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Outlook and Situation Report



Private farming: Small scale,
but important, p. 16

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Summary

East European grain production in 1984, forecast at 95 to 100 million tons, may fall slightly short of a year earlier. Oilseed output will remain stable at 4 million tons, and the sugar beet crop is projected to increase 3 million tons to 47 million. Total meat output will be in the vicinity of 11 million tons, down slightly from 1983. Plans for growth in 1984 agricultural production range from zero in Czechoslovakia to 6 percent in Romania. Grain imports will probably remain near last year's total, but purchases of oilseed products should rebound with larger Polish imports. The United States will most likely maintain its 1983 share of the East European market.

Restrictions on imports and investment continued to hinder Eastern Europe's agricultural performance in 1983. In each country, attempts to reduce debt through lower imports and expanded exports were high on the policy agenda. Nevertheless, growth in farm exports was thwarted by a 2- to 3-percent decline in regionwide agricultural output. Only Czechoslovakia and Poland attained better production than in 1982. A prolonged drought mainly hurt the fall-harvested crops. Small grains and rapeseed harvested in the summer fared better than corn, sunflowers, potatoes, and sugar beets.

Despite the drought, grain production—estimated at 100 million tons—was only 5 percent below the 1982 record. A decline in corn and barley production was partly offset by a larger wheat crop. Total grain imports were an estimated 8.5 to 9 million tons, more than 2 million less than in 1982. Grain for food is assured until the next harvest, but exports will have to be curtailed in some countries, and imports increased in others, otherwise livestock inventories will need to be reduced.

Total oilseed production, at nearly 4 million tons, roughly equaled the 1982 level. More rapeseed compensated for less sunflowerseed and soybeans. Oilmeal consumption declined last year, but the outlook for 1984 is for a slight increase because of higher imports. Statements from Polish officials indicate large increases in protein meal imports, which should help revive the hog and poultry industries in that country.

In the livestock sector, cattle and hog inventories were up 2 percent regionwide last January. Poultry numbers increased 3 percent, and sheep inventories 4 percent. Declines in Poland were more than offset by increases in other countries. Poland's problems in the livestock sector brought regional meat production down an estimated 1 percent to 11.4 million tons last year.

The region's total trade balance improved from 1982. In fact, it had a foreign trade surplus of about \$4.5 billion. All country balances were in surplus except in Bulgaria and Yugoslavia. But even in Yugoslavia, 1982's huge deficit was cut in half in 1983. While the hard-currency component of the region's trade balance greatly improved, debt to the Soviet Union increased.

Regional data for 1983 agricultural trade are still incomplete. However, Poland, the largest importer in the region, reduced its farm trade deficit to about \$240 million, compared with \$2.4 billion in 1981 (Poland's worst agricultural trade year).

U.S. agricultural exports to Eastern Europe, at \$899 million in 1983, showed a slight improvement over 1982. Exports to Poland, Hungary, and Yugoslavia were up; sales to the latter two were facilitated by U.S. credit guarantees. The German Democratic Republic, Poland, and Yugoslavia accounted for two-thirds of U.S. agricultural exports to the region. U.S. grain exports declined, but shipments of soybean products and cotton increased considerably. Poland received no U.S. Government credit, but it did receive U.S. food aid worth \$34.4 million in fiscal 1983 and an authorization for \$83.7 million in fiscal 1984.

AGRICULTURE IN THE ECONOMY

The general economy, deteriorating in the past 3 years because of large debt repayment obligations to foreign creditors, apparently turned around during 1983. During the year, all countries continued their conservative policies of slower economic growth. Restrictions on imports, investments, and consumption were the key elements of economic policy. Debt reschedulings and new loans from the International Monetary Fund (IMF), the USSR, and Western banks relieved some of the financial pressures.

With the help of an economic upturn in Poland, aggregate national income in the region increased 2.5 to 3 percent in 1983. Hungary and Yugoslavia had the slowest growth rates, while the German Democratic Republic (GDR), Poland, and Romania had the fastest. However, the faster growth in the latter three countries was reflected in improved foreign trade balances, rather than better living standards.

Improved industrial production was the main contributor to the growth in national income, because agricultural production declined in all countries except Czechoslovakia and Poland. Poland had the fastest growth rate for industrial output, from its low base in 1982. The growth rate was about 1 percent in Hungary and Yugoslavia.

Gross agricultural production dropped 2 to 3 percent regionwide, as drought-reduced crop production more than offset good performances in several countries' livestock sectors. Gross farm output in Poland, while the highest in the last 4 years, remained lower than in any year from 1973 to 1979.

Plans for 1983 called for stable or lower investments, except in Poland. Preliminary reports indicate that actual investments exceeded the planned amounts.

Agriculture's share in total investments is unlikely to have increased except in Poland. In Poland, agriculture is supposed to get top priority in investment allocation, along with housing, fuel, and other sources of energy. Agriculture in Poland, including the related industries, should receive 29 percent of total investments in 1984.

The agricultural labor force has stabilized in the last few years with a quarter share in the total labor force; however, its share is below the regional average in Czechoslovakia and the GDR. The large outflow of farm labor in the 1970's has temporarily halted because of improved living conditions in the villages and because the capacity of industry to absorb additional workers has declined.

The standard of living deteriorated in most countries, as wage and salary increases did not keep up with rising consumer prices. The decline was probably more serious than the published per capita real income reveals. Yugoslavia experienced the sharpest decline in its standard of living. Its consumer price index was up 58 percent during 1983, and the food component was up 54 percent.

While prices controlled by the governments remained fixed, the goods under price control were in short supply, and people with increased disposable income purchased more of the uncontrolled products or turned to black markets. Shortages were widespread, as evidenced by the rationing of staple food in Poland, by the less comprehensive rationing system in Romania, and by a decree issued in Bulgaria imposing heavy fines on people hoarding flour. (*Thomas A. Vankai*)

GRAIN AND FEED

Good Grain Harvest Despite Drought

Total 1983 grain production is estimated at 100 million tons, the second largest crop, but 5 percent below the

Principal plan indicators, Eastern Europe, 1983 and 1984

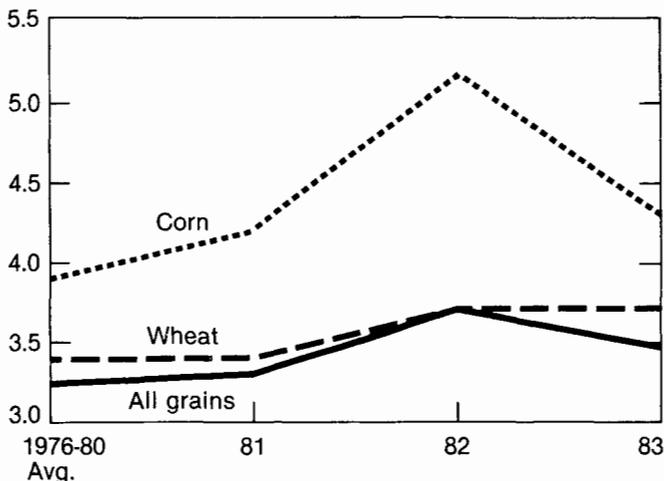
| Item | Bulgaria | Czechoslovakia | GDR | Hungary | Poland | Romania | Yugoslavia |
|------------------------------------|----------|----------------|--------|---------|---------|---------|------------|
| <i>Percent change</i> | | | | | | | |
| National income | | | | | | | |
| 1983 plan | 3.8 | 2.0 | 4.2 | 0.5-1.0 | 2-2.5 | 5.0 | 1.0 |
| 1983 actual | 3.0 | 2.2 | 4.4 | 0.4 | 4-5 | 3.4 | NA |
| 1984 plan | 3.8 | 2.9 | 4.4 | 1.5-2.0 | 2.6 | 7.3 | 2.0 |
| Industrial production ¹ | | | | | | | |
| 1983 plan | 4.8 | 2.4 | 3.8 | 1-2 | 4 | 8 | 2.0 |
| 1983 actual | 4.6 | 2.7 | 4.1 | 0.7 | 6.7 | 4.8 | 1.3 |
| 1984 plan | 5.0 | 2.9 | 3.6 | 1.5-2 | 4.5-5.5 | 6.7 | 3.0 |
| Agricultural production | | | | | | | |
| 1983 plan | 2.7 | 2.7 | NA | 1-2 | 1.5-2.4 | 5.1-5.6 | 2.5 |
| 1983 actual | -5.0 | 2.2 | (-2.4) | -3.2 | 3.6 | -2 | -2.1 |
| 1984 plan | 3.1 | 0 | 0.6 | 4-5 | 1.5-2 | 5.4-6 | 2 |
| Capital investment | | | | | | | |
| 1983 plan | -7.0 | NA | -10 | -10 | 1.6 | 0.7 | -20 |
| 1983 actual | -1.0 | 1-2 | (4) | -5 | 4.8 | 2.9 | -12.5 |
| 1984 plan | 1.9 | NA | (-10) | -10 | -2.8 | NA | -10 |
| Per capita real income | | | | | | | |
| 1983 plan | 2.8 | NA | 3 | -1-0.5 | NA | NA | NA |
| 1983 actual | 2.8 | 1.9 | 2.3 | 0 | 2-3 | 5.1 | -11.8 |
| 1984 plan | 2.5 | NA | 2.2 | 0 | 2 | 5.0 | NA |

NA = Not available. () = Estimate. ¹Socialized sector only.

Source: State plans and plan fulfillment reports in numerous publications.

Grain Yields in Eastern Europe

Tons/hectare



1982 record (table 1). Wheat output rose slightly to 34.5 million tons, while coarse grain production fell to 65.6 million, mainly because of reduced corn and barley output in the southern countries where a drought, which was particularly severe during the 1982/83 fall and winter and again in midsummer 1983, reduced yields. Record grain output in the GDR and Czechoslovakia, plus good production in Poland, partially offset declines in the other countries. Lower yields were responsible for 1983's performance, because grain area was up 2 percent from 1982, to the highest area since 1977 (table 2). Yields fell in all countries except Czechoslovakia and Poland.

The mild 1982/83 winter favored winter grain development throughout the region, but spring sown grains suffered in every country. Damage was most severe in the southern countries. Hungarian officials reported the worst drought in over 30 years, although grain production was higher than anticipated (*Vjesnik*, Sept. 23, 1983). They estimate that the total loss in farm output because of the drought nearly equaled the entire planned increase in Hungary's national income (Budapest Domestic Service, Sept. 5, 1983). Extensive irrigation of wheat and barley in Bulgaria (approximately 20 and 11 percent, respectively, of area sown to these crops) likely reduced drought damage (Bulgarian Telegraph Agency, July 26, 1983). Despite claims of the worst drought in 20 years, Bulgaria's grain harvest was 4 percent above the 1976-80 average.

Damage was probably more severe in Romania, where the southern and eastern grain areas were hard hit (*Scinteia*, May 29, 1983). Although 15 to 20 percent of the wheat and corn area had irrigation facilities last year, actual irrigated area was likely smaller because of chronic equipment failures. Official Romanian estimates placed the 1983 crop at least 2.3 million tons (11 percent) below 1982's. Romanian President Ceausescu announced early this year a 1983 grain crop of "around 20 million tons" (*Scinteia*, Dec. 10, 1983). This figure is at least 2 million tons above many Western estimates. This year's harvest is probably not a crop of 20 million tons of usable grain, because the Romanians usually

report production on a bunker-weight basis, with no allowance for foreign matter and excess moisture.

Procurements Recover in Poland, Yugoslavia

Poland and Yugoslavia are the only countries in the region that depend on State purchases from private producers to meet much of the food, feed, and industrial demand for grain. Following several years of poor grain procurements, Poland should meet its 1983/84 target of 5 million tons, including seed. July-December procurements totaled 4.6 million tons, about 70 percent above a year earlier. Higher grain procurement prices effective July 1, 1983, record rye production (the major grain procured), and lower livestock numbers on private farms contributed to 1983/84's recovery. Procured grain is used mostly for food, and shortfalls have been covered through either imports or diversion of some rye from feed to food use. This year's higher procurements should mean lower grain imports in 1984, but a higher percentage of feed grains in total imports than in previous years.

In Yugoslavia, private-producer sales of wheat are an important source for the milling industry. Attractive 1983 purchase prices and premiums have resulted in record wheat sales—estimated at 3.4 million tons, 600,000 higher than in 1982 and only 200,000 below the procurement target. Therefore, wheat imports in 1984 should be lower than last year.

The situation is the opposite for Yugoslav procurements. Officials have fixed the 1983 procurement price for corn below prevailing free market prices; consequently, procurements have suffered. On-farm feeding by small producers has increased, while large livestock and poultry producers, who depend on corn purchased from the State, have threatened to slaughter many of their animals for want of corn. The country's extremely poor foreign exchange position will hardly allow for higher feed imports, even if market supplies do not improve.

Feed Supplies Tight

Total domestic feed supplies in 1983/84 should be less than in 1982/83. Hay, silage, and other nongrain feeds suffered because of the drought. Only in Czechoslovakia are officials confident that feed supplies, with the exception of corn, will cover both current needs and also allow for stock building (*Hospodarske Noviny*, July 1, 1983). Officials in the GDR are recommending sharper culling of cows in order to hold grain imports to last year's level.

The situation is similar in Poland, although its implications for livestock production are more serious. Unfortunately, the better, but still relatively low, potato harvest, and low hay and root crop yields in 1983 will aggravate an already difficult feed situation. Reductions in an already depleted livestock inventory will be necessary if the country is unable to finance supplemental feed imports. Sales of mixed feed to private farmers during July-December 1983 were 9 percent above the very low levels of a year earlier, indicating only small improvement in supplies. Aside from rudimentary home mixes, these sales are the sole supply of mixed feeds available to private farmers.

Hungarian officials expect only local difficulties with feed supplies and no significant herd drawdowns (*Magyar*

Hirlap, Nov. 26, 1983). The situation is worse in Yugoslavia, where the prices paid for ingredients are compounding problems of crop shortfalls. These prices are well below actual farm production costs, resulting in supply shortfalls for mixed feed operations and the closing of several of these plants.

Grain Imports Fall

Grain imports probably fell again last year, to an estimated 8.5 to 9 million tons, from 11.4 million in 1982 (table 3). Imports peaked at 18.8 million tons in 1980. U.S. exports in 1983 totaled 1.6 million tons (1.1 million tons of corn), down from 3.5 million in 1982 and the lowest in more than a decade. The record 1982 grain crop, lower livestock inventories in several countries, competition from other suppliers, and inadequate foreign exchange supplies account for the poor U.S. performance.

Lower livestock numbers have reduced the consumption of mixed feeds in Czechoslovakia (by 230,000 tons according to officials) and the GDR. Additionally, competition from Canada has reduced demand for U.S. corn in the GDR. This trend should continue, as Canada signed a multiyear grain agreement with the GDR in early 1983. The agreement, backed by credit from the Canadian Government, calls for exports of 1 million tons a year through 1986.

Poland, formerly the region's largest importer, continues to import grain well below the levels of just 2 years ago; imports in 1983 were about 3.3 million tons vs 7.8 million in 1980. Prospects for an increase in 1984 are not bright. The recovery in 1983/84 procurements, plus foreign exchange shortages, should limit imports to 3 to 3.2 million tons. Plans to revive poultry production and increased use of rye flour in bread may result in higher corn imports at the expense of wheat.

Total East European grain imports in 1984 should be about 8.5 to 8.8 million tons, and grain exports will be close to 1983's 4 to 4.3 million tons.

Drought Affects 1983 Fall-Sown Grain

Fall sowing of grain was on schedule in 1983 and, except in Yugoslavia, covered or exceeded the planned area. However, the dry weather of early fall hindered germination, especially in Czechoslovakia where 25 to 30 percent of the winter grain had not germinated by mid-January. December precipitation in the GDR, Hungary, Romania, and Yugoslavia helped relieve some of the dryness, and a warm winter across the region resulted in less-than-average winterkill.

The only significant change in fall-sown area was in Yugoslavia, where higher input prices and producer dissatisfaction with official 1984 purchase prices led to a 10- to 12-percent decline in wheat area. A 5-percent increase in corn area sown this spring, however, should offset a large part of the decline in wheat.

(Robert Cummings)

OILSEEDS AND PRODUCTS

Total 1983 oilseed production was about the same as in 1982, with increases in rapeseed in the northern countries and decreases in soybeans and sunflowerseed in the

southern countries (table 4). Despite the good 1982 oilseed crop, meal consumption continued its decline in 1983, mainly because of sharply reduced meal imports, which were only partially offset by increases in soybean imports. Vegetable oil consumption showed a slight increase. The outlook for 1984 is for some increase in oilseed production, as well as in vegetable oil and meal consumption.

Oilseed Production Unchanged

Total oilseed production was about 4 million tons, roughly equal to 1982 production. The composition, however, has changed: 1983 rapeseed production was up 15 percent from the 1982 crop, while sunflowerseed production was down 9 percent, and the soybean crop fell 4 percent.

Soybean yields suffered as a result of dry weather in the southern countries. Yields for the region were down; however, greater production losses were prevented by an increase in sown area (table 5).

The sunflower crop in Hungary weathered the drought surprisingly well. After Hungarian officials estimated a 14-percent decline at harvest time, production turned out to be 600,000 tons, about the same as last year from a roughly equal area. Romania and Bulgaria were hit harder by the drought. Yields declined slightly in Bulgaria, while they dropped 14 percent in Romania. The Yugoslav crop continued to be affected by phomopsis, a fungal disease. Forced into a longer rotation, the planted area fell from 140,000 hectares in 1982 to 80,000 in 1983. Yields on the reduced area were up, 1.8 tons per hectare from 1.4 in 1982, reflecting progress in combating the disease.

Rapeseed, on the other hand, did exceedingly well, with an average yield of 2.1 tons per hectare, up from 1.8 in 1982. Plantings in Poland were below plan because of dry weather in fall 1982; however, yields were excellent because of favorable weather during the spring. Record yields were also attained in Czechoslovakia and Yugoslavia. Yields in the GDR remained the same as in 1982, but they were still the highest in Eastern Europe.

Meal Consumption Continues Its Decline

Oilseed meal consumption in 1983 declined about 11 percent to 5.9 million tons, about the same rate as in 1982. The decline was caused by a sharp reduction in Polish oilseed meal imports, down from 856,000 tons in 1982 to 399,000 in 1983 (table 6). Meal imports also declined in Czechoslovakia and Romania because of hard currency shortages. The lower regionwide meal imports more than canceled out meal supply increases brought about by larger soybean imports.

Domestic production of soybean meal in Eastern Europe increased about 18 percent in 1983 over 1982. This increase was a result of higher soybean imports by Poland and a good 1982 crop in the southern countries. Polish imports rose from 99,000 tons in 1982 to an estimated 180,000 in 1983. Eastern Europe's production of sunflower meal declined somewhat, but not enough to offset the rise in soybean meal production.

The outlook for 1984 is for a slight increase in meal consumption. With the exception of Poland, no significant

Oilseed meal utilization¹, Eastern Europe, 1979-83

| Item | 1979 | 1980 | 1981 | 1982 | 1983 ² |
|---|-------|-------|-------|-------|-------------------|
| 1,000 tons | | | | | |
| Processing from domestic crops ³ | | | | | |
| Soybean meal | 299 | 425 | 421 | 346 | 456 |
| Sunflower meal | 614 | 729 | 626 | 719 | 693 |
| Rapeseed meal | 667 | 325 | 651 | 588 | 553 |
| Fish meal | 89 | 86 | 82 | 77 | 73 |
| Imports | | | | | |
| Oilseed meal | 3,971 | 4,394 | 4,764 | 4,008 | 3,250 |
| Soybeans ⁴ | 639 | 679 | 538 | 442 | 470 |
| Sunflowerseed ⁴ | 66 | 27 | 37 | 37 | 15 |
| Fish meal | 508 | 383 | 309 | 325 | 400 |
| Exports | | | | | |
| Oilseed meal | 18 | 29 | 11 | 37 | 10 |
| Apparent meal consumption | 6,835 | 7,019 | 7,417 | 6,605 | 5,900 |

¹Including fish meal. ²Preliminary. ³Estimated from preceding year's harvest minus exports. ⁴Converted to meal equivalent.

Source: Country yearbooks and *FAO Trade Yearbook*.

increases in livestock inventories are planned, so overall meal requirements are not expected to rise much.

Poland's meal imports are expected to rise significantly. Because of increased domestic crushing capacity, Romania will likely increase its imports of soybeans while decreasing its meal imports. Meal imports by Yugoslavia and Hungary will probably decline slightly.

Vegetable Oil Consumption Up Slightly

With the help of higher domestic production, supplies of vegetable oil increased slightly throughout the region in 1983. In Yugoslavia, increases in soybean and rapeseed oil were partially offset by shortfalls in sunflowerseed oil. The major importers of vegetable oil are Yugoslavia, Poland, and the GDR. Imports by Poland and the GDR during 1983 were roughly the same as in 1982, about 125,000 and 100,000 tons, respectively. Yugoslavia, on the other hand, more than doubled its vegetable oil imports, from 79,000 tons in 1982 to about 165,000 in 1983. Of this, 132,000 tons came from the United States, financed by credit from the Commodity Credit Corporation (CCC). Poland bought only 11,000 tons from the United States, while the GDR bought nearly all its vegetable oil from West Germany. Imports of vegetable oil are expected to decline in 1984. However, high soybean imports and the excellent 1983 rapeseed harvest should lead to an increase in supplies.

Planting Intentions

Significant increases in the rapeseed crop can be expected. The plan in Poland called for 450,000 hectares to be planted to rapeseed. Because of dry weather, the plan was not met; however, it is estimated that a total of 410,000 hectares were planted, which is well above last year's 295,000. No changes have been reported in the GDR's seeding plans. However, recent reports indicate that the rapeseed crop has been wintering well, so it may exceed the 1983 harvest.

The 1984 plan for Yugoslavia calls for 138,000 hectares to be planted to soybeans, up from 100,000 in 1983, and 115,000 hectares to sunflowerseed, up from 80,000. Procurement prices for both oilseeds were raised significant-

ly to induce such increases. Nevertheless, with the disease phomopsis still a threat to the sunflower crop, farmers are unlikely to risk planting such a large area. Consequently, not much increase can be expected in the sunflower area. A disease-resistant strain is expected to be available by 1985, so production may rebound in 1986. A significant increase can be expected in the soybean area, but rises in the costs of inputs have made 1984 soybean prices less attractive. So, area may not reach the planned level. (*Nancy Cochrane*)

OTHER CROPS

Potato Production Steady

Potato production in 1983, at 54 million tons, hardly changed from 1982. Crop shortfalls in many countries were offset by a larger outturn in the region's major producer, Poland. The declines in several countries were attributable mainly to excess precipitation that delayed sowing and, later, to persistent drought. In Poland, the increase in potato production, 2 million tons, was tempered by a Colorado beetle infestation (*Dziennik Ludowy*, May 23, 1983).

About half of the potatoes produced in the GDR and in Poland are used for feed. The decline in the GDR hurts feed supplies; however, food demand for potatoes will be met. In Poland, the State purchases potatoes from farmers for food, industrial, or seed use; only small quantities are purchased for feed use. Procurements in Poland increased 23 percent in 1983, indicating an improved supply to consumers.

Sugar Beet Production Falls Short

Sugar beet production decreased to 44 million tons, from 50 million in 1982. Total refined sugar production, however, decreased only slightly, from 5.5 million tons in 1982 to 5.4 million. Higher sugar content than in 1982 offset the effect of lower sugar beet production. Because of poor weather, smaller crops occurred in all countries except Poland, where production increased, and Yugoslavia, where the crop remained the same size as in 1982. There were, however, slight cutbacks in the area planted in all countries except Yugoslavia. In Czechoslovakia, almost 10 percent of the crop had to be plowed under because of summer heat and drought damage, and in the GDR, spring planting was delayed because of wet fields.

In the future, Czechoslovakia would like to decrease the area devoted to sugar beets in order to plant more grain, while the GDR would like to increase production in order to cut down on sugar imports. All East European countries currently import raw sugar from Cuba as part of bilateral agreements.

Tobacco Production Up

Tobacco production in Eastern Europe, at 393,000 tons in 1983, was slightly higher than in 1982. Larger area in Yugoslavia and Bulgaria, the two major producers, chiefly contributed to the increase. Tobacco exports increased an estimated 7 percent from 1982, but imports were up also. Efforts to curb consumption by cigarette price increases and campaigns against smoking were unsuc-

cessful. For the first time, the GDR stressed tobacco production on private plots in order to reduce imports.

Imports from the United States increased to 2,469 tons, up 34 percent from 1982, mainly because of an 850-ton increase in exports to Bulgaria. Several East European countries have obtained licenses (Phillip Morris) and are interested in further western licensing arrangements (Marlboro) to manufacture foreign cigarettes, which could boost U.S. tobacco exports.

Cotton Production Off

Little cotton is produced in Eastern Europe, and only an estimated 3 percent of total cotton consumption is met from domestic output. All East European countries—including Bulgaria and Yugoslavia, the only cotton producers—are importers. Total seed cotton production in 1983 decreased substantially from 1982's 27,000 tons because of poor weather in Bulgaria. A 750-hectare increase in Yugoslavia's planted area, to 3,000 hectares, partially offset the Bulgarian loss. The USSR remained the main supplier of cotton to Eastern Europe; however, the United States, whose market share was zero in 1982, exported 40,000 tons (\$60 million) of cotton to Yugoslavia through CCC credit. Credit has been announced for cotton exports to Hungary (\$5 million) and Yugoslavia (\$60 million) in fiscal 1984. (Cynthia Taylor)

LIVESTOCK

Performance in the livestock sector, principally in Poland, Romania, and Yugoslavia, continued to be disappointing in 1983 because of inadequate concentrated feed imports. Low profitability for animal raising—particularly in Poland—and aggressive meat and live animal exports resulted in continued meat rationing in Poland and Romania and chronic shortages in Yugoslavia. Several other countries reported sporadic shortages. Per capita consumption of livestock products changed little last year, and this trend will persist in 1984.

Animal Numbers Rose; Meat Output Fell

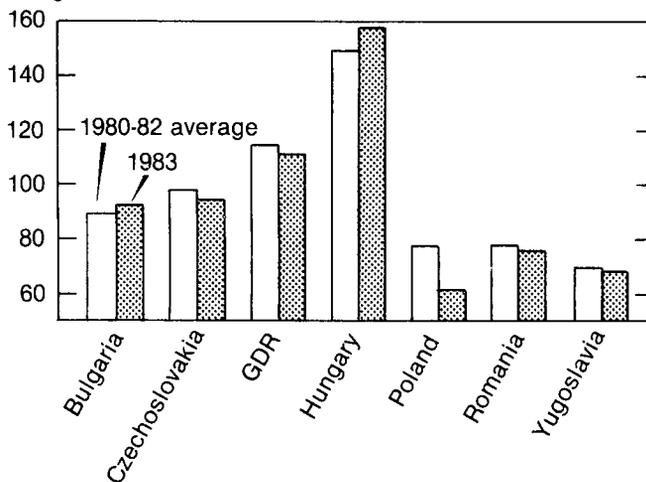
Animal numbers increased slightly last year. Total cattle and cow herds rose almost 2 percent each, and hog and poultry numbers increased 2 and 3 percent, respectively. Sheep numbers were up more than 4 percent (table 7). Changes were uneven in hog inventories; they rose significantly in the GDR, Hungary, and Romania, but fell 10 percent in Poland. Romania reported increases for every major livestock category that were well in excess of any expansion by other countries. However, reports of meat and livestock product shortages and health problems in livestock raising call into question the accuracy of the Romanian numbers.

Meat production fell only in Poland and Yugoslavia during 1983, but the decline in Poland was so large—10 percent—that regionwide output dropped an estimated 1 percent to 11.4 million tons (table 8).

The mild 1982/83 winter and more favorable producer prices in some countries lead to near-record milk production of 43.8 million tons, 5 percent above 1982 output. In Poland, the region's major producer, officials want to replace with dairy products and eggs the protein lost in

Per Capita Meat Output

Kilograms



the Polish diet because of lower meat consumption (*Rzeczpospolita*, May 12, 1983). Attention will therefore continue to be focused on modernizing Poland's milk industry, which suffers from inadequate milking and refrigeration capacity (*Zycie Warszawy*, Feb. 10, 1984). These inadequacies, plus supply mismanagement, were responsible for the reimposition of butter rationing last October, despite record milk procurements (*Rzeczpospolita*, Jan. 4, 1984).

Low Profitability Hampers Output In Poland, Yugoslavia

Low profitability is an especially acute problem for livestock producers in Poland and Yugoslavia, and it contributed significantly to last year's drop in meat output and major livestock numbers. The situation is most severe in Poland, where, by the end of 1982, the procurement price for 1 kilogram of slaughter hog covered only 73 percent of the cost of production (*Sztandar Mlodych*, Nov. 16, 1983). Consequently, herd drawdowns for hogs have been so drastic that no recovery in pork output is expected before late this year or early 1985.

Costs are similarly high for Polish cattle breeders. The yearend 1982 procurement price for 1 kilogram of slaughter cattle was 84 percent of the production cost. This, combined with cattle's relatively long breeding period and recent high calf slaughterings, indicates that beef production should not recover until well after profitability is restored. Milk production remains the most profitable livestock enterprise in Poland, and this should guarantee another good year of milk production in 1984.

Polish officials have taken several steps to bolster livestock profitability. Effective January 1, 1984, officials raised guaranteed deliveries of feed concentrates and coal (the latter is used in steaming potatoes that are fed to hogs) for each hog under contract to a state procurement center. Low-interest credit for buying piglets is now available, plus the purchase price of hog breeding stock is subsidized. Last year's relatively favorable crop production has led to a fall in free market prices for grain and potatoes, which should also benefit livestock producers.

Yugoslav meat producers are facing high feed costs, reduced demand at home, depressed world prices, and import barriers by the European Community (EC). Livestock exporters claim they are unable to buy slaughter animals at prices low enough to compete on world markets, while producers say high feed costs make livestock fattening unprofitable. At home, lower consumer incomes constrained demand for meat sold on the higher priced free market last year, and supplies in state outlets did not cover demand.

Meat Consumption Stabilized

Per capita meat consumption likely changed little last year (table 9). The GDR remained the number-one consumer at 91 kilograms, followed by Czechoslovakia and Hungary. Consumption declined again in Poland; dropping to 57 kilograms, 17 below the 1980 peak. Yugoslavia reports the lowest consumption—55 kilograms per capita. Czechoslovakia and Hungary plan no increase in per capita meat consumption; the GDR has already attained relatively high consumption; and a decline is possible in Yugoslavia. Only Bulgaria appears willing and able to increase consumption.

Rationing remains in force in Poland and Romania for most livestock products. No early end is in sight for meat rationing in Poland, as monthly meat supplies from the State will be an estimated 7 percent less this year than last.

Livestock Trade Pattern Unchanged

Despite domestic shortages, Eastern Europe remains a net exporter of live animals and livestock products. These exports are primarily of high-quality products (canned hams, bacon) to Western markets and are an important source of hard currency for all countries. In 1981 and 1982, Poland and Yugoslavia used their hard currency from these exports to finance a larger amount of lower quality meat imports. Complete data for the region's meat trade are available only through 1982. In that year, exports were 1.1 million tons, similar to earlier years. Imports were 357,000 tons, down slightly from 1981, but well above the 1976-80 average. Romanian exports dropped 34 percent, highlighting the livestock sector's problems in that country.

In 1983, Poland reverted to its traditional position as a net meat exporter, with exports of approximately 100,000 tons and imports of only 50,000. This surplus should not be repeated this year, as imports are planned to double. Slaughter hogs will also be purchased from the GDR for processing in currently underutilized slaughterhouses in western Poland. Most meat imports will be pork and will come mainly from Hungary, the first large-scale imports of meat from that country, and China (Warsaw Home Service, Jan. 18, 1984). Payment will probably be either through barter or convertible currencies.

No Growth Expected

The outlook for 1984 livestock production is for no improvement. Livestock numbers in most countries should remain unchanged or fall. No change is expected in the GDR; Romanian President Ceausescu has called for no increase in hog and poultry numbers; and declines are expected in Hungary and Yugoslavia. Only in Poland

is a significant increase expected, with hog numbers up 1 to 1.5 million head or about 6 to 9 percent (*Trybuna Ludu*, Oct. 29-30, 1983). Meat production should rise slightly this year in all countries except Poland and Yugoslavia; Polish officials forecast a 125,000-ton drop in 1984's meat production (Polish report to the Economic Commission for Europe, March 1984). (*Robert Cummings*)

FOREIGN TRADE AND FINANCE

Trade Balance Continues To Improve

The trade balance of Eastern Europe continued to show strong improvement in 1983. Based on available data, the region likely posted the equivalent of a \$4.5 billion surplus, with exports and imports up 7 and 3 percent, respectively (table 10). The need to service maturing foreign debts without recourse to new loans has forced a large cut in imports; total imports last year, in current prices, were 10 percent less than the 1980 peak (40 and 29 percent lower, respectively, for Poland and Romania). All countries except Czechoslovakia—where the balance remained positive—improved their trade balance. Yugoslavia remains the only country importing well in excess of exports.

Of greater importance to debt servicing than the overall trade balance is the region's balance of convertible currency trade. This balance includes almost all trade with Western nations, plus a portion of trade with countries of the Council for Mutual Economic Assistance (CEMA) and other countries with nonmarket economies. The share of trade conducted in convertible currencies varies greatly; it ranges between approximately 60 percent in Yugoslavia and 20 percent in Bulgaria. Complete data for 1983 are unavailable, but several countries—Czechoslovakia, the GDR, Hungary, and Romania—reported larger convertible currency surpluses than in 1982, while Yugoslavia reported an almost 50-percent decrease in its deficit (*Borba*, Feb. 17, 1984). Import cutbacks—in Bulgaria, Czechoslovakia, and Yugoslavia—plus larger exports for all countries except Bulgaria are responsible for last year's good performance.

The region's balance of trade conducted in nonconvertible currencies, however, continued in deficit. In Yugoslavia, exports fell approximately 12 percent, while imports were down only slightly, leaving that country with a deficit in nonconvertible trade following a surplus in 1982. Poland's trade continued to be in deficit because of a negative trade balance with the Soviet Union, which is expected to continue through the 1980's.

Large Drop in Farm Imports

Although complete data are unavailable, agricultural imports likely remained well below historic levels in 1983, following their sharp decline in 1982. Farm imports in 1982 fell 19 percent to their lowest level since 1978. Because of this drop, 1982's agricultural trade deficit fell from the equivalent of \$4.1 billion in 1981 to \$1.8 billion.

Poland, the region's major importer, continued to cut agricultural purchases in 1983. The value of all farm imports (excluding cotton and fish meal) fell 25 percent while exports rose 27 percent, leaving the country with

an agricultural trade deficit of approximately \$240 million, the lowest in over a decade. The turnaround in farm trade on convertible currencies was even more stunning. The reported deficit was \$120 million in 1983, compared with \$1.8 billion as recently as 1981. Higher-than-expected exports of meat and livestock products, frozen fruit and vegetables, and sugar, coupled with lower-than-planned feed imports, were responsible; purchases of oil meal, fish meal, and chemical feed additives were 26 to 59 percent less than planned (*Zycie Gospodarske*, Feb. 12, 1984).

Hungary, the region's biggest agricultural exporter, took advantage of 1982's generally favorable crop and livestock production to increase exports 7 percent last year (*Magyar Hirlap*, Feb. 4, 1984). The other major exporters—Bulgaria, Romania, and Yugoslavia—also likely posted increases.

The relatively poor agricultural year of 1983 should restrict export growth this year. Nonetheless, Yugoslav farm shipments could benefit from a trade agreement with the EC, which came into force early last year (*Borba*, Feb. 24, 1983). The agreement runs for 5 years and calls for, among other things, lower EC trade restrictions on exports of Yugoslav baby beef, fruit, and some liquors.

Foreign Debt Increases Slightly

Net hard currency debt in Eastern Europe rose slightly last year to approximately \$72.8 billion. Little new lending occurred in 1983, mostly to Yugoslavia, and the addition of unpaid interest onto the existing debt of Poland and Yugoslavia accounted for almost all of the regional increase. Because of improved hard currency trade balances and low foreign lending, only Hungary, Poland, and Yugoslavia did not reduce their net debt in 1983. Continued declines are almost certain in Bulgaria and Czechoslovakia because of conservative borrowing attitudes; Czechoslovak officials expect to have all of the country's outstanding debt paid off by 1986.

The U.S. Government in early 1984 signed an agreement to reschedule 60 percent of the principal repayments due in 1983 on government-guaranteed credit extended to Romania. In June 1983, bankers rescheduled Romania's commercial debt, postponing almost 70 percent of 1983's principal repayments to 1987-89.

Poland's financial situation remains serious, and rescheduling has become almost an annual event. The country's net debt increased 11 percent to \$26 billion in

Estimated net hard currency debt, Eastern Europe, yearend 1981, 1982, and 1983

| Country | 1981 | 1982 | 1983 |
|----------------|------------------------|------|------|
| | <i>Billion dollars</i> | | |
| Bulgaria | 2.2 | 1.7 | 1.4 |
| Czechoslovakia | 3.4 | 3.3 | 2.7 |
| GDR | 12.3 | 10.7 | 9.1 |
| Hungary | 7 | 6.6 | 6.8 |
| Poland | 24.7 | 23.8 | 26.4 |
| Romania | 9.8 | 9.4 | 8.8 |
| Yugoslavia | 16.3 | 16.8 | 17.6 |
| Total | 75.7 | 72.3 | 72.8 |

Source: From the forthcoming article "Eastern Europe Facing Up to the Debt Crisis," by R. Miller and D. Barclay in a Joint Economic Committee print assessing the economies of Eastern Europe.

1983, mostly because of nonpayments. The 1983 rescheduling for commercial debt was signed in November and covered 95 percent of the principal due on medium- and long-term debt.

Poland has reportedly rescheduled 95 percent of its commercial debt coming due between 1984 and 1987. This is the first multi-year rescheduling for the country and highlights the long-term seriousness of Poland's debt. Under the agreement, interest payments must be kept current, but a significant amount of these payments will be returned to Poland as short-term loans. Payment of the rescheduled principal—estimated at \$7.3 billion—will be due between 1989 and 1994.

No U.S. Government-backed Polish debt has been rescheduled since 1981 because of the sanctions following the imposition of martial law in Poland. However, the U.S. Government announced in October 1983 that it was willing to enter into negotiations with the Polish Government to reschedule U.S.-backed credit to Poland. Talks have been held, but no agreement has been reached. Direct Western government or government-backed credit accounts for about 55 percent of Poland's debt.

Hungary and Yugoslavia used their membership in the IMF to manage their debt more easily. In April 1983, Hungary received a \$100 million short-term loan from the Bank for International Settlements and, in January 1984, received a \$450 million loan from the IMF for balance-of-payments adjustment. In return for IMF assistance, Hungary has agreed to undertake certain changes in economic management. One of these is the devaluation of the national currency, the forint. Between mid-1982 and 1983, the forint was devalued 18 percent against the dollar.

Yugoslavia has reportedly reached an agreement in principle with the IMF on economic reforms that should clear the way for a \$400 million standby loan, plus open the door for negotiations with commercial bankers over repayment of the country's 1984 debt. This assistance is badly needed. Debt service obligations in 1984, including arrearages from last year, are estimated at \$5 billion. Yugoslavia made an estimated \$3 billion in payments on its debt last year, and reached a rescheduling and financing agreement with bank creditors, certain Western governments, and the World Bank.

The IMF agreement will likely result in a further devaluation of the dinar, increased interest rates, and a general decline in consumption throughout the economy. The Yugoslav Federal Government, through its National Bank, also agreed in late 1983 to be the final guarantor of all of the country's debts. This was a major demand of the IMF and should allow the Government to centralize control over contracting new debt.

Prospects Improved

The worst of Eastern Europe's immediate foreign trade and finance problems should be over. Except in Poland and Yugoslavia, debt reschedulings and current maturity schedules have given the region a few years breathing space. Official policies to maintain trade surpluses in order to provide funds for debt service will continue, but will hold the danger that the region's long-term export

potential may be weakened by deferring needed capital imports. This, combined with the maturity of rescheduled payments later in the decade, could place several countries in a debt crisis situation similar to that of just 2 or 3 years ago. (Robert Cummings)

U.S. AGRICULTURAL TRADE

U.S. agricultural exports to Eastern Europe in 1983, valued at \$899 million, were 3 percent higher than in 1982, but still only 50 percent of the 1981 value (table 11). Lower U.S. agricultural exports to Eastern Europe and higher total imports from the region reduced the U.S. trade surplus to \$128.2 million, down 69 percent from 1982 and the lowest since 1972. However, the agricultural trade surplus, at \$634 million, was little changed from 1983. Estimated transshipments, at \$61 million, accounted for 7 percent of U.S. agricultural exports and were less than one-half the 1981 value. Exports were up to Hungary, Poland, and Yugoslavia, but down substantially to Bulgaria, Czechoslovakia, and the GDR. Agricultural exports to Hungary and Yugoslavia showed marked improvement.

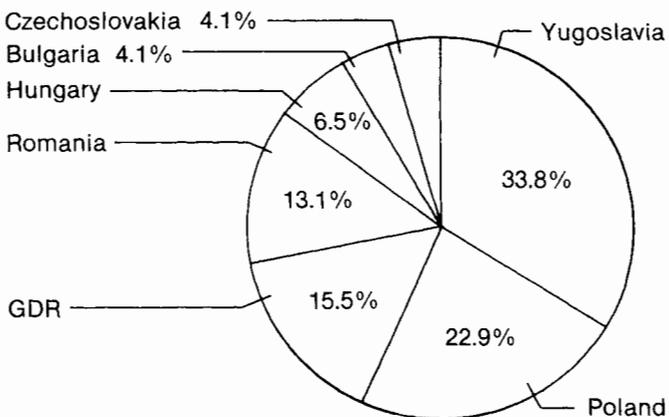
The GDR, Poland, and Yugoslavia received over two-thirds of U.S. agricultural exports. Yugoslavia, our largest customer in 1983, accounted for over one-third of total U.S. agricultural exports to this region. Poland still retained its relative share, but moved from third to second place. The GDR, our largest customer in 1982, dropped to third place.

Of total U.S. exports to Eastern Europe, agriculture's share was 60 percent last year, close to 1982 but below historical levels. A substantial drop in the share of farm products in total exports to Czechoslovakia was offset by a large increase for shipments to Hungary and Yugoslavia, the only two countries receiving CCC credit.

Exports Decline; Cotton and Vegetable Oil Shipments Improve

In 1983, the United States exported 1.6 million tons of grain (valued at \$222 million) to Eastern Europe, down

Individual Country Shares of U.S. Agricultural Exports to Eastern Europe, 1983



Source: Bureau of the Census, U.S. Department of Commerce; U.S. Export Sales, Foreign Agricultural Service, USDA.

Agriculture's share of total U.S. exports to Eastern Europe, 1978-83

| Country | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 |
|----------------|---------|------|------|------|------|------|
| | Percent | | | | | |
| Bulgaria | 83.0 | 72.6 | 80.6 | 79.1 | 60.1 | 56.7 |
| Czechoslovakia | 75.4 | 92.1 | 87.0 | 75.1 | 80.8 | 50.4 |
| GDR | 92.6 | 95.1 | 95.5 | 96.7 | 92.1 | 94.6 |
| Hungary | 53.9 | 34.0 | 37.7 | 16.6 | 10.5 | 52.9 |
| Poland | 74.8 | 82.6 | 81.4 | 87.2 | 61.8 | 64.1 |
| Romania | 47.4 | 67.8 | 65.4 | 75.3 | 59.8 | 63.6 |
| Yugoslavia | 23.4 | 40.7 | 38.0 | 22.6 | 32.8 | 50.4 |
| Eastern Europe | 57.8 | 69.8 | 69.4 | 66.5 | 55.0 | 59.7 |

Source: Bureau of the Census, U.S. Dept. of Commerce.

53 percent from 1982 and 78 percent from 1981 (table 12). Corn exports fell to 1.1 million tons (\$139.5 million), down from 3.2 million tons in 1982. Wheat exports, showing some improvement, increased to 385,000 tons (\$61 million), from 334,000 in 1982.

The U.S. share in total East European grain imports probably declined further, down from 31 percent in 1982 and an average 45 percent during 1976-80. The 70-percent market share of corn imports in 1982 also likely decreased. U.S. wheat showed some slight improvement from 1982's 6-percent share, but it was still far below the 28-percent average during 1976-80.

Soybean exports increased to 720,000 tons (\$181 million) in 1983, up from 546,000 tons in 1982, with expanded shipments to Poland, Romania, and Yugoslavia. Soybean meal and cake exports also improved, rising to 755,000 tons (\$174.7 million), compared with 524,000 tons in 1982. Exports decreased to Bulgaria, Czechoslovakia, the GDR, and Romania, but they improved significantly to Yugoslavia, Poland, and especially Hungary, which imported no U.S. soybean meal and cake in 1982. Nevertheless, exports were still down 56 percent from the peak year of 1980.

Vegetable oil exports, at 143,000 tons (\$63 million), were up fivefold from 1982. Exports to Poland, a major importer, remained on the 1982 level; however, shipments to Yugoslavia increased to 132,000 tons.

Cotton exports, at 2,000 tons in 1982, increased to 47,000 tons (\$82.6 million), with Yugoslavia the only importer. U.S. exports of cattle hides remained at 1982's 2.5 million pieces (\$78 million), with greater exports to Czechoslovakia and Romania and much less to Poland.

U.S. agricultural imports from Eastern Europe increased to \$264 million in 1983, up from \$228 million in 1982 (table 13). The value of imports of processed meat, primarily canned ham, increased 16 percent and accounted for 60 percent of agricultural purchases. The increase was largest for Poland. Imports of other products from Poland, as well as from Bulgaria, Hungary, and Romania, also increased. Other products, — valued individually at \$5 million or more — included feathers and down, cheese, wine, tobacco, and hops, and accounted for 29 percent of total U.S. agricultural imports from Eastern Europe.

CCC Credit and Food Aid

A special article in this report covers East European participation in CCC's commercial Commodity Export Pro-

U.S. food aid to Poland, fiscal 1983 and 1984

| Commodity | FY1983 | | FY1984 | |
|----------------|----------------------|-------------|----------------------|-------------|
| | P.L. 480 Title II | Section 416 | P.L. 480 Title II | Section 416 |
| | Tons | | | |
| Wheat flour | 42,139 | 0 | 32,484 | 0 |
| Dried milk | 16,537 | 960 | 0 | 12,274 |
| Butter | 13,593 | 960 | 0 | 31,500 |
| Vegetable oil | 10,784 | 0 | 9,873 | 0 |
| Cheese | 8,924 | 960 | 0 | 2,580 |
| Corn soy blend | 6,805 | 0 | 0 | 0 |
| Rice | 6,093 | 0 | 7,970 | 0 |
| Rolled oats | 4,219 | 0 | 1,500 | 0 |
| Corn soya milk | 2,269 | 0 | 0 | 0 |
| Soy blend | 488 | 0 | 0 | 0 |
| Dried peas | 71 | 0 | 0 | 0 |
| Butter oil | 0 | 1,470 | 0 | 1,320 |

Source: FAS/USDA.

gram. The United States also provided food aid to the Polish people last year under Title II of P.L. 480 and Section 416 of the Overseas Dairy Donation Program. In fiscal 1983, food aid amounted to \$28.4 million under P.L. 480 and \$5.9 million (market value) under Section 416. The authorization for fiscal 1984 amounts to \$22.4 million under P.L. 480 and \$61.34 million under Section 416. The food aid is distributed by four private voluntary organizations: CARE, Catholic Relief Service, Food for Poland, and World Vision. (*Cynthia Taylor*)

INVESTMENT AND INPUTS

After sharp declines in 1982's agricultural investment everywhere except Czechoslovakia, investment in 1983 showed some recovery. There were increases in the GDR, Czechoslovakia, Romania, and Poland, and declines in Bulgaria, Hungary, and Yugoslavia. The decline in agricultural investment was most severe in Yugoslavia, where overall investment fell 12.5 percent. Agriculture's share probably remained constant at around 6 to 7 percent. The share of agriculture in total investment remained fairly steady, ranging from the 6 percent in Yugoslavia to 17 percent in Romania. Plans for agricultural investment in 1984 are for slight increases, except in Yugoslavia and Hungary, where further declines are projected.

Fertilizer Use Unchanged

Fertilizer use in 1983, measured in active ingredients, is estimated at 209 kilograms per hectare in Eastern Europe, essentially unchanged from 1982. Use was up 2 percent in Yugoslavia, 4 percent in Czechoslovakia, and 7 percent in Romania. There was very little change in the GDR, Hungary, and Bulgaria, while Poland showed a 5-percent decline. Overall use was still below that of 1980 and 1981.

All the East European countries except Poland and Yugoslavia are net exporters of nitrogen fertilizers. The GDR and Romania are net exporters of all fertilizers; the rest import significant quantities of phosphorous and potassium fertilizers. All countries are net importers of the necessary raw materials—natural gas, phosphate rock and, except for the GDR, potash. Fertilizer use in

these countries has been constrained by pressures to increase exports and decrease imports. Increases in production in most countries have been exported rather than consumed domestically in order to increase hard currency earnings. Romania, for example, exports well over half its mineral fertilizer production, while at the same time having one of the lowest application rates in Eastern Europe.

Higher fertilizer use in Yugoslavia was helped by increased domestic production of nitrogen and phosphate fertilizers and higher imports of potash and phosphate rock. Nevertheless, imports of nitrogen fertilizer have fallen considerably, and there have been reports of shortages for 1984 spring planting. The Polish Government has also made efforts to increase fertilizer exports while constraining domestic demand by steep price increases. Thus, there seems to be little hope for further increases in availability in either country, and consumption will likely remain below 1981 levels.

The outlook for 1984 is for a slight increase in fertilizer consumption. Bulgaria plans a rise of 6 percent in nitrogen fertilizer deliveries to farms and 10 percent in deliveries of phosphorous and potassium fertilizers. Czechoslovakia and Hungary will most likely see slight increases. Prices in the GDR and Yugoslavia have increased sharply—60 and nearly 100 percent, respectively. Thus, increases in consumption will at best be minimal in those countries. Poland is planning an 8-percent increase in consumption. It is doubtful that the target will be met. In fact, the lack of increase in fertilizer consumption in most countries is not a serious problem. There have been reports from the GDR, Czechoslovakia, and Hungary of overuse of fertilizer, particularly nitrogen.

Plant Protection Agents in Short Supply

A real problem throughout the region is a shortage of plant protection agents; the total supply of which is more dependent on imports than that of fertilizers. Czechoslovakia, for example, produces the plant protection agents needed for grains, but it has to import the ingredients and also has to import the agents used on oilseeds. Czech imports of these materials from the West come to \$20 million a year. Reportedly, for some agents, only 30 to 40 percent of the needs are met (*Agrochemia*, No. 5, 1983). In Yugoslavia, the situation is similar.

Fertilizer use in Eastern Europe¹, 1975 and 1980-1983

| Country | 1975 | 1980 | 1981 | 1982 | 1983 ² |
|------------------------------|------|------|------|------|-------------------|
| Kilogram/hectare arable land | | | | | |
| Bulgaria | 157 | 199 | 250 | 250 | 250 |
| Czechoslovakia | 295 | 336 | 344 | 321 | 333 |
| GDR | 370 | 326 | 344 | 281 | 278 |
| Hungary | 276 | 262 | 278 | 288 | 290 |
| Poland | 236 | 244 | 235 | 226 | 215 |
| Romania | 88 | 113 | 103 | 102 | 109 |
| Yugoslavia | 90 | 105 | 128 | 123 | 126 |
| Eastern Europe | 199 | 212 | 219 | 208 | 209 |

¹Nitrogen, phosphate, and potassium in nutrients. ²Estimate.

Source: Statistical yearbooks of respective countries.

Tractor and grain combine numbers (January 1)

| Country | Tractors | | | Grain combines | | |
|-------------------------|-------------|-------|-------|----------------|------|------|
| | 1981 | 1982 | 1983 | 1981 | 1982 | 1983 |
| | 1,000 units | | | | | |
| Bulgaria | 153 | 152 | 152 | 10 | 10 | 9 |
| Czechoslovakia | 137 | 134 | 132 | 18 | 18 | 18 |
| GDR | 145 | 147 | 150 | 14 | 14 | 15 |
| Hungary | 55 | 55 | 55 | 14 | 13 | 13 |
| Poland | 619 | 655 | 694 | 39 | 43 | 46 |
| Romania ¹ | 147 | 156 | 169 | 39 | 44 | 48 |
| Yugoslavia ² | 416 | 596 | 622 | 9 | 9 | 9 |
| Total | 1,672 | 1,895 | 1,974 | 143 | 151 | 158 |

¹Self propelled combines only. ²All types of combines.

Sources: Country yearbooks.

Farm Machinery: Numbers Up, But Problems Remain

The trend throughout Eastern Europe has been a steady increase in both numbers and horsepower of tractors and combines. This trend most likely continued in 1983. Most countries have consistently reported increases in deliveries to farms.

Underneath these trends lie several problems that indicate a slightly less sanguine situation. State deliveries to farms, while slowly increasing, are often late or below planned levels. A report from Czechoslovakia complained of delays in fall planting resulting from late deliveries. Therefore, 20 to 30 percent of the winter wheat was emerging late, and some land would have to be resown in the spring (*Hospodarske Noviny*, Feb. 4, 1983).

Machinery imports are also frequently less than planned. Hungary reported that in 1983 only two-thirds of the tractors that were contracted for with the Soviet Union and Czechoslovakia were actually delivered (*Muszaki Elet*, Aug. 4, 1983).

One reason tractor numbers continue high in most countries despite late or below-plan deliveries is that many are kept in use long after their value has depreciated to zero. In Hungary, for example, 45 percent of the tractors and 28 percent of the combines had zero book value in 1982 and should have been replaced. Furthermore, a tractor there typically gets 2,000 hours of use a year, versus 800 hours in the United States (*Magyar Hirlap*, July 14, 1983). Other problems frequently noted include chronic shortages of spare parts; inadequate storage facilities, so that tractors are often kept out in the open; and a lack of trained operators.

Irrigation Expanding Very Slowly

The area under irrigation is slowly expanding. However, many projects are behind schedule, and progress is limited by overall constraints on investment. Irrigation is acknowledged to be inadequate nearly everywhere. Arable land covered by irrigation ranges from less than 2 percent in Yugoslavia to 28 percent in Bulgaria.

The return on investment seems to be disappointing, even in those countries where irrigation is more extensive. In Romania, much of the irrigation equipment is in disrepair, and much of the capacity is unusable because of silting. Consequently, despite a 20-percent area under

irrigation, Romanian crops suffered considerably during last year's drought. Bulgaria fared somewhat better; however, there have been complaints in the press that corn and wheat yields on irrigated land were less than expected. (*Nancy Cochrane*)

AGRICULTURAL POLICIES

Agricultural policies in Eastern Europe continued to favor import substitution and, in the southern countries, higher farm exports. Changes in producer and consumer prices were used to achieve these policies. Hard currency shortages and credit restrictions from the West helped shift some trade to CEMA countries. This shift from the West to East is generally viewed as temporary and not as a step toward isolation. The region remains interested imports of high technology products and contact with capitalist markets.

Long-planned economic integration among CEMA members, however, has been slow. The economic policy of CEMA members revolves around the objective of harmonizing state planning, decentralized economic control, and independent enterprise management. The differing emphasis between rigid plan enforcement and management freedom distinguishes the countries from each other.

CEMA Cooperation Discussed; Summit Planned

The agricultural policies of CEMA members are coordinated by an intergovernmental committee, which held its 37th meeting in October in East Berlin. The principal proposals at the meeting included promotion of barter trade and additional efforts for energy and raw material conservation. These proposals were obviously generated by the difficulty in obtaining import financing from the West and the growing cost of oil and mineral extraction in the Soviet Union, which the East Europeans help finance in return for guaranteed energy supplies.

Recently, the need for regionwide planning and joint investment in agriculture received as much attention as the energy supply. During the East Berlin meeting, the Bulgarian Chairman of Ministers, Grisha Filipov, mentioned that the further increase in production capacity of agricultural land and the provision of additional food is just as expensive as energy production. Accordingly, the pooling of investment in agriculture and the food industry is just as important as in the exploitation of energy (*Rabotnichesko Delo*, Oct. 19, 1983). The Hungarian

delegate also emphasized the capital intensiveness of modern agriculture and the food industry and pleaded for industrial support and well organized joint research (*Nepszabadsag*, Oct. 19, 1983).

Eastern Europe's precarious financial and trade situation should be high on the agenda of the much-postponed summit meeting of CEMA members, which is now scheduled for June. The Soviet Union will likely push for more imports from individual East European countries to balance its bilateral trade. The East Europeans may bargain for higher raw material and energy supplies and increased prices for their finished-product exports to offset the rising cost of oil and gas from the Soviet Union.

Other important issues will be attempts to raise agricultural output and a reexamination of economic cooperation and plan coordination among CEMA members. This may be discussed in connection with East European cooperation in implementing the Soviet Union's Food Program, which is designed to raise farm output and food supplies in the USSR. Several Czechoslovak firms have already signed contracts to supply fertilizer plants and machinery to the Soviet Union, and Hungarian officials anticipate higher exports of food-processing equipment and crop-raising technology as the Food Program proceeds.

Producer Prices Raised

East European authorities have raised procurement prices in order to stimulate production. To uphold profitability despite diminishing subsidies, procurement price increases were steeper than in previous years. Generally, crop prices were increased proportionately more than livestock prices to discourage the fast expansion of livestock output without an adequate feed base.

In Poland, this price policy induced farmers to step up grain deliveries to the State, but it lowered livestock holdings, threatening the meat supply in 1984. As of July 1983, Polish wheat prices were increased 34 percent, young cattle prices 20 percent, and hog prices 8 percent. Milk prices were raised least, so as to influence a shift from dairy farming to beef cattle.

In Czechoslovakia, producer prices for crops were increased an average of 6.4 percent. In Hungary, all agricultural procurement prices were raised an average of 4.4 percent. Among the inputs, fertilizer prices in Hungary were hiked 16 percent, small machinery 12 percent, and protein meal 8 percent. The GDR announced a dramatic 50- to 60-percent procurement price increase. The price rise in the GDR is described as the steepest within the 35-year existence of the country.

Yugoslavia unsuccessfully fought its spiraling inflation with a general price freeze. This freeze, in effect for a year, was selectively and gradually lifted beginning in August. Prices, however, had been creeping upward throughout the year despite the freeze, and they erupted following the relaxation of controls. Subsequently, the freeze was reinstated at the end of December.

Demand Suppressed

Restrictions on demand to foster self-sufficiency were twofold. Higher retail prices reduced demand, and shortages or ration coupons limited the availability of food.

Hungary opted for price increases. Poland and Yugoslavia increased prices and rationed selected foods. Romania allowed shortages and used rationing in some counties to equalize distribution. Bulgaria, Czechoslovakia, and the GDR continued heavy food price subsidies.

Food price increases were the highest—an average 54 percent—in Yugoslavia. In Hungary, the increases ranged from 10 to 23 percent. Bread, cooking oil, and sugar prices were raised in September, and meat prices in January 1984. Poultry prices were raised only 10 percent because of export difficulties; beef prices were increased the most. After long deliberation and public discussion, average food prices in Poland were increased only 10 percent in January 1984, less than anticipated, and these prices were accepted by the population without violent objection. (*Thomas A. Vanka*)

OUTLOOK FOR 1984

Official plans, investment data, crop development, livestock inventories at the beginning of the year, and available feed reserves are the principal bases for forecasting crop and livestock output. Aggregate agricultural growth plans for 1984 range from no growth in Czechoslovakia to 6 percent in Romania. In Czechoslovakia, the GDR, and Hungary, the planned 5- to 10-percent increase in crop production should be canceled out by declines in the livestock sector. In the other four countries, plans call for more equal growth rates for crops and livestock.

Annual production plans always take into account the preceding year's performance. Planners expect faster growth after a poor year than after a good one. However, the modest plans for 1984 also consider current austerity measures that impose restrictions on investment and imports in all sectors of the economy.

While the largest net importers of agricultural commodities, the GDR and Poland, strive for higher self-sufficiency ratios, the southern countries wish to enlarge their agricultural trade surplus. Because of a general lack of investment funds, production growth must be generated through better mobilization of domestic resources, improved management efficiency, and higher productivity.

Investments and Inputs

Bulgaria, the GDR, and Romania will continue to emphasize expanded irrigation. The Bulgarian plan calls for irrigation facilities on an additional 30,000 hectares. In the GDR, irrigation equipment should be repaired or installed on 156,000 hectares, and local authorities are urged to help urban gardeners install irrigation facilities. The Romanians have an irrigation target of 385,000 hectares for 1985.

Plans in Bulgaria call for a 6- to 10-percent increase in fertilizer application, and Romanian plans also include a significant rise. Polish authorities hope that their private farmers will step up fertilizer purchases because procurement price increases have raised the profitability of crop production. The output of fertilizers, plant protection agents, and farm machinery has increased in Poland, assuring higher market supplies.

Crops

Grain production remains a top priority. In 1983, the region as a whole was short 4 to 5 million tons of grain at its current level of livestock inventory. This deficit could be erased and the region would be a surplus producer, if the ambitious plans for 1984 are realized and grain production hits 116.7 million tons. The planned grain production exceeds by 11 million tons the record output attained in 1982. This achievement, however, would be possible only under optimal weather, and in Romania, the 29-million-ton goal is not realistic under any circumstances.

In fact, below-optimal development of fall-sown grains is already an impediment to achieving the planned record output. The soil was generally too dry at sowing; germination was spotty; and plant growth was weak at the onset of winter. However, winterkill was below average. The sown area is larger than last year in Hungary and Poland, but smaller in Yugoslavia. Spring sowing was delayed by frosts in the GDR and by excessive precipitation in Bulgaria and Romania. Czechoslovakia, Hungary, and Poland continue to suffer from soil moisture deficiency.

The southern countries plan to expand corn area. The weather and a timely harvest of small grains permitting, Romania plans to seed 600,000 hectares of corn as a second crop. Should this corn ripen, it would add significantly to output; however, second corn crops have had very limited success so far. Thus, under present circumstances, grain production in 1984 is more likely to be about 95 to 100 million tons.

Yield increases are anticipated for all field crops. Next to grains, Bulgarian plans call for an above-average growth rate in sunflower, sugar beet, tobacco, vegetable, and grape production. In Czechoslovakia, the focus is on rapeseed, sugar beets, pulses, hops, fruit, and vegetables; in the GDR it is on potatoes, sugar beets, forage, fruit, and vegetables. The Hungarians plan to extend oilseed area 2.5 percent, and oilseed production is slated to increase 8 to 9 percent. Potato and sugar beet production is aimed at assuring self-sufficiency for direct food consumption.

The Poles hope for better rapeseed and potato crops than in 1983. In Romania, yields of all industrial crops, sugar beets, potatoes, pulses, vineyards, and orchards are expected to be larger than in 1983. The Yugoslav target of 8 million tons of sugar beets is probably out of reach.

Grain production plans for 1984

| Country | Plan |
|----------------|--------------|
| | Million tons |
| Bulgaria | 10.0 |
| Czechoslovakia | 11.0 |
| GDR | 10.5 |
| Hungary | 15.0 |
| Poland | 22.2 |
| Romania | 29.0 |
| Yugoslavia | 19.0 |
| Total | 116.7 |

Source: Economic plans for 1984 of the various countries.

Output of oilseeds may exceed 4 million tons, and an average sugar beet outturn of 47 million is likely.

Livestock

Growth in livestock production is planned in conjunction with anticipated domestic feed production and imports, which are limited by hard currency shortages. Officials are urging producers to shift from hog and poultry breeding to cattle and sheep, animals which rely less on concentrated feed. Poland and Bulgaria are exceptions to this policy. In Poland, hog and poultry inventories are so depleted that stock rebuilding is a high priority. In Bulgaria, a substantial planned increase in per capita meat consumption predetermines increased hog and poultry stock.

In Czechoslovakia, a reduction of 80,000 hogs is anticipated because the 1983 drought reduced corn, sugar beet, and forage production and the Government is reluctant to replace the loss with additional grain imports. It is likely that hog and poultry numbers will decline in the GDR and Hungary, where inventories in 1983 reached records. Excess slaughter in some countries is most likely to offset meat production declines in Poland and Yugoslavia. Total production in the vicinity of 11 million tons is anticipated in 1984.

Agricultural Trade

The southern countries' agricultural trade is expected to be positive or nearly in balance. The reduced grain and sugar beet harvests in 1983, however, will trim the trade surpluses of Hungary and Bulgaria and impose sacrifices on Romanian consumers to maintain exports.

The USDA forecast of 8.5 to 9 million tons of East European grain imports (4 million wheat, 5 million coarse grains) in 1984 is about equal to the reduced volume in 1983. Oilseed meal imports could rebound to 4.5 million tons, if Poland triples 1983 imports to 1.2 million, as planned, to help rebuild the hog and poultry industries.

East European grain exports may exceed 4 million tons. Exports of livestock and products will continue, even if domestic meat shortages persist. Higher value exports of processed meat from Poland are expected to compensate for the planned 100,000 tons of lower quality raw meat to be imported. Yugoslav plans call for an 18-percent increase in meat exports for hard currency and a 23-percent rise on bilateral clearing accounts, an overly optimistic goal. Foreign demand for Hungarian poultry has eased; thus, no growth in poultry exports is anticipated.

U.S. Export Prospects

U.S. agricultural exports to the region, of which usually more than 80 percent of the value derives from grain and oilseed products, are forecast to increase to \$890 million in fiscal 1984 from \$827 million in fiscal 1983. CCC credit has been slightly reduced for fiscal 1984, and none has been granted to Poland and Romania—considerable credit recipients in the 1970's. Lower demand, intensified competition from other suppliers, and the East European hard currency shortage will for several years prevent the United States from reaching the \$1.6 billion annual export average of 1976-81. (*Thomas Van Kai*)

CCC Credit For Eastern Europe

Cynthia Taylor

Abstract: The Commodity Credit Corporation's (CCC) Commodity Export Program has been instrumental in the expansion of U.S. agricultural trade with Eastern Europe. Currently, only Romania, Hungary, and Yugoslavia are eligible for CCC credit under the commercial segment of this program. Poland, the largest recipient in Eastern Europe, has not been considered for credit since 1981. Poland and Romania are in arrears and have had their repayments rescheduled.

Keywords: Commodity Credit Corporation, Commodity Export Program, CCC credit, Export Credit Sales Program, Export Credit Guarantee Program, Blended Credit Program.

The CCC, a wholly-owned U.S. Government corporation since 1933, offers a Commodity Export Program to foster the sale of U.S. agricultural products. The commercial segment of the CCC's Commodity Export Program has been beneficial in the promotion of U.S. agricultural trade with Eastern Europe¹. While CCC programs have financed only about 3 percent of total U.S. agricultural exports, they have supported about one-quarter of the shipments to Eastern Europe. Eastern Europe's share in total CCC-financed exports varied annually; for example, it accounted for 26 percent in 1971 and peaked at 45 percent in 1980.

¹The East European countries are generally not eligible for financing under P.L. 480, Title I of the concessionary segment of the Commodity Export Program because of their relatively advanced economic development and because of the friendly country requirement (determined by the Secretary of State). However, at various times, several East European countries have received Title I financing when a need for assistance was demonstrated. Poland, Romania, Yugoslavia, Czechoslovakia, and Hungary have received humanitarian food aid under Title II of P.L. 480.

The Commodity Export Program

The Commodity Export Program helps U.S. agricultural exporters create new markets and preserve, increase, or prevent a decline in already existing markets. It also helps developing countries shift from concessionary to commercial financing and enables U.S. firms to compete with exports from other countries—especially subsidized exports. The Commodity Export Program achieves these goals through the offering of short and intermediate term credit—6 months to 10 years—so that foreign buyers can avail themselves of U.S. agricultural goods. Credit periods, however, are typically 3 years in length.

The commercial segment of the Commodity Export Program is composed of three programs, the Export Credit Sales Program (direct credit), the Export Credit Guarantee Program (guaranteed credit), and the Blended Credit Program (direct and guaranteed credit). The Export Credit Sales Program involves direct credit from the CCC to foreign buyers to enable them to purchase eligible U.S. agricultural commodities. Under the Export Credit Guarantee Program, the CCC guarantees repayment of

U.S. farm exports and CCC credit to Hungary, Poland, Romania, and Yugoslavia, selected fiscal year averages and fiscal 1980-83 annual

| Fiscal year ¹ | Hungary | | | Poland | | | Romania | | | Yugoslavia | | |
|--------------------------|-------------------|-------------------------|-----------|-------------------|-------------------------|-----------|-------------------|-------------------------|-----------|-------------------|-------------------------|-----------|
| | U.S. farm exports | CCC credit ² | CCC share | U.S. farm exports | CCC credit ² | CCC share | U.S. farm exports | CCC credit ² | CCC share | U.S. farm exports | CCC credit ² | CCC share |
| | Million dollars | Percent | | Million dollars | Percent | | Million dollars | Percent | | Million dollars | Percent | |
| 1963-1964 | 12.4 | 0 | 0 | 107.7 | 8.1 | 8 | .1 | 0 | 0 | 96.3 | 0 | 0 |
| 1965-1969 | 6.9 | 0.9 | 13 | 48.6 | 15.5 | 32 | 3.3 | 0 | 0 | 71.4 | 7.9 | 11 |
| 1970-1974 | 19.5 | 0.3 | 2 | 134.3 | 29.7 | 22 | 52.2 | 15.8 | 30 | 83.8 | 26.1 | 31 |
| 1975-1979 | 35.5 | 3.2 | 9 | 434.0 | 258.5 | 60 | 176.4 | 41.9 | 24 | 101.1 | 35.1 | 35 |
| 1980 | 40.5 | 0 | 0 | 676.9 | 562.9 | 83 | 496.6 | 25.0 | 5 | 333.2 | 54.9 | 16 |
| 1981 | 8.5 | 0 | 0 | 700.0 | ³ 670.8 | 96 | 477.0 | ³ 50.0 | 10 | 203.9 | 22.3 | 11 |
| 1982 | 11.4 | 0 | 0 | 181.4 | 0 | 0 | 135.7 | 0 | 0 | 178.9 | 0 | 0 |
| 1983 | 49.0 | 42.0 | 86 | 231.9 | 0 | 0 | 115.0 | 0 | 0 | 249.3 | 235.0 | 94 |

¹July-June from 1963 to 1977, October-September from 1978. ²Includes financing under the commercial segment of the Commodity Export Program only. ³All credit was used in fiscal 1981, but a shipping extension was granted for Polish and Romanian corn purchases, resulting in in \$25.2 and \$23.9 million of corn, respectively, being shipped in the first quarter of fiscal 1982. These shipments were recorded as exports in fiscal 1982.

Sources: Bureau of the Census, U.S. Dept. of Commerce; FAS/USDA.

export-financing credit made to foreign buyers by U.S. institutions.

The Blended Credit Program, available since fiscal 1983, is a combination of both the Export Credit Sales Program and the Export Credit Guarantee Program; the direct credit portion is interest free. If for any reason a recipient is unable to adhere to its obligation, the CCC is liable for the entire amount of direct credit. The CCC guarantees 98 percent of the principal and up to an 8-percent interest rate on guaranteed credit. Currently, the amounts of direct and guaranteed credit are negotiated for each transaction under the Blended Credit Program, with the interest-free portion not exceeding 20 percent of the total.

Commodity Eligibility

Originally, only CCC commodity inventories and commodities covered under CCC price support programs were eligible for CCC export financing. Currently, all farm commodities are eligible for consideration, including those held in private stocks and those purchased from the CCC. Decisions on country and commodity financing are made annually by the CCC, which takes into account requests from foreign governments, country financial standing, commodity market importance, U.S. stocks, requests from U.S. cooperatives and exporters, and other political and economic considerations.

Country Eligibility

At present, East European country eligibility for CCC credit financing is restricted by Section 402 of the Trade Act of 1974, which provides that certain countries with nonmarket economies are not eligible for most-favored-nation (MFN) import tariff status, CCC credit programs, and Eximbank financing unless the President (1) determines that the country does not impede emigration or (2) waives this determination under other sections that give some flexibility to the President in promoting the freedom-of-emigration requirement.

Waivers, issued annually, first made Romania in 1975 and Hungary in 1978 eligible to receive CCC credit. Poland and Yugoslavia, by virtue of their eligibility for MFN status when the Trade Act became law, were exempt from Section 402. Poland, however, is no longer considered for CCC credit financing because of a U.S. decision made in response to the imposition of martial law in December 1981. Although martial law has been rescinded, two other criteria for renewed consideration—a dialogue between the labor movement and the State and a release of all political prisoners—have not yet been met.

East European Participation

CCC credit in support of U.S. agricultural exports to Eastern Europe amounted to an average \$8.1 million during fiscal 1963 and 1964, \$26.1 million during fiscal 1965-69, and \$75.1 million during fiscal 1970-74. Total East European use of CCC credit accelerated after fiscal 1974, averaging \$299 million during fiscal 1975-79, \$643 million in fiscal 1980, and peaking at \$743 million in fiscal 1981. During fiscal 1980 and 1981, Poland accounted for 88 and 93 percent, respectively, of the credit extended

U.S. farm exports to Eastern Europe and CCC credit, selected fiscal year averages and fiscal 1980-83 annual

| Fiscal year ¹ | U.S. farm exports ² | | |
|--------------------------|--------------------------------|-------------------------|-----------|
| | Total | CCC credit ³ | CCC share |
| | Million dollars | | Percent |
| 1963-64 | 234.3 | 8.1 | 3 |
| 1965-69 | 151.5 | 26.1 | 17 |
| 1970-74 | 343.5 | 75.1 | 22 |
| 1975-79 | 1,167.4 | 298.8 | 27 |
| 1980 | 2,281.3 | 642.9 | 28 |
| 1981 | 1,940.1 | 4743.1 | 38 |
| 1982 | 920.6 | 0 | 0 |
| 1983 | 826.9 | 277.0 | 34 |

¹July-June from 1963 to 1977, October-September from 1978. ²Includes transshipments for fiscal 1976-1983. ³Includes financing under the commercial segment of the Commodity Export Program only. ⁴All credit was used in fiscal 1981, but a shipping extension for Polish and Romanian corn purchases was granted, resulting in \$49.1 million of corn being shipped in the first quarter of fiscal 1982. These shipments were recorded as exports in fiscal 1982.

Sources: Bureau of the Census, U.S. Dept. of Commerce; FAS/USDA.

to Eastern Europe. No credits were authorized for the region in fiscal 1982. Authorizations for fiscal 1983 were \$277 million and are currently \$233.5 million for fiscal 1984 (\$190 million to Yugoslavia and \$43.5 million to Hungary).

Poland—The CCC's Export Credit Sales Program was first used in Eastern Europe in fiscal 1963 by Poland. Up until Polish martial law, East European use of CCC credit was dominated by Poland—71 percent of the total credit extended to Eastern Europe. During fiscal 1963-83, CCC-financed exports accounted for around 54 percent of total U.S. agricultural exports to Poland. In fiscal 1981, CCC-financed exports accounted for 96 percent of Polish agricultural imports from the United States.

Other East European countries—CCC Commodity Export credit was opened up to all other East European countries in fiscal 1966. During their period of eligibility, from fiscal 1966 until the Trade Act of 1974, Bulgaria and the GDR never took part in the program, and Czechoslovakia used it only once. Although none of the other eligible countries have taken part to the extent that Poland has, both Romania and Yugoslavia have used CCC credit substantially, averaging 15 and 27 percent, respectively, of total U.S. agricultural exports to these two countries during fiscal 1963-83.

Commodity Coverage

By far, the largest use of CCC financing in Eastern Europe has been for the purchase of grain (corn and wheat), soybeans and products, and cotton; these products made up at least 85 percent of total CCC-financed exports to Poland, Hungary, Romania, and Yugoslavia during fiscal 1963-83. Other commodities financed under CCC credit have included tallow, tobacco, cottonseed oil, linseed oil, alfalfa seed, butter, cottonseed meal, linseed meal, and vegetable oil.

Credit use in fiscal 1983, at \$277 million, included the purchase of U.S. cotton by Yugoslavia (\$59.5 million)

Commodity composition of CCC credit-financed exports to Hungary, Poland, Romania, and Yugoslavia, fiscal 1963-83¹

| Commodity | Hungary | Poland | Romania | Yugoslavia |
|------------------------------------|---------|--------|---------|------------|
| <i>Percent</i> | | | | |
| Corn | 0 | 45 | 43 | 7 |
| Wheat | 0 | 15 | 8 | 36 |
| Soybeans and products ² | 85 | 23 | 25 | 28 |
| Cotton | 3 | 5 | 13 | 14 |
| Other | 12 | 12 | 11 | 15 |
| Total | 100 | 100 | 100 | 100 |

¹Includes financing under the commercial segment of the Commodity Export Program only. ²Includes soybeans, soybean meal, and soybean oil.

Sources: Bureau of the Census, U.S. Dept. of Commerce; FAS/USDA.

under the Blended Credit Program. Before this sale, cotton exports to Eastern Europe were very small. The fiscal 1984 credit authorization for Yugoslavia—\$190 million—is to be used to purchase vegetable oil (40 percent), cotton (31 percent), hides and skins (26 percent), and oilmeals (3 percent). The credit authorization for Hungary—at \$43.5 million—is made up of 80 percent oilmeals, 11 percent cotton, 5 percent protein isolates, and 4 percent other products.

Problems with Repayment

In recent years, severe financial problems have plagued many East European countries. Poland and Romania have rescheduled CCC credit repayments, amounting to \$359 million and \$28.5 million, respectively. Repayments for Poland, which fell behind in April 1981, were rescheduled that year, but in fact, no payments have

been made since then. Rescheduling for Romania took place in early 1984. Of the amounts rescheduled, Poland and Romania were, as of January 1984, \$79.7 million and \$2.4 million, respectively, delinquent in interest payments. In addition to the amounts rescheduled, Poland and Romania were \$1.1 billion and \$11.4 million, respectively, in arrears as of January 1984. Hungary and Yugoslavia, while also experiencing financial difficulties, have managed to meet loan repayment schedules.

Conclusion

U.S. agricultural sales to Eastern Europe increased from an average of \$234 million during fiscal 1963-64 to over \$2 billion in fiscal 1980. CCC credit increased from an average \$8.1 million during fiscal 1963-64 to over \$743 million in fiscal 1981. The market expansion goal of the Commodity Export Program credit had been successful in Eastern Europe, for it is unlikely that Poland, Romania, or Yugoslavia could have imported as much from the United States without CCC credit. In fact, when CCC credit was no longer made available to Poland, U.S. agricultural exports to that country dropped from \$700 million in fiscal 1981 to \$181 million in fiscal 1982.

While the Commodity Export Program has been beneficial for U.S. exports to the region, recent events now limit its use. Besides the problems in Poland and financial difficulties in the region, U.S. budgetary constraints and increased requests from more countries for CCC credit have reduced credit availability to Eastern Europe. Nonetheless, CCC credit will likely remain an important way to promote U.S. exports of products for which self-sufficiency cannot be obtained in Eastern Europe and for which competition from third-country suppliers is strong.

The Private Sector in East European Agriculture

Nancy Cochrane

Abstract: The private sector in Eastern Europe presently produces a significant share of the food supplies; in Yugoslavia and Poland, it is responsible for well over half the agricultural production. Recognizing its importance, most governments have introduced measures encouraging private producers, often supplying essential inputs to farmers in return for deliveries to socialized organizations. There is, however, much variation in government commitment to private agriculture, and a marked exception to the trend is Romania, which has introduced several coercive measures.

Keywords: Private agriculture and farmers, household plots, private-socialized sector contracts, incentives and directives, legislation.

As socialized agriculture throughout Eastern Europe struggles with domestic investment shortfalls and constraints on imports, the production of private farmers is becoming more and more crucial in assuring adequate food supplies. The importance of the private sector lies in its potential for increasing production, thereby reducing reliance on imports without large increases in cost to the governments. In recognizing this, all governments except Romania are introducing measures to improve conditions for private farmers. Moreover, authorities in Yugoslavia and Poland, where the private sector is dom-

inant, have backed away somewhat from previous efforts to force socialization of agriculture. The degree of government support for private agriculture varies considerably, however, and socialized agriculture as a long-term goal remains a priority in Poland and Yugoslavia.

The Nature of Private Agriculture

Except for Yugoslavia and Poland, where private (but small-sized) holdings predominate, the private agricultural sector in Eastern Europe consists of three types of

farms. One is household plots—usually half a hectare in size, but sometimes more under certain conditions. These plots are allocated to members of agricultural cooperatives and employees of state farms to be worked in their spare time. The second type of farm is the auxiliary farms of less than 1 hectare; these are allocated to industrial workers. Inheritance rights may accompany these allotments, but rights to the land continue only so long as the land is properly cultivated. Finally, in Romania, and to a slight degree in Hungary and Czechoslovakia, there are a few privately owned farms. These are usually restricted to mountainous regions and other areas unsuited for large-scale, socialized agriculture.

Private agriculture in Bulgaria, Czechoslovakia, the GDR, Hungary, and Romania accounts for a minority share of production and is intended to complement rather than supplant socialized agriculture. The private sector concentrates mainly on the more labor-intensive forms of production, which are less profitable for the socialized sector. Thus, private farmers produce a substantial share of fruit and vegetables—shares as high as 50 to 60 percent in Romania and Hungary. The private sector also owns a substantial share of the livestock—often 30 to 40 percent or more—and has similar shares in the production of meat, milk, and other livestock products. Private farmers in Hungary own more than half the poultry and hogs.

Private Farmers Contract With Socialized Sector

In all five countries where socialized agriculture dominates, private farmers are free to sell most of their production (but usually not meat or grain) either to state procurement organizations or to market it directly in farmers' markets. Farmers have preferred to sell their production directly to consumers because they can

receive better prices than what the state organizations pay. To counter this tendency, governments in all five countries are introducing incentives to encourage private producers to sign delivery contracts with socialized organizations.

In these contracts, private farmers commit themselves to deliver a given quantity of products to a state farm or cooperative in return for a price set in advance and improved access to essential inputs. Livestock fattening is a common form of contract. Cooperatives either give young animals to their members or provide credit on favorable terms for their purchase. The cooperatives also provide feed or, as in the case of Hungary, allot additional land to plot holders to grow their own feed. In return, the plot holders sell the fattened animal back to the cooperatives. Similar contracts are signed by private producers of fruit and vegetables. The cooperatives provide seed, fertilizer, and plant protection agents and sometimes help in cultivating the land. The farmers in turn sell a specified amount of the crop to the cooperative at contracted prices.

Other incentives for signing contracts with socialized organizations include tax exemption of the resulting income and bonuses for fulfilling the contract on time. In Bulgaria, for example, income from sales to the socialized sector is tax free, whereas income from private sales is taxed. In Czechoslovakia, income from the sale of production by part-time farmers is tax exempt.

The contract system as measured by state procurement is most successful in Hungary and Bulgaria. In Hungary, private producers provide 22 percent of the marketed production; their share in agricultural production is 31 percent. In Bulgaria, the private sector provides 27 percent of the meat and eggs marketed by the socialized sector and 12 percent of the milk. These two countries have gone the furthest in integrating private and socialized production.

Private sector share, 1982

| Item | Bulgaria | Czechoslovakia | GDR | Hungary | Romania | Poland | Yugoslavia |
|-------------------|----------|----------------|-----|----------------|---------|--------|------------|
| | | | | <i>Percent</i> | | | |
| Agricultural land | 13 | 7 | 6 | 12 | 15 | 76 | 78 |
| Arable land | 12 | 3 | NA | 14 | 13 | 76 | 82 |
| Gross farm output | 25 | NA | NA | 28 | 14 | 81 | 67 |
| Wheat | 3 | 2 | NA | 2 | 1 | 75 | 65 |
| Corn | 29 | 21 | NA | 17 | 25 | 37 | 82 |
| Potatoes | 51 | 12 | NA | 63 | 58 | 92 | 99 |
| Sugar beets | 0 | 0 | NA | 2 | 6 | 83 | 23 |
| Vegetables | 33 | 40 | 11 | 62 | 42 | 92 | NA |
| Fruit | 37 | 70 | 30 | 50 | 58 | 91 | NA |
| Cattle inventory | 21 | 4 | 4 | 21 | 38 | 77 | 91 |
| Hog inventory | 20 | 9 | 20 | 52 | 25 | 86 | 80 |
| Poultry inventory | 38 | 25 | 44 | 72 | 39 | 90 | 58 |
| Meat | 40 | 27 | NA | 54 | 45 | 28 | 68 |
| Milk | 21 | NA | NA | 28 | 61 | 86 | 92 |
| Eggs | 56 | NA | NA | 62 | 58 | 90 | NA |

NA = Not available.

Source: Statistical yearbooks of respective countries.

The contribution of private farmers to the socialized marketing system is less in Czechoslovakia, the GDR, and Romania. The main function of the private sector in Czechoslovakia and the GDR remains household self-supply. In Czechoslovakia, the private sector supplied 12 percent of the vegetables and only 1.8 percent of the animals for slaughter purchased by state organizations. State procurements of private sector production are also very low in Romania, where food shortages are serious and state-set farm prices are particularly unfavorable. The private sector in 1981 provided only 11 percent of the state supply of meat, 7 percent of the vegetables, and 6 percent of the eggs.

Attitudes Toward Private Agriculture Vary

While almost all countries encourage private production, commitment to the private sector varies considerably among the five countries. Hungary and Bulgaria have done the most to integrate the private sector into the agricultural system, whereas Czechoslovakia and the GDR have so far taken only token measures. In marked contrast to trends in other countries, Romania has introduced extremely severe measures intended to force private sector sales to socialized organizations.

Hungary has taken the most extensive measures to promote private or "small scale" production. In 1980, a law was passed allowing private farmers to purchase tractors up to 30 horsepower, and factories have begun production of small tractors suitable for private plots. Other measures have included rises in procurement prices, tax breaks, and easier terms on credit for animal, fodder, and machinery purchases.

In Bulgaria, private plot production forms an integral part of its program for regional self-sufficiency. As in Hungary, the socialized organizations are required to provide inputs and other aid to private producers, and regional production plans include the contribution of private plots.

Czechoslovakia and the GDR have given less support to the private sector. Both governments turned only reluctantly to the private sector once it became clear that socialized agriculture could not supply sufficient food. The socialized sector in both countries is supposed to provide aid to private producers. However, local managers of state farms and cooperatives in Czechoslovakia have been accused of ignoring government edicts to provide inputs to plot holders. There have also been complaints that land that could be allocated for fattening contracts is still lying unused. In the GDR, there seems to be a similar lack of support from cooperative management.

Romania Adopts Coercive Measures

In marked contrast to other Eastern European countries, the Romanian Government has recently introduced measures intended to force private farmers to contract with the socialized sector. As in other countries, the Romanians have provided incentives for such contracting, such as easier access to inputs, but at the same time they have taken measures to penalize farmers who do not contract. Plot holders are required to raise specific numbers of animals, depending on plot size and number of family members. Private slaughtering of animals is forbidden, and delivery quotas have been imposed: 1

sheep for up to 5 raised, 800 liters of milk per cow raised, 25 eggs per hen, and so forth.

If the farmers comply with these quotas, they will receive access to state-owned grazing land, loans, and the right to purchase specified amounts of fodder—15 kilograms of feed concentrate for each 100 liters of milk sold, for example.

Similar delivery quotas are in effect for fruit and vegetable growers. Failure to make the requisite deliveries means no access to inputs and land can even be confiscated if authorities deem it is not being used to its full potential.

Private Sector Dominates in Yugoslavia and Poland

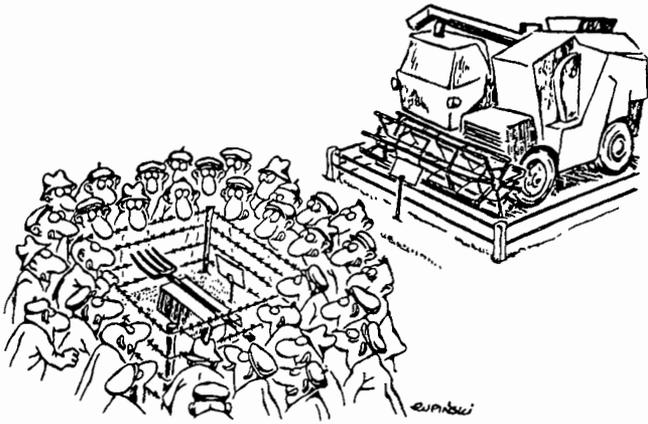
In Yugoslavia and Poland, agricultural production is dominated by small, fragmented private farms covering 76 percent of the arable land in Poland and 82 percent in Yugoslavia in 1982. The maximum size of a private farm in Yugoslavia is 10 hectares (more in hilly, less fertile regions), but the average farm is only 3.2 hectares and can consist of as many as 9 separate plots. There is a 30- to 50-hectare maximum in Poland, but the average farm is slightly over 5 hectares, and 60 percent are less than 5 hectares. Private farms in Poland also tend to be fragmented.

The private sector accounts for 67 percent of agricultural production in Yugoslavia and 81 percent in Poland. In both countries, the private sector owns the majority of the livestock and grows more than half of the crops. In Poland, only rapeseed is concentrated in the socialized sector, while in Yugoslavia, the socialized sector dominates in the production of sugar beets as well as oilseeds.

Government Policies Favor Integration With Socialized Sector

Until recently, Government policies in Yugoslavia and Poland have been aimed at expanding the share of the socialized sector in agricultural production. The resulting neglect of the private sector led to inadequate supplies of capital and inputs to private farmers in both countries. In 1982, private farmers in Poland had only a 57-percent share in capital investment, while those in Yugoslavia had a 52-percent share. The unavailability of machinery suitable for the private sector, including hand tools, has become a subject for satire in Poland. Yet, despite the economic disadvantage, private farmers in both countries have resisted government efforts to increase collectivization. Both Governments in recent years have reluctantly admitted that private agriculture will remain dominant for some time to come and have introduced measures to appease farmers and bolster production. Most such measures are aimed at promoting integration between the two sectors.

Formation of cooperatives. Policies being pursued in Yugoslavia and, to some extent, in Poland encourage the formation of cooperatives. These may be self-management organizations of private farmers for pooling land and machinery, or more often, they are marketing organizations. The governments encourage farmers to sign contracts with these marketing organizations, simi-



Popular commentary on the lack of hand tools for Poland's small private farmers who dominate the agricultural labor force.

Source: *Polityka*, Warsaw, July 30, 1983.

lar to those signed by private plot holders in the other countries. The Government in Yugoslavia has introduced several incentives for farmers to contract with cooperatives, such as credit on favorable terms and feed supplies. Farmers who cooperate will also be allowed to purchase land up to the maximum 10 hectares and to round off their holdings through the addition of adjacent land.

In both Yugoslavia and Poland, private farmers tend to be suspicious of such organizations. They feel that the State has too much control over their management. Private farmers in Yugoslavia also complain that the services provided by the cooperatives are inadequate, and that the terms of their contracts often work to the farmers' disadvantage. As a result, private farmer participation in these organizations is very low in both Yugoslavia and Poland.

Increases in the maximum holding size. An important issue in Yugoslavia is the 10-hectare maximum size of holdings. The inefficiency of such small holdings is widely recognized, and the Government may yet bow to pressure to raise the maximum. So far, it has resisted such

EXPLANATORY NOTES

Agricultural land: Arable land (cultivated land, gardens, and orchards), meadows, and pastures.

Agricultural trade: Trade in food, live animals, and agricultural raw materials.

Council for Mutual Economic Assistance (CEMA): Bulgaria, Cuba, Czechoslovakia, the German Democratic Republic (GDR), Hungary, Mongolia, Poland, Romania, USSR, and Vietnam.

Eastern Europe: Northern countries—Czechoslovakia, the GDR, and Poland. Southern countries—Bulgaria, Hungary, Romania, and Yugoslavia.

pleas. However, many of the republics have already raised the maximum in the hilly, less fertile regions; sometimes up to 100 hectares are permitted.

Constitutional amendment in Poland. Pressure from private farmers in Poland led in 1982 to a law guaranteeing the property rights of private farmers and allowing them to purchase land. However, farmers continued to demand more permanent guarantees of their status in the form of a constitutional amendment. In July 1983, such an amendment was passed. Authorities emphasize (*Gazeta Robotnica*, Jan. 29-30, 1983), however, that the further socialization of family agriculture remains the primary goal of Polish policy and that:

...its [the amendment's] intention is not to give some special preferential treatment to individual farming at the expense of the cooperative and state farms, but to create equal economic opportunities for all sectors of agriculture.

Despite this amendment, a disproportionate share of State investment is still going to the socialized sector. Thus it is unclear whether the amendment will even guarantee equal treatment.

The previously cited report further states that the State cannot now force decisions on socialization. But farmers "are free to make decisions about changes in ownership." One can perhaps expect measures to "encourage" private farmers to make such decisions.

Prospects

While most East European countries are introducing measures to improve the conditions of private agriculture, such measures are uneven. Except in Yugoslavia and Poland, governments have made it clear that socialized agriculture is to remain dominant, and the ultimate goal in Yugoslavia and Poland remains the socialization of agriculture. So long as economic difficulties persist in Eastern Europe, the importance of private agriculture will continue. But the private sector will still play a role that is subordinate to that of socialized agriculture, and if economic situations should improve, government support may wane.

Transshipments: U.S. exports destined for Eastern Europe and unloaded in Canada or Western Europe, but reported by the U.S. Bureau of the Census as exports to the port of entry.

Metric units are used throughout:
 One metric ton = 2,204.6 pounds
 One kilogram = 2.2046 pounds
 One hectare = 2.471 acres

Cattlehides: one piece = 22 kilograms
Milk: one liter = 1.031 kilograms

Statistical data in this report are taken from the yearbooks of the respective countries and from the yearbooks of the Council for Mutual Economic Assistance. Other sources are noted as appropriate. Data on Albania are so scarce that Albania is not covered here.

Table 1.—Production of grains, Eastern Europe, 1976-80 average and 1980-83 annual¹

| Commodity and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania | Yugo-slavia | Total Eastern Europe |
|---------------------------|----------|-----------------|--------|---------|--------|----------|-------------|----------------------|
| 1,000 tons | | | | | | | | |
| Wheat | | | | | | | | |
| 1976-80 | 3,513 | 4,949 | 2,998 | 5,181 | 5,089 | 6,104 | 5,306 | 33,140 |
| 1980 | 3,847 | 5,386 | 3,098 | 6,068 | 4,176 | 6,417 | 5,091 | 34,083 |
| 1981 | 4,443 | 4,325 | 2,942 | 4,602 | 4,203 | 5,295 | 4,270 | 30,080 |
| 1982 | 4,913 | 4,606 | 2,739 | 5,751 | 4,476 | 6,455 | 5,218 | 34,158 |
| 1983 | 3,600 | 5,825 | 3,550 | 5,961 | 5,165 | 4,900 | 5,520 | 34,521 |
| Rye | | | | | | | | |
| 1976-80 | 20 | 578 | 1,748 | 133 | 6,474 | (50) | 87 | (9,090) |
| 1980 | 28 | 570 | 1,917 | 139 | 6,566 | (50) | 79 | (9,349) |
| 1981 | 34 | 544 | 1,797 | 115 | 6,731 | (50) | 75 | (9,346) |
| 1982 | 34 | 583 | 2,119 | 115 | 7,792 | (50) | 84 | (10,777) |
| 1983 | 20 | 750 | 2,060 | 136 | 8,780 | 40 | 85 | 11,871 |
| Barley | | | | | | | | |
| 1976-80 | 1,532 | 3,386 | 3,715 | 769 | 3,560 | 1,981 | 664 | 15,607 |
| 1980 | 1,375 | 3,575 | 3,979 | 925 | 3,419 | 2,466 | 826 | 16,565 |
| 1981 | 1,406 | 3,392 | 3,476 | 899 | 3,540 | 2,571 | 720 | 16,004 |
| 1982 | 1,436 | 3,654 | 4,055 | 865 | 3,647 | 3,052 | 669 | 17,378 |
| 1983 | 1,100 | 3,275 | 3,900 | 1,007 | 3,260 | 1,800 | 670 | 15,012 |
| Oats | | | | | | | | |
| 1976-80 | 70 | 423 | 525 | 85 | 2,434 | 56 | 298 | 3,891 |
| 1980 | 54 | 423 | 582 | 106 | 2,245 | 47 | 294 | 3,751 |
| 1981 | 62 | 433 | 598 | 159 | 2,731 | 65 | 311 | 4,359 |
| 1982 | 50 | 491 | 848 | 118 | 2,608 | 91 | 269 | 4,475 |
| 1983 | 50 | 475 | 500 | 118 | 2,380 | 70 | 255 | 3,848 |
| Corn | | | | | | | | |
| 1976-80 | 2,652 | 724 | 2 | 6,347 | 165 | 11,097 | 9,192 | 30,179 |
| 1980 | 2,256 | 745 | 4 | 6,535 | 58 | 11,153 | 9,317 | 30,068 |
| 1981 | 2,401 | 706 | 3 | 6,813 | 65 | 11,892 | 9,807 | 31,687 |
| 1982 | 3,418 | 941 | 1 | 7,752 | 68 | 12,620 | 11,126 | 35,926 |
| 1983 | 3,300 | 715 | — | 6,215 | 70 | 11,100 | 10,690 | 32,090 |
| Rice | | | | | | | | |
| 1976-80 | 62 | — | — | 31 | — | 48 | 34 | 175 |
| 1980 | 67 | — | — | 24 | — | 39 | 42 | 172 |
| 1981 | 74 | — | — | 39 | — | 49 | 42 | 204 |
| 1982 | 75 | — | — | 48 | — | 46 | 42 | 211 |
| 1983 | 65 | — | — | 42 | — | 70 | 45 | 222 |
| Other grains ² | | | | | | | | |
| 1976-80 | — | — | 49 | 4 | 1,773 | (47) | 7 | (1,880) |
| 1980 | — | — | 46 | 3 | 1,872 | (28) | 5 | (1,954) |
| 1981 | — | — | 47 | 1 | 2,451 | (23) | 5 | (2,527) |
| 1982 | — | — | 259 | — | 2,575 | (21) | 4 | (2,859) |
| 1983 | — | — | 50 | — | 2,445 | 20 | 5 | 2,520 |
| Total grain | | | | | | | | |
| 1976-80 | 7,849 | 10,060 | 9,037 | 12,550 | 19,495 | 19,383 | 15,588 | 93,962 |
| 1980 | 7,627 | 10,699 | 9,622 | 13,800 | 18,336 | 20,200 | 15,654 | 95,938 |
| 1981 | 8,420 | 9,400 | 8,863 | 12,628 | 19,721 | 19,945 | 15,230 | 94,207 |
| 1982 | 9,926 | 10,275 | 10,021 | 14,649 | 21,166 | 22,335 | 17,412 | 105,784 |
| 1983 | 8,135 | 11,040 | 10,060 | 13,479 | 22,100 | (18,000) | 17,270 | (100,084) |

— = No information reported, or amount under 1,000 tons. () = Estimate. ¹1983 data are preliminary. ²Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 2.—Area of grains, Eastern Europe, 1976-80 average and 1980-83 annual¹

| Commodity and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania | Yugo-slavia | Total Eastern Europe |
|---------------------------------|----------|-----------------|-------|---------|--------|---------|-------------|----------------------|
| <i>1,000 hectares</i> | | | | | | | | |
| Wheat | | | | | | | | |
| 1976-80 | 938 | 1,229 | 720 | 1,274 | 1,735 | 2,256 | 1,616 | 9,768 |
| 1980 | 968 | 1,197 | 707 | 1,276 | 1,609 | 2,239 | 1,516 | 9,512 |
| 1981 | 1,032 | 1,090 | 675 | 1,151 | 1,418 | 2,101 | 1,386 | 8,853 |
| 1982 | 1,059 | 1,073 | 591 | 1,310 | 1,456 | 2,151 | 1,558 | 9,198 |
| 1983 | 900 | 1,190 | 755 | 1,355 | 1,540 | 2,220 | 1,610 | 9,570 |
| Rye | | | | | | | | |
| 1976-80 | 15 | 186 | 645 | 81 | 2,997 | (40) | 64 | (4,028) |
| 1980 | 20 | 179 | 678 | 73 | 3,039 | (40) | 55 | (4,084) |
| 1981 | 27 | 171 | 656 | 74 | 3,002 | (40) | 54 | (4,024) |
| 1982 | 23 | 177 | 653 | 74 | 3,273 | (35) | 53 | (4,288) |
| 1983 | 20 | 200 | 680 | 72 | 3,450 | (35) | 50 | (4,507) |
| Barley | | | | | | | | |
| 1976-80 | 485 | 919 | 981 | 237 | 1,288 | 662 | 298 | 4,870 |
| 1980 | 426 | 921 | 969 | 246 | 1,322 | 810 | 324 | 5,018 |
| 1981 | 382 | 996 | 964 | 286 | 1,294 | 917 | 310 | 5,149 |
| 1982 | 352 | 967 | 982 | 262 | 1,236 | 943 | 284 | 5,026 |
| 1983 | 330 | 825 | 930 | 277 | 1,110 | 750 | 280 | 4,502 |
| Oats | | | | | | | | |
| 1976-80 | 49 | 162 | 157 | 35 | 1,067 | 52 | 215 | 1,737 |
| 1980 | 41 | 139 | 155 | 35 | 997 | 51 | 194 | 1,612 |
| 1981 | 46 | 160 | 172 | 55 | 1,156 | 62 | 194 | 1,845 |
| 1982 | 44 | 172 | 218 | 50 | 1,086 | 88 | 176 | 1,834 |
| 1983 | 40 | 160 | 170 | 40 | 1,040 | 50 | 170 | 1,670 |
| Corn | | | | | | | | |
| 1976-80 | 657 | 202 | — | 1,297 | 41 | 3,295 | 2,256 | 7,748 |
| 1980 | 584 | 192 | — | 1,229 | 16 | 3,288 | 2,202 | 7,511 |
| 1981 | 563 | 178 | 1 | 1,163 | 16 | 3,327 | 2,297 | 7,545 |
| 1982 | 621 | 184 | — | 1,130 | 16 | 2,764 | 2,246 | 6,961 |
| 1983 | 730 | 165 | — | 1,098 | 15 | 3,275 | 2,260 | 7,543 |
| Rice | | | | | | | | |
| 1976-80 | 17 | — | — | 23 | — | 21 | 8 | 69 |
| 1980 | 17 | — | — | 16 | — | 20 | 9 | 62 |
| 1981 | 16 | — | — | 13 | — | 20 | 9 | 58 |
| 1982 | 16 | — | — | 13 | — | 21 | 9 | 59 |
| 1983 | 20 | — | — | 15 | — | 30 | 5 | 70 |
| Other grains² | | | | | | | | |
| 1976-80 | — | — | 20 | 2 | 740 | 28 | 6 | 796 |
| 1980 | — | — | 16 | 1 | 864 | 21 | 4 | 906 |
| 1981 | — | — | 16 | 1 | 1,021 | 16 | 4 | 1,058 |
| 1982 | — | — | 71 | 1 | 1,027 | 15 | 4 | 1,118 |
| 1983 | — | — | 55 | — | 960 | 15 | 5 | 1,035 |
| Total grain | | | | | | | | |
| 1976-80 | 2,160 | 2,699 | 2,524 | 2,949 | 7,868 | 6,353 | 4,462 | 29,015 |
| 1980 | 2,055 | 2,628 | 2,526 | 2,876 | 7,847 | 6,469 | 4,304 | 28,705 |
| 1981 | 2,066 | 2,595 | 2,485 | 2,743 | 7,907 | 6,483 | 4,254 | 28,533 |
| 1982 | 2,115 | 2,573 | 2,515 | 2,840 | 8,094 | 6,017 | 4,330 | 28,484 |
| 1983 | 2,040 | 2,540 | 2,590 | 3,017 | 8,115 | 6,375 | 4,380 | 29,057 |

— = No information reported, or amount under 1,000 hectares. () = Estimate. ¹1983 data are preliminary. ²Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 3.—Grain trade, Eastern Europe, 1976-80 average and 1980-82 annual

| Commodity and country | Imports | | | | Exports | | | |
|------------------------------|---------|--------|--------|--------|---------|-------|-------|-------|
| | 1976-80 | 1980 | 1981 | 1982 | 1976-80 | 1980 | 1981 | 1982 |
| <i>1,000 tons</i> | | | | | | | | |
| Wheat | | | | | | | | |
| Bulgaria | 124 | 30 | 60 | — | 326 | 509 | 319 | 1,018 |
| Czechoslovakia | 519 | 537 | 218 | 262 | — | — | — | — |
| GDR ² | 953 | 476 | 794 | 731 | 59 | 50 | 75 | 75 |
| Hungary | 8 | 1 | 100 | 1 | 682 | 814 | 1,298 | 1,147 |
| Poland | 2,723 | 3,466 | 3,448 | 3,602 | — | — | — | — |
| Romania ¹ | 687 | 807 | 1,160 | 315 | 971 | 704 | 200 | 240 |
| Yugoslavia | 630 | 1,347 | 424 | 765 | 18 | 5 | 50 | 1 |
| Total | 5,644 | 6,664 | 6,204 | 5,676 | 2,056 | 2,082 | 1,942 | 2,481 |
| Barley | | | | | | | | |
| Bulgaria | 73 | 1 | 1 | — | 18 | 46 | — | — |
| Czechoslovakia | 126 | 169 | 20 | — | 59 | 34 | 18 | 20 |
| GDR ² | 782 | 564 | 582 | 356 | 147 | 150 | 154 | 138 |
| Hungary | 130 | 84 | 45 | 1 | 8 | 22 | 23 | 22 |
| Poland | 1,410 | 1,130 | 879 | 144 | 16 | — | — | — |
| Romania ¹ | 84 | 60 | — | — | — | — | — | — |
| Yugoslavia | 22 | 35 | 5 | 14 | 4 | 10 | 17 | 6 |
| Total | 2,627 | 2,043 | 1,532 | 515 | 252 | 262 | 212 | 186 |
| Corn | | | | | | | | |
| Bulgaria | 367 | 653 | 953 | 1,390 | 84 | 90 | 54 | — |
| Czechoslovakia | 942 | 1,181 | 675 | 1,064 | — | — | 15 | — |
| GDR ² | 1,775 | 3,161 | 1,823 | 1,349 | — | — | — | — |
| Hungary | 116 | 30 | 9 | 1 | 330 | 83 | 123 | 438 |
| Poland | 1,985 | 2,553 | 2,465 | 413 | — | — | — | — |
| Romania ¹ | 590 | 1,318 | 1,568 | 900 | 602 | 994 | 1,395 | 903 |
| Yugoslavia | 240 | 1 | — | 383 | 249 | 273 | 220 | 205 |
| Total | 6,015 | 8,897 | 7,493 | 4,500 | 1,265 | 1,440 | 1,807 | 1,546 |
| Other grains ^{1, 3} | | | | | | | | |
| Bulgaria | 5 | — | 2 | 2 | — | — | — | — |
| Czechoslovakia | 14 | 20 | 9 | 50 | 4 | 3 | 24 | 15 |
| GDR ² | 342 | 220 | 97 | 132 | 170 | 240 | 141 | 133 |
| Hungary | 14 | 15 | 6 | 7 | 15 | 12 | 13 | 14 |
| Poland | 675 | 569 | 311 | 89 | 18 | 6 | — | — |
| Romania | 302 | 35 | 30 | 125 | 4 | 22 | — | — |
| Yugoslavia | 4 | 2 | 3 | — | 6 | 4 | 1 | 2 |
| Total | 1,356 | 861 | 458 | 405 | 217 | 287 | 179 | 164 |
| Rice | | | | | | | | |
| Bulgaria | 7 | 8 | — | 15 | 1 | 6 | 4 | — |
| Czechoslovakia | 78 | 73 | 81 | 66 | — | — | — | — |
| GDR ² | 44 | 44 | 42 | 31 | — | — | — | — |
| Hungary | 23 | 23 | 19 | 13 | — | — | — | — |
| Poland | 87 | 93 | 115 | 81 | — | — | — | — |
| Romania | 56 | 57 | 56 | 65 | — | — | 5 | 4 |
| Yugoslavia | 17 | 32 | 35 | 31 | — | — | — | — |
| Total | 312 | 330 | 348 | 292 | 1 | 6 | 9 | 4 |
| Total grains | | | | | | | | |
| Bulgaria | 576 | 692 | 1,016 | 397 | 429 | 651 | 377 | 1,018 |
| Czechoslovakia | 1,679 | 1,980 | 1,003 | 1,442 | 67 | 37 | 57 | 35 |
| GDR ² | 3,896 | 4,465 | 3,338 | 2,599 | 375 | 440 | 370 | 346 |
| Hungary | 291 | 153 | 179 | 23 | 1,036 | 931 | 1,457 | 1,621 |
| Poland | 6,880 | 7,811 | 7,218 | 4,329 | 34 | 6 | — | — |
| Romania ¹ | 1,719 | 2,277 | 2,814 | 1,405 | 1,577 | 1,720 | 1,600 | 1,147 |
| Yugoslavia | 913 | 1,417 | 467 | 1,193 | 276 | 292 | 288 | 214 |
| Total | 15,954 | 18,795 | 16,035 | 11,388 | 3,794 | 4,077 | 4,149 | 4,381 |

— = No information reported, or amount less than 1,000 tons.

¹FAO data for imports. ²Trading partners data for exports only. ³Rye, oats, and grain sorghum.

Table 4.—Production of selected crops, Eastern Europe, 1976-80 average and 1980-83 annual¹

| Commodity and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania | Yugo-slavia | Total Eastern Europe |
|------------------------|----------|-----------------|--------|---------|--------|---------|-------------|----------------------|
| <i>1,000 tons</i> | | | | | | | | |
| Potatoes | | | | | | | | |
| 1976-80 | 370 | 3,678 | 9,873 | 1,194 | 42,742 | 4,431 | 2,705 | 64,993 |
| 1980 | 301 | 2,695 | 9,214 | 941 | 26,391 | 4,135 | 2,440 | 46,117 |
| 1981 | 403 | 3,743 | 10,378 | 1,112 | 42,562 | 4,447 | 2,774 | 65,419 |
| 1982 | 469 | 3,608 | 8,883 | 966 | 31,951 | 5,006 | 2,636 | 53,519 |
| 1983 | 470 | 3,105 | 7,000 | 800 | 34,475 | 5,630 | 2,590 | 54,070 |
| Sugar beets | | | | | | | | |
| 1976-80 | 1,827 | 7,132 | 6,996 | 3,975 | 14,149 | 6,135 | 5,258 | 45,472 |
| 1980 | 1,414 | 7,255 | 7,034 | 3,927 | 10,139 | 5,562 | 5,213 | 40,544 |
| 1981 | 1,136 | 6,969 | 8,043 | 4,719 | 15,867 | 5,441 | 6,224 | 48,399 |
| 1982 | 1,583 | 8,210 | 7,193 | 5,370 | 15,085 | 6,647 | 5,671 | 49,759 |
| 1983 | 1,450 | 6,040 | 6,000 | 3,800 | 16,360 | 4,820 | 5,650 | 44,120 |
| Sunflowerseed | | | | | | | | |
| 1976-80 | 392 | 17 | — | 298 | — | 821 | 433 | 1,961 |
| 1980 | 380 | 25 | — | 454 | — | 817 | 302 | 1,978 |
| 1981 | 457 | 33 | — | 624 | — | 810 | 327 | 2,251 |
| 1982 | 511 | 36 | — | 579 | — | 847 | 202 | 2,175 |
| 1983 | 505 | 38 | — | 600 | — | 705 | 140 | 1,988 |
| Rapeseed | | | | | | | | |
| 1976-80 | — | 151 | 291 | 80 | 637 | 12 | 60 | 1,231 |
| 1980 | — | 214 | 308 | 98 | 572 | 19 | 68 | 1,279 |
| 1981 | — | 200 | 284 | 75 | 496 | 14 | 65 | 1,134 |
| 1982 | — | 178 | 307 | 85 | 433 | 13 | 79 | 1,095 |
| 1983 | — | 200 | 300 | 70 | 555 | 15 | 120 | 1,260 |
| Soybeans | | | | | | | | |
| 1976-80 | 114 | 4 | — | 37 | — | 293 | 56 | 504 |
| 1980 | 107 | 6 | — | 37 | — | 448 | 34 | 632 |
| 1981 | 105 | 6 | — | 48 | — | 268 | 92 | 519 |
| 1982 | 116 | 6 | — | 60 | — | 301 | 198 | 681 |
| 1983 | 100 | 5 | — | 50 | — | (300) | 200 | (655) |
| Tobacco | | | | | | | | |
| 1976-80 | 141 | 5 | 5 | 20 | 80 | 46 | 67 | 364 |
| 1980 | 120 | 5 | 4 | 14 | 56 | 37 | 57 | 293 |
| 1981 | 130 | 6 | 4 | 20 | 96 | 28 | 63 | 347 |
| 1982 | 145 | 6 | 5 | 24 | 96 | 33 | 77 | 386 |
| 1983 | 155 | 5 | 5 | 23 | 95 | 30 | 80 | 393 |
| Corn silage | | | | | | | | |
| 1976-80 | 4,866 | 14,930 | 10,951 | 6,104 | 21,512 | 4,348 | 1,253 | 63,424 |
| 1980 | 4,498 | 14,647 | 11,434 | 6,613 | 18,000 | 3,688 | 1,460 | 60,340 |
| 1981 | 5,053 | 15,642 | 13,434 | 7,287 | 20,836 | 4,403 | 1,622 | 68,277 |
| 1982 | 5,969 | 18,813 | 10,408 | 7,086 | 14,398 | 7,945 | 1,803 | 68,422 |
| Hay² | | | | | | | | |
| 1976-80 | 2,052 | 6,129 | 4,809 | 2,903 | 8,294 | 5,636 | 3,414 | 33,237 |
| 1980 | 2,080 | 7,169 | 6,113 | 3,128 | 8,089 | 5,312 | 3,378 | 35,269 |
| 1981 | 2,076 | 6,635 | 6,296 | 2,588 | 9,568 | 5,281 | 3,314 | 35,758 |
| 1982 | 2,182 | 6,451 | 5,079 | 2,674 | 8,166 | 6,300 | 3,120 | 33,972 |
| Feed roots | | | | | | | | |
| 1976-80 | 690 | 870 | 2,401 | 692 | 9,055 | 3,605 | 749 | 18,062 |
| 1980 | 479 | 715 | 1,714 | 661 | 8,044 | 2,986 | 685 | 15,284 |
| 1981 | 431 | 795 | 2,721 | 645 | 11,722 | 3,276 | 675 | 20,265 |
| 1982 | 465 | 1,220 | 2,770 | 700 | 10,541 | 4,392 | 664 | 20,752 |

— = No information reported, or amount under 1,000 tons.

¹1983 data are preliminary and unavailable for corn silage, hay, and feed roots. ²Does not include meadow hay and includes only lucerne, clover, and vetch in Yugoslavia.

Table 5.—Area of selected crops, Eastern Europe, 1976-80 average and 1980-83 annual¹

| Commodity and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania | Yugo-slavia | Total Eastern Europe |
|-----------------------|----------|-----------------|-----|---------|--------|---------|-------------|----------------------|
| <i>1,000 hectares</i> | | | | | | | | |
| Potatoes | | | | | | | | |
| 1976-80 | 35 | 223 | 566 | 84 | 2,410 | 291 | 301 | 3,910 |
| 1980 | 35 | 199 | 513 | 63 | 2,344 | 286 | 287 | 3,727 |
| 1981 | 37 | 200 | 505 | 61 | 2,257 | 299 | 291 | 3,650 |
| 1982 | 40 | 199 | 505 | 56 | 2,178 | 311 | 280 | 3,569 |
| 1983 | 40 | 193 | 500 | 60 | 2,230 | 310 | 280 | 3,613 |
| Sugar beets | | | | | | | | |
| 1976-80 | 66 | 217 | 260 | 118 | 505 | 247 | 125 | 1,538 |
| 1980 | 56 | 218 | 250 | 104 | 460 | 238 | 128 | 1,454 |
| 1981 | 56 | 219 | 262 | 122 | 470 | 282 | 147 | 1,558 |
| 1982 | 61 | 213 | 255 | 125 | 493 | 269 | 140 | 1,556 |
| 1983 | 60 | 212 | 250 | 108 | 490 | 230 | 140 | 1,490 |
| Sunflowerseed | | | | | | | | |
| 1976-80 | 233 | 13 | — | 185 | — | 515 | 214 | 1,160 |
| 1980 | 247 | 20 | — | 273 | — | 508 | 180 | 1,228 |
| 1981 | 260 | 19 | — | 302 | — | 506 | 196 | 1,283 |
| 1982 | 253 | 22 | — | 290 | — | 496 | 140 | 1,201 |
| 1983 | 255 | 22 | — | 290 | — | 480 | 80 | 1,127 |
| Rapeseed | | | | | | | | |
| 1976-80 | — | 72 | 124 | 53 | 327 | 8 | 28 | 612 |
| 1980 | — | 91 | 125 | 51 | 320 | 14 | 32 | 633 |
| 1981 | — | 95 | 124 | 56 | 277 | 13 | 31 | 596 |
| 1982 | — | 97 | 120 | 60 | 259 | 14 | 45 | 600 |
| 1983 | — | 118 | 122 | 50 | 260 | 10 | 50 | 610 |
| Soybeans | | | | | | | | |
| 1976-80 | 83 | 3 | — | 25 | — | 239 | 29 | 379 |
| 1980 | 94 | 1 | — | 20 | — | 364 | 17 | 496 |
| 1981 | 94 | 2 | — | 22 | — | 310 | 48 | 476 |
| 1982 | 69 | 3 | — | 26 | — | 269 | 75 | 442 |
| 1983 | 90 | 3 | — | 32 | — | 300 | 100 | 525 |
| Tobacco | | | | | | | | |
| 1976-80 | 116 | 4 | 3 | 16 | 51 | 48 | 62 | 300 |
| 1980 | 108 | 4 | 3 | 14 | 52 | 44 | 57 | 282 |
| 1981 | 106 | 4 | 3 | 15 | 49 | 39 | 56 | 272 |
| 1982 | 103 | 4 | 3 | 15 | 49 | 35 | 65 | 274 |
| 1983 | 110 | 4 | 3 | 15 | 50 | 35 | 65 | 282 |
| Corn silage | | | | | | | | |
| 1976-80 | 273 | 439 | 372 | 319 | 624 | 172 | 42 | 2,241 |
| 1980 | 360 | 418 | 365 | 329 | 668 | 44 | 49 | 2,233 |
| 1981 | 341 | 423 | 366 | 346 | 577 | 53 | 57 | 2,163 |
| 1982 | 291 | 460 | 374 | 302 | 485 | (95) | 61 | (2,068) |
| Hay ² | | | | | | | | |
| 1976-80 | 453 | 957 | 540 | 656 | 1,698 | 942 | 659 | 5,905 |
| 1980 | 469 | 998 | 604 | 635 | 1,692 | 704 | 660 | 5,762 |
| 1981 | 462 | 1,010 | 624 | 599 | 1,900 | 782 | 646 | 6,023 |
| 1982 | 483 | 1,004 | 598 | 588 | 1,851 | (800) | 623 | (5,947) |
| Feed roots | | | | | | | | |
| 1976-80 | 14 | 21 | 55 | 20 | 258 | 85 | 35 | 488 |
| 1980 | 12 | 20 | 40 | 19 | 257 | 76 | 34 | 458 |
| 1981 | 11 | 17 | 60 | 19 | 273 | 90 | 34 | 504 |
| 1982 | 11 | 23 | 69 | 19 | 288 | (100) | 33 | (543) |

— = No information reported, or amount less than 1,000 hectares. () = Estimate.

¹1983 data are preliminary and unavailable for corn silage, hay, and feed roots. ²Does not include meadow hay, and includes only lucerne, clover, and vetch in Yugoslavia.

Table 6.—Trade of selected agricultural commodities, Eastern Europe, 1976-80 average and 1980-82 annual

| Commodity and country | Imports | | | | Exports | | | |
|---|---------|-------|-------|-------|---------|-------|-------|-------|
| | 1976-80 | 1980 | 1981 | 1982 | 1976-80 | 1980 | 1981 | 1982 |
| <i>1,000 tons</i> | | | | | | | | |
| Oilseeds¹ | | | | | | | | |
| Bulgaria | 9 | 6 | 27 | — | 22 | 15 | 13 | 13 |
| Czechoslovakia | 135 | 91 | 58 | 109 | 2 | 2 | 2 | 2 |
| GDR | 55 | 84 | 50 | 40 | 21 | 11 | 25 | — |
| Hungary | 8 | 15 | 11 | 7 | 86 | 107 | 92 | 150 |
| Poland | 143 | 279 | 108 | 99 | 51 | — | — | — |
| Romania | (251) | (273) | (81) | (244) | 4 | 2 | 2 | — |
| Yugoslavia | 163 | 233 | 275 | 219 | 16 | 8 | 1 | 2 |
| Total | (764) | (981) | (610) | (718) | 202 | 145 | 135 | 167 |
| Vegetable oil, edible | | | | | | | | |
| Bulgaria | 1 | 2 | 1 | 6 | 16 | 13 | 18 | 26 |
| Czechoslovakia | 44 | 21 | 53 | 41 | 1 | — | — | — |
| GDR | 113 | 112 | 109 | 107 | — | — | — | — |
| Hungary | 14 | 9 | 11 | 8 | 58 | 95 | 134 | 198 |
| Poland | 78 | 104 | 61 | 125 | 57 | 7 | 6 | 3 |
| Romania | 9 | 20 | 16 | 2 | 122 | 86 | 82 | 107 |
| Yugoslavia | 52 | 81 | 116 | 79 | 14 | 17 | 5 | 5 |
| Total | 311 | 349 | 367 | 368 | 268 | 218 | 245 | 339 |
| Meat and meat products² | | | | | | | | |
| Bulgaria | 9 | 5 | 2 | 2 | 108 | 117 | 98 | 108 |
| Czechoslovakia | 26 | 31 | 21 | 26 | 32 | 54 | 72 | 76 |
| GDR | 24 | 31 | 23 | 63 | 133 | 122 | 131 | 126 |
| Hungary | 13 | 16 | 20 | 21 | 285 | 347 | 354 | 416 |
| Poland | 48 | 52 | 188 | 93 | 156 | 162 | 82 | 67 |
| Romania | 39 | 90 | 71 | 59 | 187 | 191 | 206 | 136 |
| Yugoslavia | 41 | 70 | 40 | 93 | 94 | 100 | 76 | 122 |
| Total | 200 | 295 | 365 | 357 | 995 | 1,093 | 1,019 | 1,051 |
| Sugar³ | | | | | | | | |
| Bulgaria | 219 | 194 | 283 | 246 | 2 | — | — | — |
| Czechoslovakia | 88 | 92 | 101 | 129 | 210 | 260 | 215 | 151 |
| GDR | 209 | 188 | 277 | 204 | 82 | 94 | 108 | (94) |
| Hungary | 84 | 40 | 136 | (1) | 31 | 106 | 76 | 42 |
| Poland | 58 | 124 | 185 | 73 | 208 | 26 | 14 | 101 |
| Romania | 139 | 199 | 211 | 217 | 72 | 87 | 266 | (271) |
| Yugoslavia | 85 | — | 179 | 37 | 78 | 317 | 1 | 10 |
| Total | 862 | 837 | 1,372 | (907) | 683 | 890 | 680 | (669) |
| Tobacco | | | | | | | | |
| Bulgaria | 7 | 12 | 14 | 20 | 69 | 73 | 67 | 65 |
| Czechoslovakia | 21 | 26 | 28 | 19 | 1 | — | — | — |
| GDR | 20 | 26 | 18 | 18 | 2 | 3 | 3 | (3) |
| Hungary | 7 | 7 | 8 | 7 | 1 | 3 | 5 | 2 |
| Poland | 12 | 23 | 24 | 11 | 9 | 9 | 3 | 5 |
| Romania | 1 | — | — | — | 7 | 3 | 4 | (4) |
| Yugoslavia | 4 | 7 | 7 | 8 | 24 | 25 | 22 | 25 |
| Total | 72 | 101 | 99 | 83 | 113 | 116 | 104 | (104) |
| Oilseed meal | | | | | | | | |
| Bulgaria | 194 | 184 | 230 | 161 | — | — | — | — |
| Czechoslovakia | 643 | 753 | 722 | 767 | 20 | 17 | — | 1 |
| GDR | 949 | 943 | 1,030 | 1,273 | 3 | 4 | 1 | 5 |
| Hungary | 614 | 620 | 599 | 565 | (1) | (3) | (6) | 29 |
| Poland | 1,160 | 1,361 | 1,348 | 856 | (5) | (3) | (1) | 1 |
| Romania | 297 | 385 | 654 | 170 | — | — | — | — |
| Yugoslavia | 172 | 148 | 177 | 215 | 3 | 6 | 4 | 1 |
| Total | 4,029 | 4,394 | 4,760 | 4,007 | (32) | (33) | (12) | 37 |
| Cotton | | | | | | | | |
| Bulgaria | 57 | 64 | 56 | 60 | — | — | — | — |
| Czechoslovakia | 109 | 114 | 109 | 126 | — | — | — | — |
| GDR | 90 | 99 | 86 | 105 | — | — | — | — |
| Hungary | 93 | 117 | 95 | 79 | — | — | — | — |
| Poland | 163 | 173 | 152 | 160 | — | — | — | — |
| Romania | 111 | 120 | 119 | 135 | — | — | — | — |
| Yugoslavia | 108 | 110 | 103 | 108 | — | — | — | — |
| Total | 731 | 797 | 720 | 773 | — | — | — | — |
| Hides and skins | | | | | | | | |
| Bulgaria | 6 | 5 | 7 | 6 | — | — | — | — |
| Czechoslovakia ⁴ | (52) | 51 | 17 | (21) | — | — | — | — |
| GDR | 17 | 19 | 16 | 11 | — | — | — | — |
| Hungary | 31 | 31 | 27 | 30 | — | — | — | — |
| Poland | 42 | 43 | 31 | 50 | — | — | — | — |
| Romania | 44 | 43 | 50 | 29 | — | — | — | — |
| Yugoslavia | 27 | 30 | 29 | 25 | — | — | — | — |
| Total | (219) | 222 | 177 | (172) | — | — | — | — |

() = Estimate. — = No information reported, or less than 1,000 tons.

¹Rapeseed, soybeans, and sunflowerseed. ²Includes poultry meat. ³Raw basis. ⁴Converted from pieces to metric tons at 22 kilograms per piece.

Sources: Statistical yearbooks of respective countries, CEMA Yearbook, FAO Trade Yearbook, statistical yearbooks of trading partners.

Table 7.—January livestock numbers, Eastern Europe, 1976-80 average and 1981-84 annual¹

| Category and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania | Yugo-slavia | Total Eastern Europe |
|-------------------|----------|-----------------|--------|----------|----------|-----------|-------------|----------------------|
| <i>1,000 head</i> | | | | | | | | |
| Cattle | | | | | | | | |
| 1976-80 | 1,733 | 4,754 | 5,544 | 1,926 | 12,339 | 6,361 | 5,575 | 38,232 |
| 1981 | 1,796 | 5,002 | 5,723 | 1,918 | 11,337 | 6,485 | 5,474 | 37,735 |
| 1982 | 1,807 | 5,103 | 5,749 | 1,945 | 11,467 | 6,303 | 5,464 | 37,838 |
| 1983 | 1,783 | 5,131 | 5,690 | 1,922 | 11,022 | 6,246 | 5,351 | 37,145 |
| 1984 | 1,780 | 5,190 | 5,755 | 1,910 | 11,085 | 6,750 | (5,295) | (37,765) |
| Cows | | | | | | | | |
| 1976-80 | 697 | 1,902 | 2,145 | 773 | 5,914 | 2,612 | 3,181 | 17,224 |
| 1981 | 702 | 1,902 | 2,138 | 765 | 5,666 | 2,670 | 3,086 | 16,929 |
| 1982 | 706 | 1,905 | 2,122 | 759 | 5,706 | 2,592 | 3,079 | 16,869 |
| 1983 | 703 | 1,899 | 2,125 | 751 | 5,686 | 2,565 | 3,050 | 16,779 |
| 1984 | 695 | 1,900 | 2,125 | 755 | 5,680 | (2,800) | (3,045) | (17,000) |
| Hogs | | | | | | | | |
| 1976-80 | 3,669 | 7,240 | 11,683 | 7,805 | 20,219 | 9,997 | 7,513 | 68,126 |
| 1981 | 3,808 | 7,894 | 12,871 | 8,330 | 18,734 | 11,542 | 7,867 | 71,046 |
| 1982 | 3,844 | 7,302 | 12,869 | 8,300 | 19,081 | 12,464 | 8,431 | 72,291 |
| 1983 | 3,810 | 7,126 | 12,107 | 9,035 | 17,564 | 12,644 | 8,370 | 70,656 |
| 1984 | 3,770 | 7,070 | 12,840 | 9,835 | 15,850 | 14,375 | (8,320) | (72,060) |
| Sheep | | | | | | | | |
| 1976-80 | 10,105 | 837 | 1,925 | 2,560 | 3,452 | 14,818 | 7,504 | 41,201 |
| 1981 | 10,433 | 910 | 2,038 | 3,090 | 3,490 | 15,865 | 7,384 | 43,210 |
| 1982 | 10,726 | 959 | 2,169 | 3,140 | 3,510 | 17,288 | 7,398 | 45,190 |
| 1983 | 10,761 | 990 | 2,198 | 3,183 | 3,678 | 16,921 | 7,452 | 45,183 |
| 1984 | 10,980 | 1,040 | 2,350 | 3,100 | 3,530 | 18,575 | (7,570) | (47,145) |
| Horses | | | | | | | | |
| 1976-80 | 126 | 54 | 67 | 141 | 1,970 | 565 | 751 | 3,674 |
| 1981 | 120 | 45 | 70 | 120 | 1,780 | 555 | 573 | 3,263 |
| 1982 | 119 | 44 | 76 | 112 | 1,726 | 598 | 515 | 3,190 |
| 1983 | 119 | 44 | 81 | 111 | 1,617 | 610 | 505 | 3,087 |
| 1984 | 120 | 44 | 80 | 110 | (1,575) | (620) | (495) | (3,044) |
| Poultry | | | | | | | | |
| 1976-80 | 39,989 | 44,871 | 49,102 | 63,002 | 86,259 | 90,858 | 59,752 | 433,833 |
| 1981 | 41,636 | 47,283 | 51,611 | 65,042 | 81,164 | 97,800 | 65,690 | 450,226 |
| 1982 | 40,563 | 47,388 | 54,392 | 67,496 | 71,281 | 109,244 | 67,408 | 457,772 |
| 1983 | 42,853 | 49,212 | 51,356 | 67,552 | 67,244 | 111,047 | 69,680 | 458,944 |
| 1984 | 43,080 | 50,980 | 53,170 | (67,600) | (66,300) | (119,240) | (71,000) | (471,370) |

() = Estimate.

¹1984 data are preliminary.

Table 8.—Production of principal livestock products, Eastern Europe, 1976-80 average and 1980-83 annual¹

| Category and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania | Yugoslavia | Total Eastern Europe |
|--|----------|-----------------|-------|---------|--------|---------|------------|----------------------|
| <i>1,000 tons</i> | | | | | | | | |
| Beef and veal² | | | | | | | | |
| 1976-80 | 143 | 424 | 447 | 203 | 869 | 306 | 362 | 2,754 |
| 1980 | 154 | 436 | 431 | 203 | 846 | 304 | 360 | 2,734 |
| 1981 | 150 | 423 | 452 | 196 | 623 | 289 | 356 | 2,489 |
| 1982 | 162 | 424 | 441 | 205 | 799 | (225) | 376 | (2,632) |
| 1983 | (160) | 435 | 440 | 200 | 720 | (210) | (365) | (2,530) |
| Mutton, lamb, and goat meat² | | | | | | | | |
| 1976-80 | 99 | 6 | 20 | 15 | 29 | 76 | 60 | 305 |
| 1980 | 104 | 6 | 21 | 17 | 20 | 78 | 59 | 305 |
| 1981 | 113 | 7 | 19 | 19 | 27 | 64 | 58 | 307 |
| 1982 | 111 | 8 | 19 | 17 | 27 | 68 | 60 | 310 |
| 1983 | (115) | 7 | 20 | 17 | 25 | (70) | (60) | (314) |
| Pork² | | | | | | | | |
| 1976-80 | 349 | 803 | 1,198 | 922 | 1,728 | 876 | 798 | 6,674 |
| 1980 | 372 | 851 | 1,258 | 986 | 1,768 | 977 | 815 | 7,027 |
| 1981 | 380 | 888 | 1,358 | 991 | 1,384 | 1,008 | 844 | 6,853 |
| 1982 | 378 | 772 | 1,211 | 1,020 | 1,512 | (895) | 850 | (6,638) |
| 1983 | (385) | 825 | 1,250 | 1,130 | 1,350 | (970) | (800) | (6,710) |
| Poultry meat² | | | | | | | | |
| 1976-80 | 149 | 159 | 137 | 328 | 374 | 363 | 250 | 1,760 |
| 1980 | 145 | 172 | 145 | 355 | 441 | 406 | 299 | 1,963 |
| 1981 | 147 | 170 | 149 | 367 | 455 | 422 | 286 | 1,996 |
| 1982 | 153 | 170 | 147 | 400 | 197 | 440 | 282 | 1,789 |
| 1983 | (160) | 175 | 150 | 405 | 205 | (455) | (295) | (1,845) |
| Total meat^{2, 3} | | | | | | | | |
| 1976-80 | 745 | 1,423 | 1,821 | 1,472 | 3,064 | 1,623 | 1,476 | 11,624 |
| 1980 | 781 | 1,498 | 1,899 | 1,566 | 3,141 | 1,769 | 1,519 | 12,173 |
| 1981 | 794 | 1,527 | 1,997 | 1,577 | 2,525 | 1,786 | 1,555 | 11,761 |
| 1982 | 807 | 1,413 | 1,837 | 1,647 | 2,580 | 1,635 | 1,577 | 11,496 |
| 1983 | (825) | 1,442 | 1,860 | 1,752 | 2,300 | (1,705) | (1,520) | (11,404) |
| Milk⁴ | | | | | | | | |
| 1976-80 | 1,653 | 5,629 | 8,155 | 2,283 | 16,805 | 4,164 | 4,136 | 42,825 |
| 1980 | 1,830 | 5,909 | 8,321 | 2,548 | 16,494 | 4,148 | 4,342 | 43,592 |
| 1981 | 1,900 | 5,918 | 8,202 | 2,680 | 15,341 | 3,601 | 4,484 | 42,126 |
| 1982 | 2,000 | 5,931 | 7,678 | 2,721 | 15,293 | 3,365 | 4,602 | 41,590 |
| 1983 | (2,114) | 6,495 | 8,200 | 2,745 | 15,920 | 3,630 | (4,690) | (43,794) |
| <i>Million pieces</i> | | | | | | | | |
| Eggs | | | | | | | | |
| 1976-80 | 2,163 | 4,690 | 5,287 | 4,475 | 8,523 | 6,583 | 4,117 | 35,838 |
| 1980 | 2,434 | 4,900 | 5,514 | 4,385 | 8,902 | 6,727 | 4,394 | 37,256 |
| 1981 | 2,431 | 4,968 | 5,670 | 4,394 | 8,816 | 7,017 | 4,427 | 37,723 |
| 1982 | 2,459 | 5,030 | 5,696 | 4,440 | 7,633 | 7,155 | 4,612 | 37,025 |
| 1983 | 2,640 | 5,230 | 5,710 | 4,480 | 7,600 | 7,250 | (4,720) | 37,630 |

() = Estimate.

¹1983 data are preliminary. ²Data include offal and edible slaughter fat, and live animal exports for slaughter. CEMA data except for Yugoslavia. ³Data include horse and rabbit meat, CEMA data except for Yugoslavia. ⁴Data include only cow milk for consumption in Romania, Yugoslavia, and Hungary. Data in the remaining countries include milk sucked by calves. In the GDR, milk production is given in 3.5 percent fat equivalent. One liter is equivalent to 1.031 kilograms.

Table 9.—Per capita consumption of selected foods, Eastern Europe, 1975 and 1980-83¹

| Commodity and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania 2/ | Yugo-slavia |
|----------------------------|----------|-----------------|--------|---------|--------|---------------------|-------------|
| <i>Kilograms</i> | | | | | | | |
| Total meat | | | | | | | |
| 1975 | 58.0 | 81.1 | 77.8 | 68.5 | 70.3 | 45.7 | 48.3 |
| 1980 | 61.2 | 85.6 | 89.5 | 71.7 | 74.0 | 60.0 | 54.2 |
| 1981 | 66.6 | 86.6 | 90.7 | 73.0 | 65.0 | — | 54.7 |
| 1982 | 68.3 | 81.0 | 91.0 | 74.5 | 58.5 | ³ 65.0 | 54.7 |
| 1983 | (69.5) | 80.5 | (91.3) | (74.8) | 57 | ³ (65.0) | (55.0) |
| Eggs ⁴ | | | | | | | |
| 1975 | 146 | 297 | 269 | 274 | 209 | 214 | 166 |
| 1980 | 204 | 316 | 289 | 317 | 222 | 270 | 190 |
| 1981 | 209 | 321 | 290 | 314 | 227 | — | 183 |
| 1982 | 220 | 324 | 288 | 307 | 200 | 270 | — |
| 1983 | 225 | — | 301 | (320) | (208) | — | — |
| Vegetable oil | | | | | | | |
| 1975 | 14.1 | 6.7 | 2.0 | 2.9 | 6.5 | — | 10.6 |
| 1980 | 14.8 | 7.2 | 1.6 | 4.2 | 7.0 | — | 11.3 |
| 1981 | 14.9 | 7.3 | 1.6 | 4.4 | 7.4 | — | — |
| 1982 | 15.0 | 6.9 | 1.8 | (4.5) | 5.9 | — | — |
| Sugar | | | | | | | |
| 1975 | 32.5 | 38.0 | 36.8 | 39.4 | 43.2 | 20.3 | 32.8 |
| 1980 | 34.7 | 37.5 | 40.6 | 37.9 | 41.4 | 28.2 | 36.6 |
| 1981 | 35.1 | 36.9 | 40.8 | 35.5 | 33.4 | — | 36.1 |
| 1982 | 35.0 | 41.0 | 44.0 | 38.0 | 41.7 | — | — |
| Grain, in flour equivalent | | | | | | | |
| 1975 | 162 | 108 | 95 | 118 | 120 | 189 | 183 |
| 1980 | 160 | 107 | 94 | 112 | 127 | 172 | 178 |
| 1981 | 159 | 109 | 93 | 110 | 128 | 180 | 179 |
| 1982 | 159 | 111 | 97 | 109 | 124 | 173 | — |
| Vegetables | | | | | | | |
| 1975 | 127 | 74 | 90 | 85 | 109 | 113 | 87 |
| 1980 | 125 | 66 | 94 | 80 | 101 | 140 | 97 |
| 1981 | 135 | 66 | 94 | 77 | 118 | — | 98 |
| 1982 | 147 | 69 | 96 | 75 | 107 | 170 | — |
| Potatoes | | | | | | | |
| 1975 | 23 | 96 | 142 | 67 | 173 | 96 | 66 |
| 1980 | 27 | 76 | 143 | 61 | 158 | 71 | 61 |
| 1981 | 30 | 80 | 140 | 59 | 155 | — | 59 |
| 1982 | 31 | 88 | 145 | 58 | 159 | 100 | — |

— = No information reported. () = Estimate.

¹1983 data are preliminary and listed if available. ²*Revista Economică*, Dec. 29, 1978; *Lumea*, Oct. 30, 1981; Bucharest Domestic Service, Nov. 1, 1981; *Scinteia*, Nov. 29, 1981; unpublished official statistics. ³Includes fish. ⁴Numbers.

Table 10.—Total and agricultural trade, Eastern Europe, 1976-83¹

| Category and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania | Yugo-slavia | Total Eastern Europe |
|---|----------|-----------------|----------|---------|--------|----------|-------------|----------------------|
| <i>Million dollars</i> | | | | | | | | |
| Exports² | | | | | | | | |
| 1976 | 5,382 | 9,035 | 11,361 | 4,934 | 11,017 | 6,138 | 3,557 | 52,424 |
| 1977 | 6,351 | 10,302 | 12,024 | 5,832 | 12,265 | 6,979 | 5,256 | 59,009 |
| 1978 | 7,478 | 11,747 | 13,267 | 6,345 | 14,114 | 8,077 | 5,668 | 66,696 |
| 1979 | 8,869 | 13,197 | 15,063 | 7,938 | 16,249 | 9,724 | 6,605 | 77,645 |
| 1980 | 10,372 | 14,891 | 17,312 | 8,677 | 16,997 | 11,401 | 10,770 | 90,420 |
| 1981 | 10,748 | 14,876 | 18,967 | 8,712 | 13,249 | 12,610 | 10,929 | 90,091 |
| 1982 | 11,288 | 15,637 | 21,743 | 8,767 | 11,208 | 11,714 | 10,713 | 91,070 |
| 1983 | 12,260 | 17,030 | (24,280) | 8,720 | 12,450 | (12,420) | (10,415) | (97,575) |
| Imports² | | | | | | | | |
| 1976 | 5,626 | 9,706 | 13,196 | 5,528 | 13,867 | 6,095 | 6,882 | 60,900 |
| 1977 | 6,393 | 11,187 | 14,334 | 6,523 | 14,616 | 7,018 | 9,633 | 69,704 |
| 1978 | 7,651 | 12,565 | 14,572 | 7,902 | 16,089 | 8,910 | 9,983 | 77,672 |
| 1979 | 8,514 | 14,262 | 16,214 | 8,674 | 17,584 | 10,915 | 13,240 | 89,403 |
| 1980 | 9,650 | 15,148 | 19,082 | 9,235 | 19,089 | 13,201 | 18,279 | 103,684 |
| 1981 | 10,854 | 14,658 | 20,059 | 9,128 | 15,476 | 12,458 | 15,817 | 98,450 |
| 1982 | 11,413 | 15,403 | 20,196 | 8,814 | 10,248 | 9,836 | 14,057 | 89,967 |
| 1983 | 12,320 | 16,850 | (22,690) | 8,385 | 11,335 | (9,410) | (12,120) | (93,110) |
| Balance | | | | | | | | |
| 1976 | -244 | -671 | -1,835 | -594 | -2,850 | 43 | -2,325 | -8,476 |
| 1977 | -42 | -885 | -2,310 | -691 | -2,351 | -39 | -4,377 | -10,695 |
| 1978 | -173 | -818 | -1,305 | -1,557 | -1,975 | -833 | -4,315 | -10,976 |
| 1979 | 355 | -1,065 | -1,151 | -736 | -1,335 | -1,191 | -6,635 | -11,758 |
| 1980 | 722 | -257 | -1,770 | -558 | -2,092 | -1,800 | -7,509 | -13,264 |
| 1981 | -106 | 218 | -1,092 | -416 | -2,227 | 152 | -4,888 | -8,359 |
| 1982 | -125 | 234 | 1,547 | -47 | 960 | 1,878 | -3,344 | 1,103 |
| 1983 | -60 | 180 | (1,590) | 335 | 1,115 | (3,010) | (-1,705) | (4,465) |
| Agricultural exports³ | | | | | | | | |
| 1976 | 955 | 339 | 331 | 1,453 | 978 | 929 | 617 | 5,602 |
| 1977 | 1,036 | 376 | 328 | 1,749 | 1,019 | 1,275 | 595 | 6,378 |
| 1978 | 1,059 | 438 | 411 | 1,785 | 1,078 | 1,273 | 712 | 6,756 |
| 1979 | 1,259 | 551 | 464 | 2,102 | 1,199 | 1,176 | 814 | 7,565 |
| 1980 | 1,436 | 688 | 554 | 1,990 | 1,107 | 1,374 | 1,074 | 8,223 |
| 1981 | 1,162 | 614 | 594 | 2,249 | 632 | 1,415 | 1,093 | 7,759 |
| 1982 | 1,295 | 684 | 477 | 2,233 | 766 | 1,135 | 1,232 | 7,822 |
| Agricultural imports³ | | | | | | | | |
| 1976 | 504 | 1,462 | 1,840 | 937 | 1,895 | 881 | 902 | 8,421 |
| 1977 | 447 | 1,634 | 1,871 | 1,155 | 2,040 | 778 | 1,132 | 9,057 |
| 1978 | 498 | 1,689 | 2,024 | 1,170 | 2,294 | 833 | 1,067 | 9,575 |
| 1979 | 593 | 2,159 | 2,223 | 1,211 | 2,505 | 1,127 | 1,519 | 11,367 |
| 1980 | 616 | 2,093 | 2,484 | 1,100 | 3,098 | 1,393 | 1,641 | 12,425 |
| 1981 | 730 | 1,904 | 2,174 | 1,044 | 3,065 | 1,493 | 1,477 | 11,887 |
| 1982 | 500 | 1,890 | 2,120 | 730 | 2,161 | 911 | 1,316 | 9,628 |
| Agricultural trade balance | | | | | | | | |
| 1976 | 451 | -1,123 | -1,509 | 516 | -917 | 48 | -285 | -2,819 |
| 1977 | 589 | -1,258 | -1,543 | 594 | -1,021 | 497 | -537 | -2,679 |
| 1978 | 561 | -1,251 | -1,613 | 615 | -1,216 | 440 | -355 | -2,819 |
| 1979 | 666 | -1,638 | -1,759 | 891 | -1,306 | 49 | -705 | -3,802 |
| 1980 | 820 | -1,405 | -1,930 | 890 | -1,991 | -19 | -567 | -4,202 |
| 1981 | 432 | -1,290 | -1,580 | 1,205 | -2,433 | -78 | -384 | -4,128 |
| 1982 | 795 | -1,206 | -1,643 | 1,503 | -1,395 | 224 | -84 | -1,806 |

() = Estimate.

¹1983 data are preliminary and unavailable for agricultural trade. ²United Nations data. ³FAO data.

Table 11.—U.S. total and agricultural trade with Eastern Europe, 1979-83

| Category and year | Bulgaria | Czecho-slovakia | GDR | Hungary | Poland | Romania | Yugo-slavia | Total Eastern Europe |
|-------------------------------------|----------|-----------------|-------|---------|--------|---------|-------------|----------------------|
| <i>Million dollars</i> | | | | | | | | |
| Total exports | | | | | | | | |
| 1979 | 56.2 | 295.5 | 388.0 | 80.6 | 804.3 | 510.5 | 773.1 | 2,908.2 |
| 1980 | 172.2 | 236.1 | 558.8 | 88.2 | 761.4 | 748.5 | 768.3 | 3,333.5 |
| 1981 | 264.4 | 97.2 | 344.4 | 77.5 | 684.1 | 548.8 | 657.0 | 2,673.4 |
| 1982 | 106.6 | 111.7 | 236.6 | 67.8 | 294.1 | 223.3 | 554.6 | 1,594.7 |
| 1983 | 65.4 | 72.4 | 147.5 | 109.8 | 320.4 | 185.7 | 603.9 | 1,505.1 |
| Total imports | | | | | | | | |
| 1979 | 34.7 | 50.9 | 36.4 | 112.2 | 425.6 | 329.3 | 388.9 | 1,378.0 |
| 1980 | 24.9 | 65.9 | 43.4 | 107.5 | 418.4 | 312.2 | 446.3 | 1,418.6 |
| 1981 | 25.6 | 67.2 | 44.7 | 127.9 | 359.9 | 559.4 | 445.5 | 1,630.2 |
| 1982 | 25.1 | 61.5 | 51.8 | 133.2 | 212.9 | 339.1 | 355.9 | 1,179.5 |
| 1983 | 32.8 | 62.8 | 56.9 | 154.5 | 190.6 | 512.8 | 366.5 | 1,376.9 |
| Balance | | | | | | | | |
| 1979 | 21.5 | 244.6 | 351.6 | -31.6 | 378.7 | 181.2 | 384.2 | 1,530.2 |
| 1980 | 147.3 | 170.2 | 515.4 | -19.3 | 343.0 | 436.3 | 322.0 | 1,914.9 |
| 1981 | 238.8 | 30.0 | 299.7 | -50.4 | 324.2 | -10.6 | 211.5 | 1,043.2 |
| 1982 | 81.5 | 50.2 | 184.8 | -65.4 | 81.2 | -115.8 | 198.7 | 415.2 |
| 1983 | 32.6 | 9.6 | 90.6 | -44.7 | 129.8 | -327.1 | 237.4 | 128.2 |
| Total agricul-tural exports | | | | | | | | |
| 1979 | 41.0 | 272.3 | 370.6 | 27.5 | 669.4 | 346.6 | 324.3 | 2,051.7 |
| 1980 | 138.9 | 205.5 | 534.3 | 33.6 | 622.4 | 490.9 | 293.2 | 2,318.8 |
| 1981 | 203.6 | 73.0 | 333.0 | 12.9 | 596.4 | 413.3 | 148.8 | 1,781.0 |
| 1982 | 64.1 | 90.2 | 217.8 | 7.1 | 181.8 | 133.6 | 182.0 | 876.6 |
| 1983 | 37.1 | 36.5 | 139.5 | 58.1 | 205.5 | 118.1 | 304.2 | 899.0 |
| Direct agricul-tural exports | | | | | | | | |
| 1979 | 41.0 | 257.9 | 337.1 | 24.5 | 651.4 | 336.5 | 284.4 | 1,932.8 |
| 1980 | 127.3 | 154.6 | 453.3 | 24.4 | 571.5 | 462.6 | 277.5 | 2,071.2 |
| 1981 | 197.3 | 58.2 | 284.2 | 12.9 | 592.9 | 368.4 | 137.9 | 1,651.8 |
| 1982 | 64.0 | 62.1 | 203.9 | 7.1 | 180.3 | 133.6 | 182.0 | 833.0 |
| 1983 | 37.1 | 21.2 | 130.9 | 58.1 | 205.0 | 118.1 | 268.1 | 838.5 |
| Transshipments | | | | | | | | |
| 1979 | 0 | 14.4 | 33.5 | 3.0 | 18.0 | 10.1 | 39.9 | 118.9 |
| 1980 | 11.6 | 50.9 | 81.0 | 9.2 | 50.9 | 28.3 | 15.7 | 247.6 |
| 1981 | 6.3 | 14.8 | 48.8 | 0 | 3.5 | 44.9 | 10.9 | 129.2 |
| 1982 | 0.1 | 28.1 | 13.9 | 0 | 1.5 | 0 | 0 | 43.6 |
| 1983 | 0 | 15.3 | 8.6 | 0 | 0.5 | 0 | 36.1 | 60.5 |
| Total agricul-ural imports | | | | | | | | |
| 1979 | 23.2 | 7.7 | 2.2 | 35.8 | 164.0 | 33.6 | 86.4 | 352.9 |
| 1980 | 17.4 | 10.4 | 2.8 | 30.6 | 155.7 | 30.5 | 63.6 | 311.0 |
| 1981 | 21.5 | 12.1 | 1.0 | 33.7 | 109.1 | 28.0 | 71.7 | 277.1 |
| 1982 | 21.7 | 13.5 | 2.4 | 33.1 | 69.3 | 18.7 | 69.0 | 227.7 |
| 1983 | 30.6 | 7.7 | 2.0 | 43.3 | 105.1 | 19.5 | 56.3 | 264.5 |
| Balance | | | | | | | | |
| 1979 | 17.8 | 264.6 | 368.4 | -8.3 | 505.4 | 313.0 | 237.9 | 1,698.8 |
| 1980 | 121.5 | 195.1 | 531.5 | 3.0 | 466.7 | 460.4 | 229.6 | 2,007.8 |
| 1981 | 182.1 | 60.9 | 332.0 | -20.8 | 487.3 | 385.3 | 77.1 | 1,503.9 |
| 1982 | 42.4 | 76.7 | 215.4 | -26.0 | 112.5 | 114.9 | 113.0 | 648.9 |
| 1983 | 6.5 | 28.8 | 137.5 | 14.8 | 100.4 | 98.6 | 247.9 | 634.5 |

Sources: Bureau of the Census, Dept. of Commerce; *U.S. Export Sales*, FAS/USDA.

Table 12.—Volume and value of U.S. agricultural exports to Eastern Europe¹, 1976-80 average and 1981-83 annual

| Commodity and country | Volume | | | | Value | | | |
|---------------------------------|-------------------|-------|-------|-------|------------------------|---------|-------|-------|
| | 1976-80 | 1981 | 1982 | 1983 | 1976-80 | 1981 | 1982 | 1983 |
| | <i>1,000 tons</i> | | | | <i>Million dollars</i> | | | |
| Total grain | | | | | | | | |
| Bulgaria | 230 | 934 | 279 | 102 | 27.8 | 134.0 | 32.0 | 13.8 |
| Czechoslovakia | 723 | 412 | 435 | 54 | 97.2 | 52.2 | 57.3 | 6.9 |
| GDR | 2,074 | 1,796 | 1,504 | 891 | 265.9 | 271.7 | 176.2 | 112.3 |
| Hungary | 44 | 1 | — | 25 | 5.2 | 0.8 | — | — |
| Poland | 2,769 | 2,340 | 437 | 248 | 330.5 | 359.9 | 45.3 | 46.7 |
| Romania | 864 | 1,631 | 236 | — | 107.1 | 247.5 | 29.3 | — |
| Yugoslavia | 522 | 137 | 609 | 311 | 73.0 | 19.9 | 78.9 | 42.2 |
| Total | 7,226 | 7,251 | 3,500 | 1,631 | 906.7 | 1,086.0 | 419.0 | 221.9 |
| Wheat | | | | | | | | |
| Bulgaria | — | — | — | — | — | — | — | — |
| Czechoslovakia | 165 | — | — | — | 28.9 | — | — | — |
| GDR | 294 | 174 | 108 | — | 45.7 | 34.2 | 16.6 | — |
| Hungary | — | — | — | — | — | — | — | — |
| Poland | 617 | 92 | — | 74 | 83.1 | 17.0 | — | 19.2 |
| Romania | 244 | 63 | — | — | 33.9 | 8.3 | — | — |
| Yugoslavia | 250 | 137 | 226 | 311 | 41.9 | 19.9 | 33.5 | 42.2 |
| Total | 1,570 | 466 | 334 | 385 | 233.5 | 79.4 | 50.1 | 61.4 |
| Corn | | | | | | | | |
| Bulgaria | 240 | 934 | 279 | 102 | 27.8 | 134.0 | 32.0 | 13.8 |
| Czechoslovakia | 549 | 412 | 435 | 54 | 67.0 | 52.2 | 57.3 | 6.9 |
| GDR | 1,650 | 1,511 | 1,396 | 766 | 207.0 | 224.7 | 159.6 | 96.7 |
| Hungary | 21 | — | — | — | 2.4 | — | — | — |
| Poland | 1,840 | 2,233 | 437 | 162 | 212.1 | 335.4 | 45.3 | 22.1 |
| Romania | 544 | 1,568 | 236 | — | 66.1 | 238.4 | 29.3 | — |
| Yugoslavia | 254 | — | 383 | — | 29.4 | — | 45.4 | — |
| Total | 5,098 | 6,658 | 3,166 | 1,084 | 611.8 | 984.7 | 368.9 | 139.5 |
| Soybeans | | | | | | | | |
| Bulgaria | — | 22 | — | — | — | 6.2 | — | — |
| Czechoslovakia | 6 | — | 13 | — | 4.4 | — | 3.1 | — |
| GDR | 5 | 1 | — | — | 1.2 | 0.2 | — | — |
| Hungary | — | — | — | — | — | — | — | — |
| Poland | 134 | 87 | 100 | 193 | 35.6 | 25.3 | 22.4 | 48.7 |
| Romania | 222 | 153 | 244 | 305 | 54.9 | 35.7 | 60.7 | 76.4 |
| Yugoslavia | 155 | 244 | 189 | 222 | 42.2 | 70.1 | 44.9 | 55.7 |
| Total | 522 | 507 | 546 | 720 | 138.3 | 137.5 | 131.1 | 180.8 |
| Vegetable oil | | | | | | | | |
| Bulgaria | — | — | — | — | — | — | — | — |
| Czechoslovakia | — | — | — | — | — | — | — | — |
| GDR | 1 | — | — | — | 1.0 | — | — | — |
| Hungary | — | — | — | — | — | — | — | — |
| Poland | 15 | 12 | 12 | 11 | 8.8 | 7.3 | 8.8 | 8.1 |
| Romania | — | — | — | — | — | — | — | — |
| Yugoslavia | 4 | 7 | 16 | 132 | 2.4 | 3.8 | 8.4 | 54.7 |
| Total | 20 | 19 | 28 | 143 | 12.2 | 11.1 | 17.2 | 62.8 |
| Soybean meal and cake | | | | | | | | |
| Bulgaria | 73 | 214 | 107 | 35 | 16.9 | 52.1 | 23.4 | 8.6 |
| Czechoslovakia | 281 | 36 | 85 | 76 | 56.7 | 8.3 | 18.8 | 15.3 |
| GDR | 345 | 208 | 172 | 79 | 75.7 | 58.4 | 39.0 | 17.4 |
| Hungary | 95 | — | — | 209 | 22.8 | — | — | 50.8 |
| Poland | 356 | 288 | 7 | 155 | 76.1 | 77.0 | 1.4 | 37.9 |
| Romania | 158 | 372 | 57 | — | 36.0 | 101.4 | 14.3 | — |
| Yugoslavia | 133 | 140 | 96 | 201 | 27.8 | 34.1 | 21.6 | 44.7 |
| Total | 1,441 | 1,258 | 524 | 755 | 312.0 | 331.3 | 118.5 | 174.7 |
| Cotton | | | | | | | | |
| Bulgaria | — | — | — | — | — | — | — | — |
| Czechoslovakia | — | — | — | — | — | — | — | — |
| GDR | — | — | 2 | — | — | — | — | — |
| Hungary | — | 2 | — | — | — | 3.9 | — | — |
| Poland | 8 | 6 | — | — | 12.3 | 15.0 | — | — |
| Romania | 10 | — | — | — | 15.4 | — | — | — |
| Yugoslavia | — | — | — | 47 | — | — | — | 82.6 |
| Total | 18 | 8 | 2 | 47 | 27.7 | 18.9 | — | 82.6 |
| Cattle hides² | | | | | | | | |
| Bulgaria | 41 | — | — | — | 1.1 | — | — | 0.8 |
| Czechoslovakia | 589 | 334 | 415 | 500 | 15.2 | 8.5 | 10.1 | 13.6 |
| GDR | 33 | — | — | — | 0.7 | — | — | — |
| Hungary | 183 | 112 | 102 | 100 | 3.9 | 3.0 | 2.3 | 2.9 |
| Poland | 441 | 203 | 791 | 300 | 12.6 | 5.5 | 21.9 | 7.6 |
| Romania | 1,486 | 680 | 939 | 1,300 | 38.8 | 22.0 | 27.2 | 40.8 |
| Yugoslavia | 461 | 230 | 298 | 300 | 9.9 | 7.7 | 9.9 | 12.1 |
| Total | 3,234 | 1,559 | 2,545 | 2,500 | 82.2 | 46.7 | 71.4 | 77.8 |

Continued

Table 12.—Volume and value of U.S. agricultural exports to Eastern Europe¹, 1976-80 average and 1981-83 annual—Continued

| Commodity and country | Volume | | | | Value | | | |
|----------------------------|-------------------|------|------|------|------------------------|---------|-------|-------|
| | 1976-80 | 1981 | 1982 | 1983 | 1976-80 | 1981 | 1982 | 1983 |
| | <i>1,000 tons</i> | | | | <i>Million dollars</i> | | | |
| Other | | | | | | | | |
| Bulgaria | — | — | — | — | 4.9 | 11.3 | 8.7 | 13.9 |
| Czechoslovakia | — | — | — | — | 10.3 | 4.0 | 0.9 | 0.7 |
| GDR | — | — | — | — | 3.5 | 2.7 | 2.6 | 9.8 |
| Hungary | — | — | — | — | 4.6 | 5.2 | 4.8 | 4.4 |
| Poland | — | — | — | — | 42.6 | 106.4 | 82.0 | 56.5 |
| Romania | — | — | — | — | 5.8 | 6.7 | 2.1 | 0.9 |
| Yugoslavia | — | — | — | — | 26.6 | 13.2 | 18.3 | 12.2 |
| Total | — | — | — | — | 98.3 | 149.5 | 119.4 | 98.4 |
| Total agricultural exports | | | | | | | | |
| Bulgaria | — | — | — | — | 50.7 | 203.6 | 64.1 | 37.1 |
| Czechoslovakia | — | — | — | — | 183.8 | 73.0 | 90.2 | 36.5 |
| GDR | — | — | — | — | 348.0 | 333.0 | 217.8 | 139.5 |
| Hungary | — | — | — | — | 36.5 | 12.9 | 7.1 | 58.1 |
| Poland | — | — | — | — | 518.5 | 596.4 | 181.8 | 205.5 |
| Romania | — | — | — | — | 258.0 | 413.3 | 133.6 | 118.1 |
| Yugoslavia | — | — | — | — | 181.9 | 148.8 | 182.0 | 304.2 |
| Total | — | — | — | — | 1,577.4 | 1,781.0 | 876.6 | 899.0 |

— = Amount less than 1,000 tons, \$1 million, or not applicable.

¹Including estimated transshipments through Belgium, Canada, the Federal Republic of Germany, and the Netherlands. ²1,000 pieces.

Sources: Bureau of the Census, Dept. of Commerce; *Foreign Agricultural Trade of the United States*, ERS/USDA; *U.S. Export Sales*, FAS/USDA.

Table 13.—Volume and value of U.S. agricultural imports from Eastern Europe, 1976-80 average and 1981-83 annual

| Commodity and country | 1976-80 | 1981 | 1982 | 1983 |
|-----------------------|------------------------|--------|--------|--------|
| | <i>1,000 tons</i> | | | |
| Processed meat | | | | |
| Bulgaria | — | — | — | — |
| Czechoslovakia | 1.1 | 1.6 | 1.6 | 0.6 |
| GDR | — | — | — | — |
| Hungary | 7.6 | 7.4 | 6.8 | 11.0 |
| Poland | 39.4 | 26.1 | 15.9 | 27.4 |
| Romania | 6.9 | 6.4 | 3.3 | 4.4 |
| Yugoslavia | 14.6 | 9.9 | 11.8 | 9.9 |
| Total | 69.6 | 51.4 | 39.4 | 53.3 |
| | <i>Million dollars</i> | | | |
| Processed meat | | | | |
| Bulgaria | 0.04 | 0.10 | — | — |
| Czechoslovakia | 3.36 | 4.72 | 5.17 | 1.96 |
| GDR | 0.10 | 0.03 | — | 0.03 |
| Hungary | 23.71 | 25.35 | 23.96 | 32.50 |
| Poland | 131.33 | 90.04 | 58.23 | 86.80 |
| Romania | 18.92 | 17.00 | 8.34 | 9.68 |
| Yugoslavia | 47.18 | 33.84 | 41.80 | 27.95 |
| Total | 224.64 | 171.08 | 137.50 | 158.92 |
| Other products | | | | |
| Bulgaria | 19.87 | 21.39 | 21.70 | 30.58 |
| Czechoslovakia | 3.38 | 7.37 | 8.37 | 5.74 |
| GDR | 2.00 | 0.85 | 2.47 | 1.97 |
| Hungary | 5.23 | 8.33 | 9.16 | 10.75 |
| Poland | 17.45 | 19.08 | 11.10 | 18.25 |
| Romania | 7.54 | 10.95 | 10.32 | 9.86 |
| Yugoslavia | 38.06 | 37.84 | 27.18 | 28.38 |
| Total | 93.53 | 105.81 | 90.30 | 105.53 |
| Total | | | | |
| Bulgaria | 19.91 | 21.49 | 21.70 | 30.58 |
| Czechoslovakia | 6.74 | 12.09 | 13.54 | 7.70 |
| GDR | 2.10 | 0.88 | 2.47 | 2.00 |
| Hungary | 28.94 | 33.68 | 33.12 | 43.25 |
| Poland | 148.78 | 109.12 | 69.33 | 105.05 |
| Romania | 26.46 | 27.95 | 18.66 | 19.54 |
| Yugoslavia | 85.24 | 71.68 | 68.98 | 56.33 |
| Total | 318.17 | 276.89 | 227.80 | 264.45 |

— = Amount less than 1,000 tons, \$1 million, or not applicable.

Source: Bureau of the Census, U.S. Dept. of Commerce.



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