports and exports of Eastern Europe, USSR, PRC, North Korea, and North Vietnam, 1965-71--Continued

Country by commodity	1965	1966	1967	1968	1969	1970	1971
				1,000 tons			
PEOPLE'S REPUBLIC OF CHINA--Continued							
Exports--Continued							
Pimento	8.0	7.9	6.3	10.6	13.2	NA	NA
Tobacco, unmanufactured	4.6	7.6	11.4	22.8	27.2	5.5	NA
Oilseed cake	29.3	25.8	31.7	32.2	33.2	25.3	NA
Peanuts	45.7	64.1	74.2	57.9	46.0	16.0	NA
Soybeans	576.6	550.1	565.0	571.3	487.7	410.0	NA
Castor seed	14.6	56.3	79.6	54.5	30.7	30.2	NA
Rape and mustard seed	5.8	29.9	23.3	9.2	2.1	1/	NA
Silk, fiber	3.3	6.0	5.7	4.2	6.2	5.6	NA
Wool, greasy	15.6	17.6	11.0	14.4	12.7	7.5	NA
Cottonseed oil	22.2	49.5	26.0	27.9	6.8	7.7	NA
Peanut oil	5.0	24.3	23.7	27.9	10.9	NA	NA
Rape and mustard oil	3.8	31.8	17.2	20.0	17.0	16.7	NA
Tung oil	19.1	17.9	15.2	10.3	12.1	8.5	NA
Castor oil	0.1	2.0	10.5	9.5	7.5	1.6	NA
NORTH KOREA							
Imports:							
Wheat, unmilled	101.2	346.2	362.0	148.7	225.7	314.6	NA
Flour and meal, wheat	20.5	63.1	116.8	1/	1/	16.7	NA
Sugar, raw equivalent	21.5	21.3	112.9	149.1	206.7	182.5	209.5
Cotton, raw	10.6	10.9	11.1	13.3	12.7	14.0	NA
Sunflowerseed oil	1/	3.5	5.7	9.4	9.0	8.2	NA
Exports:							
Rice	43.5	72.1	125.4	59.6	96.2	88.6	NA
Corn	1/	18.0	6.3	5.4	17.4	1/	NA
Tobacco	8.1	5.1	1.8	4.5	5.0	5.0	NA
Silk, fiber	0.5	0.5	0.3	0.4	0.5	0.6	NA
Apples	32.8	29.0	19.1	42.1	47.6	36.4	NA
NORTH VIETNAM							
Imports:							
Flour and meal, wheat	1.5	10.7	39.4	241.7	225.0	426.1	NA
Sugar, raw equivalent	66.0	13.1	45.5	49.8	60.1	57.6	76.1
Cotton, raw	2.3	1/	3.0	3.0	3.0	3.0	NA
Exports:							
Hogs 2/	16.9	4.7	1.6	1/	1/	0.7	NA
Rice	3.0	12.5	3.4	2.4	20.1	18.5	NA
Sugar, raw equivalent	6.6	2.0	3.2	3.7	NA	NA	NA
Coffee	1.7	3.3	2.8	1.5	1.5	1.8	NA
Tea	1.1	1.3	1.1	1.8	1.6	1.8	NA

1/ Not reported. 2/ 1,000 head. 3/ Millions, fresh equivalent. 4/ Includes watermelons and musk melons. 5/ Includes potatoes. 6/ 1,000 hectoliters. 7/ Interzonal trade between East and West Germany not included. 8/ Unspecified. Believed to include hay, fodder, and forage crops. 9/ Negligible. 10/ Slaughter weight. 11/ Millions. 12/ In terms of in-shell equivalent.

Sources: Official statistical handbooks published by the various countries except People's Republic of China, North Korea, and North Vietnam. Some data for Bulgaria, Czechoslovakia, East Germany, Romania, and Yugoslavia from Trade Yearbook, FAO, Vol. 25, 1971. Some data for Bulgaria, Czechoslovakia, East Germany, People's Republic of China, and North Vietnam from Sugar Yearbook, 1971, International Sugar Organization.