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Eastern Europe

Review of Agriculture in 1981 and Outlook for 1982

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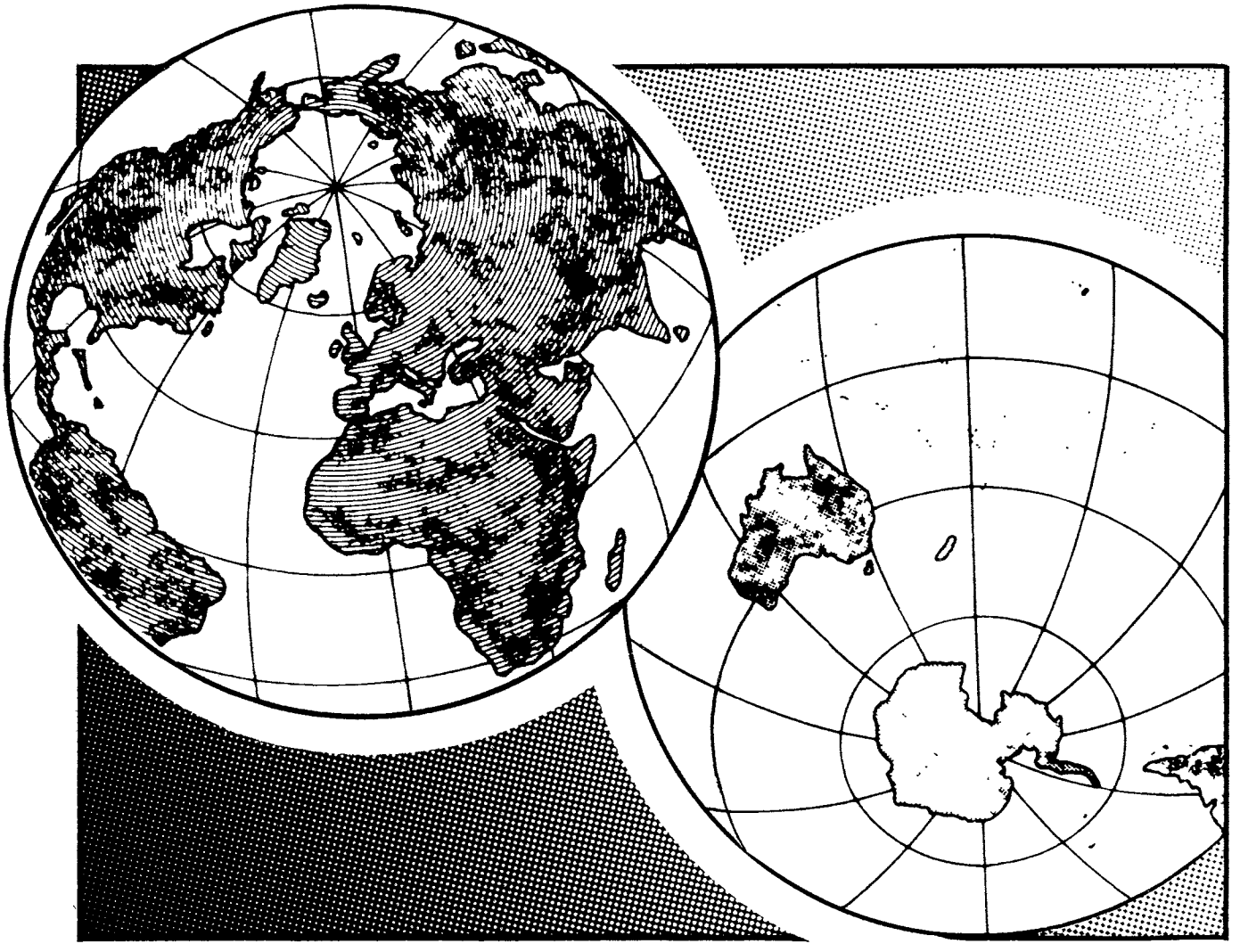

Eastern Europe: Review of Agriculture in 1981 and Outlook for 1982. East Europe-USSR Branch, International Economics Division, Economic Research Service. Supplement 3 to WAS 27. Approved by the World Agricultural Outlook Board.

ABSTRACT

Agricultural production in 1981 increased slightly from the depressed 1980 level but continued well below the records set in the late seventies. Corn, sugar beet, potato, and tobacco production increased, wheat production fell, and oilseed production remained at about the previous year's level. Meat production fell 4 percent. The value of U.S. agricultural exports to the region fell by nearly a quarter to $1.8 billion and further declines are expected in 1982.

Keywords: Eastern Europe, Poland, Romania, crops, livestock, trade, credit.

FOREWORD

The agricultural situation in Eastern Europe deteriorated sharply in 1981. In Poland, shortages of fertilizer, seeds, plant protection agents, and machinery spare parts were widely reported in the spring. Feed supplies were insufficient to support animal herds. Agricultural policy reforms followed the formation of Rural Solidarity, but before these reforms could take effect, deterioration in the general economy, shortages of foreign exchange, loss of confidence in the procurement system, and finally, in the zloty itself, set the stage for the imposition of martial law in December. Further deterioration in the food situation is a clear possibility.

In Romania, severe food shortages led to the imposition of rationing late in the year. In Czechoslovakia, shortfalls in production of grain and forage crops have led planners to conclude that a reduction in animal herds is preferable to the continued drain on foreign exchange for large grain imports. In most of Eastern Europe, the official policies implemented or reemphasized in 1981 call for reducing dependence on imported grain.

Thomas A. Vankai directed and coordinated preparation of this report. Sections were written by Edward Cook, Robert Cummings, and Thomas A. Vankai. Sonya Glenn assisted in the compilation of statistical data. Information submitted by the U.S. Agricultural Counselors and Attaches in Belgrade, Berlin, Bucharest, Vienna, and Warsaw is acknowledged with appreciation.

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

The International Economics Division's program of agricultural situation and outlook analysis and reporting includes the following regularly scheduled publications: the *World Agricultural Situation and Outlook*, published three times annually; regional reports on Asia, Africa, China, Eastern Europe, the Middle East, the Soviet Union, Western Europe, and the Western Hemisphere; the *Foreign Agricultural Trade of the United States*, published bi-monthly; the *Food Aid Needs and Availabilities Report*, published semi-annually; and the *Outlook for U.S. Agricultural Exports*, published quarterly. Information on obtaining these publications is included in this report.

We welcome any comments, suggestions, or questions concerning either this report or the current agricultural situation in Eastern Europe. Responses should be directed to the East Europe-USSR Branch, International Economics Division, Economic Research Service, USDA, Room 314, 500 12th Street, S.W., Washington, D.C. 20250. Our telephone number is 202-447-8380.

Anton F. Malish, Chief
East Europe-USSR Branch
International Economics Division

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CONTENTS

	Page
Summary	1
Slowdown in Economic Growth To Continue	1
Grain Production Down Slightly	2
Wheat Output Declines Sharply	3
Marketing and Distribution Problems Acute	3
Fall Plantings Increased	4
Oilseed Production Continues at Record Levels	4
Oilseed Product Consumption Peaks	4
Planting Intentions Show Little Change	4
Performance of Other Major Crops Improves	5
Sugar Beet and Sugar Production Up	5
Potato Production Recovers	5
Tobacco Production Rises	5
Cotton Production Up Marginally	5
Livestock Inventory Stable; Meat Production Declines	6
Inventories Show Little Change	6
Livestock Product Production Down	6
Growth in Meat Consumption Halted	6
Producer Prices Raised	6
Private Sector Supported	6
Moderate Growth Expected	6
Foreign Trade Balance Improves; Financial Situation Deteriorates	7
Trade Balance Improves	7
Agricultural Trade Balance Negative	7
Financial Situation Deteriorates	8
Credit Difficulties Influence 1981 Commodity Trade	8
U.S. Agricultural Trade with Eastern Europe Declines	9
Agricultural Commodities Dominate U.S. Trade	9
CCC Credit Use Up; Food Aid Extended to Poland	10
1982 Outlook	11
Agricultural Policies Aim for Self-Sufficiency	12
Local Management Authority Upgraded	12
Fertilizer Use Stationary	12
Prices Higher	12
Private Production Encouraged	12

Features

Poland Faces Uncertain Future in Agriculture	14
Agricultural and Trade Problems in Romania	17

Tables

1.	Production of grains, Eastern Europe, annual 1972-81	20
2.	Area of grains, Eastern Europe, annual 1972-81	22
3.	Production of selected crops, Eastern Europe, annual 1972-81	24
4.	Area of selected crops, Eastern Europe, annual 1972-1981	26
5.	January livestock numbers, Eastern Europe, 1972-82	28
6.	Production of principal livestock products, Eastern Europe, annual 1972-81	29
7.	Per capita consumption of selected foods, Eastern Europe, 1972-81	30
8.	Total and agricultural trade, Eastern Europe, 1976-81	31
9.	Grain imports, Eastern Europe, 1972-80	32

Page

10. Grain exports, Eastern Europe, 1972-80 33
11. Imports of selected agricultural commodities, Eastern Europe, 1972-80 34
12. Exports of selected agricultural commodities, Eastern Europe, 1972-80 35
13. Value of U.S. agricultural exports to Eastern Europe, 1976-81 36
14. U.S. exports to Eastern Europe, total and agricultural, 1976-81 38
15. U.S. total and agricultural trade balance with Eastern Europe, 1977-81 39
16. Volume of U.S. agricultural exports to Eastern Europe, 1976-81 40
17. Volume and value of U.S. agricultural imports from Eastern Europe, 1975-81 41

TERMS AND MEASURES

Terms

Agricultural land—Cultivated land, gardens, orchards, meadows, and pastures.

Agricultural trade—Trade in food, fiber, and feed, and raw materials to produce food.

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

Eastern Europe: Bulgaria, Czechoslovakia, GDR, Hungary, Poland, Romania, and Yugoslavia.

Transshipments: United States exports destined for Eastern Europe and un-loaded in Canada or Western Europe; reported by the U.S. Census Bureau as exports to the port of entry.

Measures

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

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

EASTERN EUROPE
REVIEW OF AGRICULTURE IN 1981 AND OUTLOOK FOR 1982

SUMMARY

Gross agricultural production in Eastern Europe during 1981 was only slightly higher than 1980's depressed level. Agriculture's poor performance, however, was generally better than the overall economic performance reported for most of the region. Agricultural production increased the most in Bulgaria and Poland where output was extremely low in 1980.

The region's trade deficit declined for the third straight year; however, the region's net hard currency debt increased to approximately $81 billion, up from $73 billion in 1980. Both total and agricultural trade balances remained negative. Poland and, later in the year, Romania had difficulty in servicing their foreign debt.

U.S. agricultural exports to Eastern Europe, at $1.78 billion, were nearly one quarter less than in 1980. Shipments of each major commodity dropped—from 17 percent for feed grains to 79 percent for wheat. Poland remained the largest U.S. customer in the region, but most of its 1981 purchases were made on credit. The imposition of martial law in that country halted consideration of new U.S. credit guarantees.

The serious reduction in feed grain imports and farmers' reluctance to sell grain to the Government resulted in a severe food shortage in Poland, forcing the Government to introduce rationing for all staple foods. Late in 1981 Romania also resorted to food rationing because of inadequate supplies.

Because of a growing inability to finance agricultural imports, all countries are striving for self-sufficiency. Agricultural policy statements in 1981 generally emphasized profitability to stimulate production and efficiency to save inputs. All producer prices were increased in Bulgaria, Poland, and Yugoslavia. In the other countries, selected producer price increases or price premiums were announced. Private agriculture is now viewed more favorably and management changes are being implemented to spur production.

All countries except the German Democratic Republic raised retail food prices to bring them in line with producer prices and allow a reduction in subsidies from the state budgets. The increases were the steepest in Poland, ranging from 175 to 375 percent.

Total grain output is estimated at 94.2 million tons, 1.7 million below 1980's level. Wheat output fell 4 million tons, while coarse grain production was up 2.3 million. The early onset of 1980 winter plus a decline of 306,000 hectares in sown area caused by delayed fall sowing were the principal factors in the lower production. Grain imports in 1981 are estimated at 15 million tons, down from 18.6 million in 1980. U.S. grain exports to the region were 7.2 million tons, 3.2 million below 1980 exports.

Higher sunflowerseed production compensated for lower rapeseed and soybean harvests, leaving oilseed output at 3.87 million tons, just below 1980's record production. Both imports and consumption of oilseed meal increased slightly in 1981. Imports are estimated to have reached nearly 4.5 million tons, with soybean meal making up 90 percent of imports. Despite higher overall imports, U.S. oilmeal exports fell to less than 1.3 million tons from 1.7 million because of sharper Brazilian competition.

Sugar beet production was over 48 million tons, 17 percent higher than in 1980. Increased area and more favorable weather accounted for the increase. The good 1981 crop plus a faster refining pace should result in sugar production of approximately 5.8 million tons (raw value) in the 1981/82 processing year, over 1 million tons above production in 1980/81. As a result, Eastern Europe could become a modest net exporter of sugar in 1982.

Potato production in Eastern Europe recovered from 1980's very poor season with total output in excess of 65 million tons. Tobacco production equaled 362,000 tons in 1981, up over 20 percent from 1980's output. Tobacco shipments from the main exporters, Bulgaria and Yugoslavia, should be higher than in 1981.

Livestock inventories remained fairly stable in 1981 for the region as a whole, although hog numbers fell 7.5 percent in Czechoslovakia because of the Government's decision not to supplement completely the 1981 grain crop with imports. Total meat production was down 4 percent, led by a slight decline in Czechoslovakia and a 17-percent reduction in Poland. The steady growth of per capita meat consumption during the seventies came to a halt in 1981 as tight foreign exchange supplies caused officials to limit feed imports and, consequently, to scale down growth rates for livestock production.

The prospects for crop production in 1982 are generally good. Fall sowing proceeded on schedule for most crops and grain was sown on a larger area than during fall 1980. Fall-sown rapeseed area also increased in 1981, but there have been reports of above-average winterkill of rapeseed in Poland. Sunflowerseed area is expected to show very little change.

Grain imports, which are estimated to have fallen over 3 million tons in 1981, will decline further in 1982 largely because of lower imports by Poland. Oilmeal imports, which were at record level in 1981, are expected to fall roughly 15 percent in 1982. U.S. agricultural export forecasts on a fiscal year basis suggest that exports in FY 1982 will be about $1.1 billion, roughly 60 percent of FY 1981 exports. Significant declines are anticipated in corn and soybean meal exports, while prospects for soybeans and wheat are mixed. (Robert Cummings)

SLOWDOWN IN ECONOMIC GROWTH TO CONTINUE

A new economic era seems to have begun in Eastern Europe. The expansionary policies of the seventies, largely financed by foreign credits, have been shelved, and growth in domestic consumption, investment, and imports have all been curtailed.

Principal plan indicators, Eastern Europe, 1981 and 1982

Item	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia
				Percent change			
National income							
1981 plan	5.1	2.7	5.0	2–2.5	−3.7	7.0	3–3.5
1981 actual[1]	(5.1)	0.2	5.0	1.8	−13	2.1	2.0
1982 plan	3.6	0.5	4.8	1–1.5	−8	5.5	2.5
Industrial production							
1981 plan	5.6	2.4	5.0	3–3.5	0	8.1	4.0
1981 actual[1]	5.6	2.0	5.1	2.3	−11.2	4.0	4.2
1982 plan	4.5	0.8	4.6	2–2.5	−10	5.6	3.5
Agricultural production							
1981 plan	4.7	2.6	NA	3.0	8.0	9.0	4.0
1981 actual[1]	4.0	−3.4	(0.7)	0	4.0	−0.9	1.4
1982 plan	2.2	3.2	(0.2)	4–4.5	NA	6–7.9	4.0
Capital investment							
1981 plan	NA	0	2.5	−10	−15	0	−5.0
1981 actual[1]	NA	−3.5	2.0	−7.0	−25	−6.7	−8.0
1982 plan	NA	−2.0	NA	−6 to −5	−10	5.0	−6.0
Per capita real income							
1981 plan	3.1	1.7	[2]4.0	1.0	NA	[2]3.4	1–1.5
1981 actual[1]	3.0	2.0	[2]3.3	2.2	NA	[2]2.2	−3.5
1982 plan	3.0	2.6	[2]4.0	0–0.5	NA	[2]2.7	NA

( ) = estimate. NA = not available. [1]Preliminary. [2]Population's income.

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

Economic performance in 1981 was generally weaker than planned for the region as a whole. Average gross agricultural production for the region exceeded last year's level only slightly. Agricultural production increased the most in Bulgaria and Poland. Crop production in both countries recovered from the disastrous harvests reported in 1980. Industrial production reached the planned level only in Bulgaria and the GDR, while it declined 11 percent in Poland. Per capita real income declined in Poland and Yugoslavia, but increased 2 to 3 percent in the other countries.

The Bulgarians attribute their success to recently introduced economic incentives leading to higher labor productivity and to scientific and technical innovations. In the GDR, work discipline, good organization, the continued application of high technology, and a special economic relationship with the Federal Republic of Germany (FRG) helped to realize the planned results. Bulgaria and the GDR attained planned 5-percent increases in national income.

Investment outlays in 1981 were curtailed. All countries concentrated on completing investment projects in progress and on remodeling factories instead of initiating large new construction. Agriculture's share in total investment has not changed significantly. Agricultural labor, about 27 percent of the total labor force in the region, remained constant as a slowdown in industrial growth reduced that sector's labor-absorbing capacity. In addition, mechanization made farm work easier, and working conditions and cultural opportunities improved, thereby reducing the attraction of urban jobs.

The region's hard currency debt increased to $81 billion, up from $73 billion, and Poland negotiated new repayment schedules for both principal and interest. With the imposition of martial law in Poland, the United States suspended further credits to that country. Whether or not Poland can make its repayments is far from certain, and Romania is having difficulty servicing its foreign debt. With the creditworthiness of all East European countries coming under increased scrutiny, a substantial period of retrenchment can be expected in all countries of the region. (Thomas A. Vankai)

GRAIN PRODUCTION DOWN SLIGHTLY

East European grain production during the past 5 years was relatively stable. The lowest production occurred in 1979, when crop outturn reached 90.6 million tons. On the other hand, record crops, only 5.6 million tons higher, occurred in 1978 and 1980. In 1981, East European grain production is estimated at 94.2 million, just slightly above the 5-year average.

Climatic conditions split Eastern Europe into two distinct grain producing regions. The northern countries—the GDR, Poland, and Czechoslovakia—produce primarily barley, rye, and wheat. The southern countries—Hungary, Romania, Yugoslavia, and Bulgaria—produce primarily corn and wheat. These climatic conditions and cropping patterns tend to explain the region's small vari-

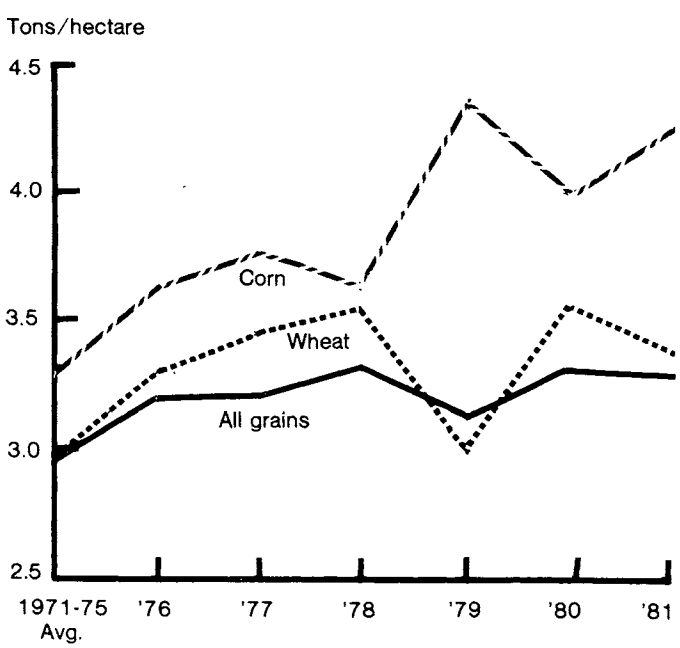
ability in production. But while grain production for the region is generally stable, production in individual countries often displays wide year-to-year swings, changing by as much as 20 percent.

Wheat Output Declines Sharply

The 1981 grain harvest of 94.2 million tons was 1.7 million tons below 1980 production (table 1). A 4-million-ton decline in wheat production to 30.1 million tons was partially offset by a 2.3-million increase in coarse grain—primarily corn—production. Bulgaria, after experiencing a serious production decline in 1980, and Poland, after experiencing poor crops in both 1979 and 1980, both reported production gains. In the other countries, production was essentially unchanged or slightly lower.

The principal cause of the lower production was a net 306,000 hectare decline in the area sown to grain (table 2). The area sown to wheat, the principal grain in the region, shrank by 655,000 hectares and not all the grain area targeted for fall planting but left unsown was replaced by spring grains. Only in Bulgaria and Poland was the harvested area in 1981 larger than in 1980, but even in these two countries it remained below the planned level. Barley, oats, and other spring grains (except corn) exceeded last year's acreage. Average grain yields of 3.31 tons per hectare attained in 1981 approximated last year's result. Bulgaria achieved record wheat and barley yields and Hungary record corn yields.

Grain Yields in Eastern Europe



The crop season began poorly, with cold and wet weather delaying field work during the fall of 1980 in every country except Bulgaria. For most countries, fall-sown crops entered dormancy in a generally underdeveloped condition. But the less than optimal weather conditions in the fall were, for the most part, offset as the season progressed. Spring sowing proceeded generally on schedule. However, beginning in May, hot weather affected wheat and barley yields in Czechoslovakia and parts of Hungary. During the summer, smut infestation of wheat was reported in Romania, and it was also observed in the GDR. On the whole, however, this problem seemed to be no worse than in any average year. The harvest proceeded under very good conditions, and at a pace well ahead of the previous year, despite heavy rains in the second half of July and first part of August that interfered with field work in the GDR and Czechoslovakia. A long frost-free fall helped the ripening of corn. Corn harvested with lower than usual moisture content saved the farmers drying expenses and reduced post-harvest losses.

Close to two-thirds of grain in Eastern Europe is used for feed. Actual use in a given year, however, depends on livestock numbers, the availability of potatoes for feed, the supply of forages, the quality of pastures, and the length of the grazing period. The 1981 feed use of grain appears to have declined, because of larger availability of other feed. Per capita cereal consumption for food had been declining until 1980 as meat consumption increased. In 1981, however, a reduction in per capita meat consumption may have reversed this trend, especially in Czechoslovakia, Poland, and Romania and generated an increase in food use.

Marketing and Distribution Problems Acute

Grain distribution systems are in the process of decentralization in Bulgaria and Romania, two countries where regional self-sufficiency is emphasized. In Poland and Yugoslavia, private farmers have withheld grain from Government procurement agencies. Yugoslav authorities reacted with larger grain imports than planned and reduced exports to assure the state farms an adequate supply. In Romania, sporadic shortages of bread occurred.

In Poland, the situation was most serious. Farmers' grain sales to state procurement agencies in July-February 1981/82 were 1.6 million tons compared with 3.4 million in July-February 1980/81, which was already the lowest quantity in a decade.

The Polish Government experimented with several incentive schemes to induce farmers to sell grain to the State. In November and December, for every 5 zlotys' worth of grain sold to the State, it offered vouchers worth 1 zloty for the purchase of farm equipment or household goods. The scheme did not work because supplies of goods that farmers wanted were inadequate and farmers worried that even if these goods were available, price increases would offset any benefit represented by the vouchers. Later, the Government offered the farmers a "grain loan" program. Under this scheme farmers would receive coupons in exchange for grain deliveries to the State. These coupons were to be deposited in saving banks, where they would earn full interest, and could be redeemed between 1983 and 1985 at grain prices then prevailing. This scheme has not worked either because of farmer distrust of the Government.

Fall Plantings Increased

Fall 1981 weather was favorable for sowing winter grains, and they were sown on a larger area than in the previous year. However, the grain area sown was less than planned in Romania and Yugoslavia. The Hungarians are worried by a survey of planting intentions that indicates less corn than planned will be sown this spring. The prevailing prices make corn less profitable than many other crops. (Thomas A. Vankai)

OILSEED PRODUCTION CONTINUES AT RECORD LEVELS

Production of the major oilseeds in Eastern Europe—rapeseed, sunflowerseed, and soybeans—totaled 3.87 million tons in 1981, virtually matching the previous year's record level (table 3). Despite higher plan targets, oilseed area remained constant and yields stabilized (table 4).

Rapeseed production, which declined 13 percent to 1.1 million tons, suffered from delayed planting and smaller than planned sown area in the fall of 1980 and, particularly in Poland, from declining availabilities of nitrogen fertilizer in spring 1981. Unusually wet weather late in July and the first half of August hindered harvesting, especially in the GDR and Czechoslovakia.

Soybean production was also lower in 1981, as production fell for the second straight year and totaled just 510,000 tons. Major problems developed with Romania's soybean production. Not only was sown area reduced in 1981, but unusually hot, dry weather during June and July seriously impaired yields. Yugoslavia, on the other hand, took the first step in a major expansion program for soybean production and nearly tripled output in 1981 to 93,000 tons.

Sunflowerseed production registered improvement. Both area and yields increased, and production, at 2.25 million tons, was some 13 percent higher than in 1980. The relative profitability of sunflowerseeds in Hungary and Bulgaria assured continued area expansion in those countries, while favorable midsummer weather boosted yields. In Yugoslavia, sunflowerseed continued to suffer from disease problems. Accordingly, production there increased only marginally in 1981 and remained well below the levels attained in the late 1970's.

Oilseed Product Consumption Peaks

In 1981, declining availability of hard-currency credits and balance-of-payments problems led most of the countries of Eastern Europe to postpone projected increases in imports of oilseeds and oilseed meal.

Both imports and consumption of oilseed meal increased slightly in 1981 relative to 1980. However, growth of oilmeal consumption slowed markedly from the trend of the last several years. Deficiencies in the protein share of feed rations in the region continued. The outlook for 1982 is for a rather significant decline in oilmeal consumption, with meal imports dropping by as much as 15 percent. Poland will account for the bulk of this decline.

Eastern Europe has traditionally been nearly self-sufficient in vegetable oil, with Bulgaria, Hungary, and Romania being net exporters and the other countries net importers. Higher imports by Yugoslavia, and to a lesser extent Poland, have recently resulted in larger vegetable oil imports for the region as a whole. The outlook for 1982 is for vegetable oil imports to decline moderately, largely because of higher vegetable oil production in Yugoslavia and import financing difficulties in Poland.

Poor 1981 soybean production in Romania and the planned introduction of new crushing capacity in Yugoslavia could mean higher soybean imports by those countries in 1982, which would offset likely declines in Polish purchases.

Oilseed meal utilization, Eastern Europe, 1977-1981

Item	1977	1978	1979	1980	1981[1]
	1,000 Tons				
Processing form domestic crops[2]					
Soybean meal	277	248	299	425	421
Sunflower meal	552	640	614	729	626
Rapeseed meal	685	586	667	325	651
Fish meal	91	90	89	86	82
Imports					
Oilseed meal	3,890	3,941	3,971	4,394	4,472
Soybean[3]	220	553	639	679	538
Sunflowerseed[3]	68	46	66	27	37
Fish meal	472	453	508	383	301
Exports					
Oilseed meal	40	50	18	13	8
Apparent meal consumption	6,215	6,507	6,835	7,035	7,120

[1]Preliminary. [2]Estimated from preceding year's harvest minus exports. [3]Converted to meal equivalent.

Source: Country Yearbooks and FAO Trade Yearbook

Planting Intentions Show Little Change

At best, modest growth in oilseed production is expected in 1982. Rapeseed area sown in the region this fall was slightly higher than last year. In addition, the crop was generally in better condition going into winter dormancy. However, there have been reports of above-average winterkill in Poland. An expansion of Yugoslav soybean area to as much as 100,000 hectares could be offset somewhat by possible declines in Romania. Sunflowerseed area in the region at most will show only marginal increases and could well decline by 1 or 2 percent. Such area is expected to decline in Yugoslavia, where greater emphasis will be placed on soybean production. (Edward Cook)

PERFORMANCE OF OTHER MAJOR CROPS IMPROVES

Sugar Beet and Sugar Production Up

Sugar beet production in 1981 recovered from 1980's dismal output. At 48.4 million tons, production was 19 percent higher than in 1980 and 9 percent above the 1976-80 average. Increased area and much better weather accounted for the increase. Sugar content also recovered and the refining period was shorter throughout the region, ensuring approximately 5.8 million tons of sugar (raw value) in 1981/82, over 1 million tons more than in 1980/81. Because of 1981's better outturn, Eastern Europe could become a modest net exporter of sugar in 1982. Higher production occurred in all countries except Czechoslovakia and Bulgaria, with Poland accounting for nearly three-quarters of the increase.

Sugar beet production is expensive relative to other crops, especially in the amount of labor required during harvest. In order to maintain sown area at levels sufficient to cover domestic sugar demand and, optimally, allow for exports, several countries raised procurement prices for sugar beets and wholesale sugar prices in 1981 and 1982. Yugoslav authorities, seeking to establish that country as a net sugar exporter, doubled procurement prices for the 1981 crop in the Vojvodina region (producing approximately 60 percent of all sugar beets) and increased these prices by 55 percent elsewhere in the country. However, these increases were not entirely successful, as the sown area target was not met in 1981. The 1982 procurement price is 22 percent higher than in 1981, but the high inflation rate in Yugoslavia will effectively negate its value as an incentive to expand area.

Several countries currently intend to expand and improve their refining capacity. Sugar content deteriorates if harvested beets are not refined promptly, and the goal in most countries is to end processing by the first week of January at the latest. Also, expanded refining capacity would allow the refining season to start later in the fall, permitting optimal sugar development in beets before harvesting. In 1981, new refineries came on line in Hungary and Romania.

The outlook for sugar beets is for the maintenance or only slight expansion of area from 1981. Over the next several years, most countries are hoping to raise output through better yields, higher quality seeds, and improved machinery.

Potato Production Recovers

Potato production in Eastern Europe recovered from 1980's very poor harvest, with total output equaling 65.3 million tons, 42 percent above 1980's harvest. Yield improvements were responsible, as sown area dropped slightly. Near ideal growing weather in Poland, the region's largest producer, resulted in a 61-percent increase in output there, in spite of a 4-percent decline in area, and accounted for much of the overall East European recovery.

The higher output will likely improve the feed situation in Poland and the GDR, particularly for hogs. At least half of all potato production is used for feed in these countries. In Poland, potato feed supplies are expected to more than double, rising to about 23 million tons. However, quality was extremely poor and procurements fell behind schedule as producers, mainly private farmers, held their supplies in expectation of higher prices in spring 1982.

In other countries, production in Bulgaria increased approximately 35 percent, reducing the strain on food potato supplies that followed the 1980 crop. Output in Romania and Czechoslovakia was likely below plan, reflecting the overall poor year for agriculture in those countries. Quality was also reported poor in Czechoslovakia. Yugoslav officials reported pest problems in some areas plus regional shortages of plant protection agents. Nevertheless, the 1981 crop should meet domestic demand, with a small surplus available for export.

The outlook for the 1982 potato crop is mixed. There may be a slight decline in area, but supplies of seed potatoes will be better than last year. Supplies of fertilizer and plant protection agents will remain the most important nonweather determinants of the 1982 crops' size and quality. However, shortages of these inputs are almost certain in Poland. Potato quality there could well suffer once again, resulting in a third straight year of tight supplies.

Tobacco Production Rises

Tobacco production equaled 354,000 tons in 1981, up 20 percent from 1980's output. Improved yields in Bulgaria, Poland, and Yugoslavia accounted for much of the increase as area rose only slightly. Good weather and a 62-percent increase in purchase prices led to a 12-percent increase in area and a 23 percent rise in production in Yugoslavia, which is heavily promoting tobacco exports. Virginia-type tobacco area likely expanded in the region again in 1981 as popular demand is growing for these types and their cultivation requires substantially less labor than that of the dominant oriental varieties.

Yugoslav authorities have raised prices for the 1982 tobacco crop by 41 percent, and this should ensure a larger area for 1982. Area sown to Virginia-type tobacco will continue to expand in Bulgaria and Yugoslavia at the expense of the oriental varieties, and 1982 shipments should be higher for both countries, which are the main exporters.

Cotton Production Up Marginally

Cotton is a minor crop in Eastern Europe, with cultivation occurring only in Bulgaria and Yugoslavia. Production of cotton lint is estimated at 4,350 tons, up 350 tons from 1980. Higher producer prices in Yugoslavia led to an expansion of cotton area in 1981 and accounted for the higher regional output.

Eastern Europe is dependent on imports for almost all its cotton needs, with the Soviet Union supplying approximately 65 percent of all imports in 1980. Other suppliers are Greece, Turkey, and countries of the Middle East and Central America. The Soviet market share likely increased in 1981 due to a record 1980 Soviet cotton crop and hard currency shortages, particularly in Poland, which restricted purchases from the West. (Robert Cummings)

LIVESTOCK INVENTORY STABLE; MEAT PRODUCTION DECLINES

Inventories Show Little Change

Cattle and hog inventories remained fairly stable in 1981 as declines in some countries were offset by increases in others (table 5). The most significant change was a 7.5-percent decline in Czechoslovak hog numbers. The change represents a deliberate Government policy to reduce herds to minimize feed imports. Romanian officials reported in March huge increases in sheep and poultry numbers plus some increase in hog numbers, contradicting a February report of a decline in all livestock categories.

In Poland, cattle members increased 1 percent and hog numbers 2 percent. The socialized sector reduced its cattle holdings by 14 percent and its hog inventory by 18 percent, while the private farmers increased the same by 7 and 10 percent, respectively. Private farmers, who own almost three-quarters of the livestock in Poland, responded to higher procurement prices and better marketing conditions in the fall.

Livestock Product Production Down

Total meat production in the region in 1981 was down 4 percent, milk production off 2 percent, but egg production was up slightly (table 6). A small decline in Czechoslovakia and 17-percent reduction in Polish meat output caused the drop in aggregate production. Milk production declined 7 percent in Poland, fell off slightly in the GDR, and rose in the rest of Eastern Europe. Egg production was down in Hungary, constant in Poland, and up in the other countries.

Beef output, accounting for 21 percent of total meat produced in the region, increased only in the GDR and Romania. Pork production, 57 percent of total meat, was up in all countries except Poland. Poland and Yugoslavia reported the best gains in poultry production. Tight feed supply and an emphasis on creating a better balance between domestic feed availability and livestock production growth contributed to the generally modest results.

Growth in Meat Consumption Halted

The steady growth of per capita meat consumption during the seventies came to a halt in 1981, and declined precipitously in Poland (table 7). Demand slackened in Hungary and Yugoslavia because of retail price increases and stable or deteriorating real per capita incomes. Shortages curbed consumption in Poland and Romania. The meat situation was worst in Poland, where nominal income kept rising while supplies were drastically reduced and prices in Government shops remained unchanged. According to the Warsaw Domestic Service (October 15, 1981):

> An average Polish woman who works 40 hours a week spends 15 of these 40 hours shopping. Shops are empty, people are lining up and the lines are getting longer and longer. The longest lines, the ones which hardly move at all, are for meat.

Only people with connections in the countryside and those willing to pay high black market prices were able to buy desirable cuts of meat without a long wait.

Because of slow growth of agricultural production, the Polish economy was unable to accommodate the demand for meat. By April 1981, rationing had to be introduced. A monthly coupon for 3.7 kilograms of meat was given to the average consumer; a higher ration was set for manual laborers, pregnant and nursing women, and children 13 to 18 years old. Many farmers did not receive coupons. By August, however, the Government was forced to reduce rations by roughly 10 percent because the farmers were reluctant to sell livestock to the procurement agencies. In early 1982 the average citizen's ration was cut to 2.5 kilograms monthly. The long lines at retail stores did not disappear until the Government, taking advantage of martial law restrictions to minimize the public response, raised meat prices three-to-fourfold in February 1982.

Meat shortages also occurred in Romania, despite a reported increase in meat production of almost 2 percent. These shortages seem related to three factors: increased income in a country where diet improvement has a high consumer priority; continued emphasis on meat exports to earn foreign exchange; and a faulty distribution system, especially outside of major cities. The Romanian Government also turned to rationing to manage demand, but the method of rationing was less rigid than in Poland and varied by regions. In Czechoslovakia, pork fat supply was inadequate as farmers there shifted to lean pork production. Sporadic meat and milk shortages also occurred in Yugoslavia.

Producer Prices Raised

Higher cost of feed and other inputs forced almost all East European governments either to raise producer prices for livestock products or increase farmers' subsidies. In Hungary, price increases ranged from 6 to 8 percent for animals for slaughter, and eggs, but milk prices remained constant because of a considerable improvement in productivity. Price increases in Poland, Romania, and Yugoslavia were more substantive. In Romania for example, slaughter cattle and hog prices were raised 32 percent. The price increases favored beef production relative to other meats.

Private Sector Supported

In 1981, private livestock holdings received added impetus. Price discrimination against the private sector has been abandoned, and feed was provided to private farmers in exchange for deliveries of animals for slaughter. The Bulgarians have offered higher than the prevailing fixed prices to individuals who do not rely on supplies of feed from the State. Government officials throughout the region now realize that the private producer's contribution to the national economy outweighs ideological objections.

Private producers provided 39 percent of meat, 36 percent of milk, and 33 percent of eggs produced in Bulgaria in 1980, and they are equally important in Hungary and Romania, despite the overwhelmingly socialized land ownership in these countries.

Moderate Growth Expected

Policy announcements indicate that future growth in meat production throughout Eastern Europe will be tied more closely to the domestic feed base. A shift to raising more ruminants (cattle and sheep) instead of increasing

hog and poultry inventories is advocated to reduce reliance on imported feed and better utilize forages and pastures.

Slower growth of disposable real income and higher meat prices will undoubtedly dampen demand for meat and relieve pressures for stepped-up domestic production. In contrast to policies elsewhere in Eastern Europe, Romania still plans considerable herd expansion despite its lackluster agricultural production. President Ceausescu, however, has advocated a return to traditional animal husbandry, acknowledging the need for greater reliance on grazing and forages than on concentrate feed. An outbreak of foot and mouth disease in March in two northern counties of the GDR forced excess livestock slaughter. The disease appears to be confined and the extent of losses was not disclosed.

Poland hopes to rebuild herds within 3 years, following an economic recovery. But without adequate financial reserves and with opportunities for further borrowing virtually foreclosed, grain imports will be insufficient to sustain livestock numbers. Lack of corn is forcing broiler factories to close, which will result in a serious decline in supplies of poultry meat. The large meat imports in 1981 almost certainly cannot be duplicated. Some unconventional sources, however, have appeared. According to Polish press reports, Poland purchased 48,000 tons of pork from China with a 10-year interest-free loan at prices prevailing at time of repayment. (Thomas A. Vankai)

FOREIGN TRADE BALANCE IMPROVES; FINANCIAL SITUATION DETERIORATES

Trade Balance Improves

The balance of trade improved in Eastern Europe in 1981. For the third straight year the overall trade deficit declined, and amounted to $7.6 billion (table 8). Exports increased almost 6 percent, while imports rose just over 2 percent. Balances improved in Czechoslovakia, Hungary, Yugoslavia, and Romania. However, the improvement in Romania has not been reflected in the country's ability to meet its foreign debt obligations. Poland's trade balance deteriorated significantly as exports fell more than imports because of the country's poor economic situation.

Most trade among CEMA members is denominated in rubles and data on this trade for 1981 are incomplete. However, the region's deficit on this trade in 1980 increased 26 percent to 1.4 billion rubles. Poland had the largest ruble deficit in the region, due to increased imports from the USSR and reduced exports. Preliminary 1981 data indicate a further deterioration in Poland's ruble trade balance.

The share of socialist countries in the exports and imports of the region changed little in 1980. However, preliminary data for 1981 indicate an increase in East European trade with socialist countries as a result of reduced availability of hard currency credits and growing Soviet insistence on more balanced trade with Eastern Europe.

The improvement in the overall trade balance resulted from stepped-up exports and very strict anti-import policies. This improvement should continue in 1982, especially if hard currency credit remains scarce and low economic growth continues in the region. The ruble balance of most countries should also improve as the Soviet Union grows less willing to extend credit to its East European trading partners.

Share of trade with socialist countries[1], Eastern Europe, 1979-81

	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total
				Percent				
Exports								
1979	74.3	72.3	73.5	57.6	60.9	44.5	40.4	62.8
1980	70.8	69.6	68.7	55.1	55.9	43.5	38.0	59.0
1981[2]	75.6	71.1	NA	58.1	58.8	NA	49.6	NA
Imports								
1979	81.0	71.0	64.4	53.8	54.3	40.7	25.4	55.6
1980	78.9	70.2	63.8	57.1	55.6	37.8	30.1	55.3
1981[2]	69.1	73.7	NA	57.5	69.8	NA	31.4	NA

NA = Not available.

[1]CEMA members, Yugoslavia, and Asian communist countries. [2]Preliminary.

Agricultural Trade Balance Negative

Regionwide 1981 data on agricultural trade are not yet available, but the information available suggests that Eastern Europe continued to import a greater value of agricultural products than it exported. The $4.5-billion agricultural trade deficit reported in 1980 was the third record in a row. Czechoslovakia, the GDR, and Poland remained the largest agricultural importers and Bulgaria, Hungary, and Romania the major agricultural exporters. Agricultural exports accounted for 8.7 percent of all exports from Eastern Europe and agricultural imports held a 12.5-percent share of all imports, similar to levels in previous years.

For 1981, the negative agricultural trade balance of Poland, the region's largest agricultural importer, increased as exports declined substantially. In contrast, Hungarian authorities reported exports of wheat, poultry, fruits, and vegetables in excess of expectations, indicating a further strengthening of that country's agricultural trade surplus.

Foreign trade officials in Yugoslavia reported a decline in Yugoslavia's 1981 agricultural trade deficit of roughly 45 percent due to reduced imports and higher exports. This improvement came about despite the loss of a substantial market for Yugoslav "baby beef" exports in Greece due to the latter's entry into the European Community (EC). Greece was, on average, a $100-million market for Yugoslav baby beef exports. To offset the lost EC exports, Yugoslavia has further developed markets for its livestock exports in the Middle East and, recently, in the Soviet Union. In March 1982, officials signed an agreement providing for future exports valued

at $152 million of Yugoslav meat and meat products, including baby beef, to the Soviet Union. Soviet payments will be in hard currencies. Efforts to cultivate Middle Eastern and Soviet markets for agricultural exports are widespread in Eastern Europe. Middle Eastern markets have substantial growth potential, and increased agricultural exports to the Soviet Union are a convenient way to pay for raw material imports from that country.

The current lack of available hard currency credit will force the region to alter its trading pattern by relying more heavily on East European, Soviet, and developing country markets for its imports. It is highly unlikely that the region will be able to improve its poor record of export performance in the West.

Further, exports to the Soviet Union will have to increase to pay for necessary raw material imports. Yugoslav officials, for example, have reported that Soviet deliveries of energy were cut 25 percent in 1981 from 1980 levels and, at the same time, the USSR insisted on increased food and consumer goods imports from Yugoslavia.

There will also be increased efforts to expand the use of compensation, or barter, in East-West trade. Romanian authorities have gone so far as to call for an "international center" for the promotion of barter trade, and Western firms report heavy Romanian pressure to include product "buy-back" provisions in trade and production agreements signed with Romanian foreign trade organizations. In any event, a shift of trade away from the West is likely and could result in an improvement in the balance of trade, but at the expense of domestic consumption and investment.

Financial Situation Deteriorates

Negotiations on rescheduling Poland's and Romania's hard currency debts dominated financial events in Eastern Europe. Net hard currency debt at the end of 1981 stood at approximately $81 billion. The three largest debtors in the region, Poland, Yugoslavia and Romania, had net debts of approximately $25 billion, $18.4 billion and $10.8 billion, respectively.

Debt service ratios (payments due on principal and interest divided by hard currency export earnings) in 1981 ranged from 22 percent in Czechoslovakia to 106 percent in Poland. Hungary's ratio, the second largest in the region, was 45 percent. It is likely that Western lending in the region will be much lower in 1982 than in 1981.

In early 1981 Poland informed its Western creditors that it could not meet its financial obligations. Negotiations between Polish officials and representatives of Western governments began in April to reschedule Western Government-backed debts. Agreement was reached to reschedule 90 percent of these debts, including interest, coming due between May and December 31, 1981. This represents about $2.4 billion, which is to be repaid beginning in 1986. The U.S. share amounted to $380 million, of which $360 million was due the Commodity Credit Corporation (CCC) for credits and credit guarantees on exports of U.S. farm products. Outstanding Polish debt owed to, or guaranteed by, the CCC totaled $1.6 billion in early 1982.

Poland also signed an agreement in April 1982 with its commercial creditors to reschedule $2.4 billion in payments due for most of 1981. Reportedly, 95 percent of the debt will be deferred for 4 years. The remaining 5 percent is to be repaid in three intervals beginning in May 1982.

In response to the situation in Poland, the Soviet Union in 1981 increased, on credit, its exports of several key commodities to that country. Reportedly, these exports included grain, meat, and other foodstuffs. The Soviet Union also extended hard currency and ruble-denominated credits to Poland. The Polish press reported the equivalent of $2 billion in credit from the Soviet Union. Additionally, the 1982 Polish-Soviet trade protocol allows for Polish trade deficits with the Soviet Union in 1981 and 1982 combined of approximately 2.7 billion rubles ($3.6 billion).

Early in 1982, Yugoslav officials announced a Polish food aid package valued at $10 million, which included beef, rice, pasta, and corn flour. Other East European countries apparently are providing food assistance as well, although the details of the composition and size of such aid are not clear. However, the Polish press has indicated that some of these countries are making the supply of additional goods contingent on fulfillment of existing Polish export obligations to them, thus reducing the real level of assistance.

The EC continued to make foodstuffs from EC stocks available to Poland at 10-15 percent below market prices. Since December 1980, the EC has approved three offers (frequently called "tranches") of such food sales. These offers do not contain any credit or credit guarantees to finance purchases from the EC, forcing Polish officials to obtain credit from the individual member states. However, Polish officials experienced difficulties in obtaining this credit, so that by early 1982, only the first offer had been fully shipped. Of the second offer, most of the dairy products and one quarter of the meat remained unshipped, and only shipments of some meat and grain occurred under the third offer. As a result of martial law, the EC in mid-January 1982 suspended further food sales to Poland at concessional prices.

Agricultural products made available to Poland at concessional prices by the EC

Commodity	Dec. 1980	Apr. 1981	Oct. 1981
		1,000 tons	
Grain	225.0	559.0	320.0
Sugar	50.0	5.0	0
Dairy products	33.0	22.0	5.0
Olive oil	0.6	3.0	0
Meat	50.0	50.0	10.0
Lemons	0	0	20.0

Source: *Agra Europe*, No. 964, Jan. 29, 1982.

Both Hungary and Poland applied for membership in the International Monetary Fund (IMF) in 1981 and Hungary was admitted in May 1982. The IMF has made loans to its East European members, Romania and Yugoslavia, to assist them in financing balance of payments deficits, and this aspect of membership is likely appealing to Hungary and, especially, Poland.

Credit Difficulties Influence 1981 Commodity Trade

The region's foreign credit difficulties as well as the 1980 and 1981 harvests affected agricultural commodity trade during 1981. Grain imports were lower than in

1980 and insufficient credit will lower 1982 imports further. Imports of other agricultural products will be similarly affected. However, there will be pressure to step up traditional agricultural exports, such as sugar and tobacco, to obtain foreign currency.

East European grain imports in 1981 are estimated at 15 million tons, compared with 18 million in 1979 and 18.6 million in 1980 (table 9). An accurate breakdown of 1981 imports by type of grain and origin is not yet available. Annual average imports in the last few years exceeded 7 million tons for Poland, 4 million tons for the GDR, and 2 million tons for Romania.

East European grain exports have averaged 3.8 million tons in the past 5 years, fluctuating between 2 and 5 million tons depending on the harvest results and the volume of Romanian reexports. Hungary and Romania are the principal exporters (table 10).

Oilseed meal imports in 1981 are estimated to have increased slightly to nearly 4.5 million tons, due largely to higher Romanian imports (table 11). Soybean meal continued to represent roughly 90 percent of oilseed meal imports and 70 percent of total oilmeal (including fishmeal) consumption.

Sugar exports from Eastern Europe could recover in 1982, especially from Yugoslavia, although Czechoslovakia, the region's largest exporter, will probably not increase shipments. Polish authorities will be under intense pressure to export as sugar has been an important hard currency earner. Also, retail sugar prices were raised substantially in several countries, and the resulting expected decline in domestic sugar use could increase the exportable sugar stock. The major export markets for East European sugar outside the region are in North Africa and the Middle East and, for Poland, Western Europe. Imports from outside the region come almost exclusively from Cuba, with Western Europe in 1981 also a substantial supplier to Poland.

Eastern Europe is a net exporter of tobacco and tobacco products (exports averaged 115,000 tons in 1976-80; table 12). Major export markets outside the region include Western Europe and the United States. Sources of non-East European imports are Greece, the United States, Central and South American countries, as well as Western Europe.

The region has traditionally been a net meat exporter. Czechoslovakia, earlier a net importer, attained self-sufficiency in 1979. Poland lost its longtime self-sufficiency in 1981. Hungary, the leading meat exporter in the region, maintained its exports in 1981 at the 1980 level. Increased poultry exports offset a decline in red meat exports (table 12). Hungarian slaughter animal exports increased 13,000 tons. Romania, the second ranking exporter of the region, has not yet published 1981 data. With exports of quality meats shrinking, Yugoslavia reduced its meat imports by 30,000 tons. The GDR's principal market is the FRG, but the GDR exports meat to a lesser degree also to Italy and France. Poland reduced exports in all categories to about one-half of the 1980 volume, and imported an unprecedented 175,000 tons of meat—beef and pork in approximately equal quantities—and 55,000 tons of pork fat. The GDR donated 10,000 tons of meat to Poland in 1981.

The USSR is the region's leading customer for both red meats and poultry. Several West European countries, and in recent years countries of the Middle East, are other important markets for East European meat. (Robert Cummings)

U.S. AGRICULTURAL TRADE WITH EASTERN EUROPE DECLINES

U.S. agricultural exports to Eastern Europe were valued at $1.78 billion in 1981, 23 percent below 1980 exports and the lowest since 1978 (table 13). Agricultural transshipments, at $129 million, were about one-half the 1980 value and represented slightly more than 7 percent of U.S. agricultural exports to the region (table 14). As a result of lower agricultural exports, the U.S. trade surplus with the region declined from $1.9 billion in 1980 to $1 billion in 1981 (table 15). Exports were down to all countries except Bulgaria, where the small level of exports nearly doubled. Poland remained the largest U.S. agricultural customer in the region, taking 33.5 percent of all U.S. agricultural exports, with Romania and the GDR also major markets. Agricultural exports to Eastern Europe were 4.1 percent of all such exports from the United States, down slightly from an average 5.1 percent between 1976 and 1980. The volume of shipments for the seven major export commodities fell significantly in 1981, ranging from a 17-percent drop for feed grains to a 79-percent drop for wheat.

Volume and value indicies of U.S. exports in 1981 to Eastern Europe

Commodity	Volume	Value
	1980 = 100	
Wheat	19	20
Feed grains	83	88
Soybeans	69	70
Vegetable oil	59	57
Soybean meal	74	84
Cotton	32	43
Cattlehides	60	61

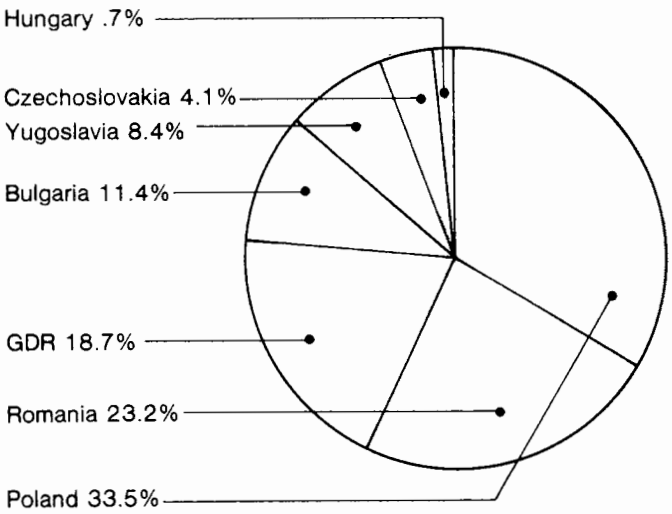
Source: Bureau of the Census, U.S. Dept. of Commerce; *U.S. Export Sales*, USDA/FAS.

Agricultural Commodities Dominate U.S. Trade

Despite the decline in agricultural exports, they continued to represent two-thirds of all U.S. exports to the region. As in previous years, U.S. exports to the GDR were almost entirely agricultural (96.7 percent) while only 16.6 percent of all exports to Hungary were agricultural. The commodity content of U.S. exports remained essentially unchanged, with grain, soybeans and soybean meal exports accounting for 87.3 percent of all agricultural exports.

In 1981, the United States exported 7.2 million tons of grain (valued at $1.1 billion) to Eastern Europe, compared with 10.4 million in 1980 and 9 million in 1979 (table 16). Corn accounted for 92 percent of U.S. grain

Individual Country Shares of U.S. Agricultural Exports to Eastern Europe in 1981



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

Agriculture's share in total U.S. exports to Eastern Europe, 1976-81

Country	1976	1977	1978	1979	1980	1981
			Percent			
Bulgaria	73.0	11.2	83.0	72.6	80.6	79.1
Czechoslovakia	90.2	82.8	75.4	92.1	87.0	75.1
GDR	98.4	98.1	92.6	95.1	95.5	96.7
Hungary	35.5	51.4	53.9	34.0	37.7	16.6
Poland	77.6	67.5	74.8	82.6	81.4	87.2
Romania	68.6	45.5	47.4	67.8	65.4	75.3
Yugoslavia	13.3	19.9	23.4	40.7	38.0	22.6
Eastern Europe	71.3	57.3	57.8	69.8	69.4	66.5

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

shipments in 1981, compared with 77 percent in 1980. The approximately 2 million tons of wheat exported in 1979 and 1980 followed a disastrous 1979 East European wheat harvest. In 1981, U.S. wheat exports declined to 465,000 tons. Besides the United States, important wheat exporters to Eastern Europe were Canada, Western Europe, and Hungary while the United States was the dominant supplier of corn to the region.

U.S. oilseed exports—virtually all soybeans—also declined in 1981. At roughly 500,000 tons ($137 million) they were 31 percent below the level of the previous year. This represented a major break in trend and reflected problems with Polish import financing and reported technical problems in Romania's crushing industry. United States exports of oilmeal fell dramatically: from roughly 1.7 million tons to less than 1.3 million tons (valued at $331 million). Rising Brazilian competition was responsible for much of this decline. A continued decline in U.S. oilmeal exports can be expected in 1982. Exports in 1982 are likely to be lower to Poland, Yugoslavia, and Romania. Vegetable oil exports from the United States, which have traditionally been small, could also decline in 1982 because of lower exports to Poland.

In 1981, U.S. exports of tobacco were 4,011 tons, 28 percent less than in 1980. Bulgaria, Poland, and Yugoslavia continued to be the main markets for U.S. tobacco. U.S. raw cotton exports (excluding linters) to Eastern Europe, at 8,500 tons, were valued at $18 million and represented less than a 2-percent import market share. Export quantity was down 68 percent from 1980's level. With little planned expansion in cotton textile production, continued hard currency shortages, and a good 1981 Soviet cotton crop, there should be no increase in U.S. cotton exports to Eastern Europe in 1982.

Cattlehide exports were also down, dropping to $46 million. They declined from 2.5 million pieces in 1980 to 1.6 million, the smallest volume in the last 7 years.

U.S. agricultural imports from Eastern Europe were down for the fourth straight year in 1981. At $276.9 million (table 17), they were 11 percent lower than in 1980. Significant declines occurred in imports from Poland, while imports from Bulgaria were up 23 percent. Processed meats (primarily canned hams and sausages) continued to dominate imports, accounting for 64 percent of the value of 1981 imports. While still significant, this share dropped from an average 71 percent in 1976-80.

CCC Credit Use Up; Food Aid Extended To Poland

Use of CCC credit guarantees by eligible East European importers increased in U.S. fiscal year 1981 to $715.7 million, up from $643 million in FY 1980. Poland remained the largest CCC user, accounting for 93 percent of all credit guarantees, with Romania accounting for the rest. Hungary and Yugoslavia, the other eligible East European countries, used no CCC guarantees in FY '81.

CCC credits and guarantees have been a significant factor determining the value of U.S. agricultural exports to Eastern Europe. In FY 81, these credits financed 40 percent of U.S. agricultural exports to the region and 95 percent of such exports to Poland.

No CCC credit guarantees have been authorized for Eastern Europe thus far in FY 82. The Polish Government has requested $740 million, but in response to the imposition of martial law, the United States suspended consideration of official credits to that country. This policy is to prevail until: (1) martial law is lifted, (2) all political detainees are released, and (3) a genuine dialogue between the Government of Poland and the Solidarity trade union is resumed.

During 1981, the United States extended P.L. 480 assistance to Poland and sold dairy products from CCC surplus stocks to U.S. private aid organizations and the Polish Government. The dairy exports amounted to 26,000 tons of dried milk and 28,000 tons of butter, primarily under the P.L. 480 concessional sales programs. Milk products have not been exported in previous years to Eastern Europe. In April 1981, butter and nonfat dry milk having an estimated value of $71 million were sold to Poland for zlotys. Following the imposition of martial law, the unshipped balance (approximately 1,000 tons of butter) was suspended. In August, a long-term P.L. 480 Title I credit was granted to Poland for $55 million to finance exports of corn valued at $47.6 million plus shipping costs. Shipments under this latter credit were com-

P.L. 480 assistance to Poland and sales from CCC surplus stocks to CRS and the Polish Government, FY 1981 and FY 1982

Date	Type of assistance	Value ($1,000)	Commodities
April 1981	Sale from CCC stocks	71,000	Dairy prod.
Aug. 1981	P.L. 480 Title I	47,600	Feed grains
Aug. 1981	Sale from CCC stocks	[1]992	Dairy prod.
Oct. 1981	Sale from CCC stocks	31,000	Dairy prod.
Nov. 1981	P.L. 480 Title II	30,000	Flour, grain, milk, cooking oils.

[1]Represents sale price to CRS.

Source: Compiled by Eastern Europe/USSR Branch.

pleted before the imposition of martial law. Repayment is scheduled to begin in 1985.

Also in August, a cash sale was approved from surplus CCC dairy stocks to Catholic Relief Services (CRS) for $992,000, covering 9,000 tons of dairy products. A further surplus sale was announced in October to the Polish Government valued at $31.6 million. The United States accepted payment in Polish zlotys. CARE will be responsible for the distribution of these products in Poland. Finally, in November a P.L. 480 Title II grant of $30 million for grain, flour, milk, and cooking oils was approved. CARE and CRS will be responsible for shipment to and distribution in Poland. This assistance was not affected by the U.S. sanctions following martial law, as it is humanitarian aid handled by nongovernmental organizations in Poland and the United States. Shipments from the United States continue so long as the use of these commodities is restricted to social welfare purposes. (Robert Cummings)

1982 OUTLOOK

The prospects for crop production in 1982 are generally good. Fall sowing proceeded on schedule for most crops. Grain was sown on a larger area than during the fall of 1980 and the grain production outlook at this stage is good except in Poland, where local flooding and shortages of many key inputs are jeopardizing the prospects for a good harvest.

Fall-sown rapeseed area has also increased this year, but only modestly and there have been reports of above-average winterkill of rapeseed in Poland. Sunflowerseed area is expected to show very little change for the region, while such area is expected to decline in Yugoslavia. Depressed yields and reported problems in the crushing industry in Romania could keep soybean area from fully recovering from the 15-percent decline registered in 1981. These negative factors contrast with well articulated policies of improving self-sufficiency in oilseed products. It appears that only a modest increase, if any, in oilseed production can be expected in 1982.

The outlook for other major crops is mixed. Sugar beet area will at most increase only slightly in 1982, and a shortage of plant protection chemicals is threatening this year's potato crop in Poland.

In accordance with the goal of attaining agricultural self-sufficiency, emphasis in the livestock sector is being placed on cattle and sheep, while poultry and hog inventories will be given lower priority. Meat production, which declined in 1981, will remain depressed in 1982 by the need to limit feed imports.

Following a decade of virtually uninterrupted growth as a market for agricultural imports, developments in Eastern Europe in the last year are clouding trade prospects for 1982 and subsequent years. Of central importance is the fact that new hard-currency credit is less available following Poland's failure to meet its debt obligations and the serious deterioration of its political situation. All countries of the region have redoubled efforts to improve their balance of trade and payments positions. For the first time in recent years, many East European countries appear willing to allow domestic consumption to suffer if necessary. Commitments to improve diets through a higher level of meat consumption are being postponed or, as in the case of Poland, abandoned.

Grain imports, which are estimated to have fallen over 3 million tons in 1981, will decline further in 1982, because of lower imports by Poland. Oilmeal imports, which were at a record level in 1981, are expected to fall roughly 15 percent in 1982, with Poland again accounting for most of the decline. Oilmeal imports by Yugoslavia and Romania are also expected to be lower. Prospects for vegetable oil and oilseed imports indicate lower amounts in 1982 than in 1981. With declining hard-currency availability, many countries of the region are expected to aim for broadened bilateral trade agreements, primarily with developing countries, to meet a growing share of their agricultural import needs.

The increasing competition for agricultural exports to Eastern Europe that characterized 1981 is continuing in 1982. U.S. forecasts suggest that agricultural exports in FY 1982 will be about $1.1 billion, roughly 55 percent of FY 1981 exports. Significant declines are anticipated in corn and soybean meal exports, while prospects for soybeans and wheat are mixed. The new Czechoslovak livestock policy already noted, the credit repayment problems in Romania, and martial law in Poland (the largest U.S. market in Eastern Europe in recent years) will significantly restrain sales. Although the Poles are free to make any commercial purchases of U.S. agricultural products they wish, their lack of liquidity suggests these sales will be very small.

The longer run prospects for the East European region do not suggest an improved market for U.S. agricultural products. A gradual recovery of oilseed and oilseed meal imports is anticipated over the next few years. Depending on the size of domestic harvests, grain imports could possibly recover somewhat in the medium term, but they are almost certain to remain short of the record levels of 1979/80. Markets for processed food products will remain virtually nonexistent. (Edward Cook)

AGRICULTURAL POLICIES AIM FOR SELF-SUFFICIENCY

The general agricultural policy goals pursued in the seventies continued in 1981, but the methods of pursuing these goals changed in several countries. However, in every country in the region, self-sufficiency in the production of staple foods—meat, bread, and sugar—remained an overriding goal. To achieve self-sufficiency East European countries are emphasizing more efficient production combined with a reduction of State subsidies. Quantitative output indicators are de-emphasized and quality rewards are used in product pricing. Profitability has become the chief success indicator.

With the exception of Hungary, a basic problem has been disproportionate growth in crop production relative to livestock that has resulted in expanded feed imports. Also common is the problem of deteriorating prices for farmers relative to the prices they pay for inputs. In all countries, the prices of inputs—chemicals, energy, machinery, building material, mixed feed—are increasing faster than the prices paid for farm products, and as a result, farmers are tending to use less input per unit produced. In Czechoslovakia, for example, hot air drying is used more sparingly than before; in the GDR, the straw pelletization program is being curtailed to save energy. Farm managers are also being urged to optimize the use of tractors or trucks in transportation to save fuels.

Local Management Authority Upgraded

The Bulgarian experiment which started in 1979 and is based on regional decentralization continued to evolve in 1981. Each region is expected to have balanced budgets in its agricultural sector and achieve self-sufficiency in crop and livestock production. Profitable production is to be obtained from the lowest economic unit up to individual enterprises and complexes. Wages depend on profits. The central Government provides subsidies only under exceptional circumstances. At the onset of this program each county was obligated to deliver a food quota to the State. In 1981, this system was replaced with a contract system where only surplus production is to be transported out of the county. The new system saves the cost of transporting goods that ultimately have to be repurchased and returned later. Monopoly Government purchase agencies are being replaced by several institutional buyers to instill competition and bring the producer in more direct relationship with the consumer. It is hoped that under this new initiative producers will be more flexible in adjusting production to consumers' changing demands. Farms are permitted to engage in foreign trade but they must keep their foreign currency transactions in balance. While enterprises must adhere to central plans and to price regulations, they are free to maximize profits.

In Romania, the principal organizational change in 1981 related to machinery use. A few years ago, all machinery had been placed under the jurisdiction of machine stations, and the machine stations were responsible for land cultivation. According to a new directive all machines with their operators will be leased permanently to individual enterprises. While the machine stations retain ownership, perform maintenance and repair, and oversee general machinery use, operators will be placed under the supervision of farm managers and made available for other duties.

Fertilizer Use Stationary

The recent halt in the growth of fertilizer use in Eastern Europe contrasts markedly with the trend established during the sixties and most of the seventies. Higher prices for imported fertilizer raw materials, the worsening balance of payments, and a reluctance on the part of the governments of the region to expand fertilizer subsidies have all contributed to the slowdown. In addition, Czechoslovakia and the GDR have already attained use levels that are quite high by European standards. Thus, in these two countries the marginal yield increase from expanding fertilizer use is probably small.

Fertilizer [1] use, Eastern Europe, 1971, 1975, and 1978-1981

Country	1971	1975	1978	1979	1980	1981[2]
Bulgaria	141	157	172	193	199	222
Czechoslovakia	254	305	334	335	334	315
GDR	332	370	331	340	326	330
Hungary	171	276	286	280	262	278
Poland	172	236	241	239	244	235
Romania	60	88	105	116	113	115
Yugoslavia	82	90	108	111	105	105
Eastern Europe	153	199	211	215	212	212

[1]Nitrogen, phosphate, and potassium in active matter. [2]Preliminary.

Prices Higher

Producer prices were raised periodically in the past few years and in 1981, the general level of these prices was increased in Bulgaria, Yugoslavia, and Poland. The rest of the countries increased producer prices sparingly to promote certain products or as premiums for producing in excess of the preceding year's average results.

For more than a decade, retail prices of staple foods were stable in Czechoslovakia, the GDR, and Poland. In 1981 however, food prices were increased throughout the region. In Yugoslavia, the producer price increases were transmitted to consumers. The retail price index there rose 39 percent between December 1980 and December 1981. In Hungary, average meat prices were increased 10 percent in 1981 with increases ranging between 6 percent for poultry meat and 13 percent for pork. Food price increases were the steepest in Poland ranging from 175 to 375 percent. Average food prices in Romania were raised 35 percent. Meat prices in Czechoslovakia increased an average of 27 percent, in Romania 64 percent. The retail price increases were designed to lighten the burden of subsidies on the budgets and to reduce meat consumption. The GDR remained the only East European country without officially announced food price increases for 2 decades.

Private Production Encouraged

Each East European government encourages private production. In 1981, additional lands unsuitable for large-scale mechanical cultivation were distributed for private use. Hungary was the first country in Eastern

Europe to recognize the potential of individual part-time farming. It is estimated that including the hobby gardeners, 1.5 million people in Hungary make additional income from farming at present. Private part-time farming is concentrated in labor-intensive sectors such as livestock raising and fattening, and vegetable and fruit production. Encouragement of private farming and contract arrangements with private entrepeneurs in Hungary is so extensive that it is certain that such arrangements have been approved by the Soviet Union. Indeed, recent Soviet statements indicate support for this type of agricultural organization in other Communist countries. In Romania, 1.7 million hectares of land are privately used, of which 45 percent is pasture, 33 percent cultivated land, 17 percent meadow, and 5 percent orchards and gardens. The role of private farming is growing in the GDR and in Czechoslovakia also. In order to promote private farming, the GDR increased the network of retail shops that cater to the needs of small producers and provide an outlet where the small producers can market their products. The Czechoslovak Government in 1981 abolished taxes on income from private plot production.

The prejudice of some farm managers against private farming remains, but the cooperation of the large farm managers is indispensable to the success of private farming. Most private farmers and, especially, state farm workers and cooperative members working their private plots rely on the assistance of socialized farms in buying inputs or marketing the products.

The private producer is extremely sensitive to price changes and marketing conditions. If this sector is to be fully exploited as a substantial untapped reserve, it can only be perpetuated through the presently widespread contractual arrangements with state organizations or large farms to assure predetermined profits. Thus, the small private farmer's financial risk is limited to noneconomic factors such as weather or disease. While the growth of production in part-time farming is not expected to match the growth to be attained in the large enterprises, some sort of private sector incentives can be expected for some time. This mode of farming is advantageous to individuals as a means of securing extra income and produce, and it is advantageous to the State because it mobilizes a workforce and utilizes facilities especially suitable for small-scale production. (Thomas A. Vankai)

POLAND FACES UNCERTAIN FUTURE IN AGRICULTURE

by

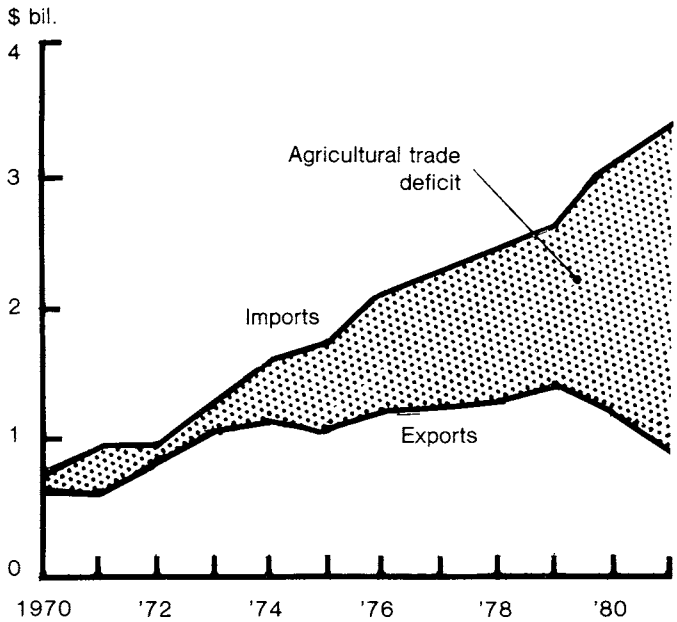
Edward Cook

Following a number of years of poor management and counterproductive policies that resulted in escalating food imports, agriculture in Poland is now being given top priority. The task is to ensure steady increases in production, but because of the precarious debt situation and the decision to implement martial law in December, this task will need to be accomplished with less foreign aid than originally anticipated. With this in mind, Polish planners have greatly scaled down food consumption targets for 1985 and beyond, and will attempt to readjust the Polish diet to more closely match domestic production potential while still meeting essential needs.

The Legacy of the Gierek Years

Polish agricultural policies of the second half of the 1970's significantly hampered continued growth in production. One of the primary goals of these policies was to ensure the steady transfer of land and production from the private sector to the socialized sector. This was accomplished through privileged access for socialized farms to new land purchases, other inputs, and credit. Also, private farmer cooperatives and local government administration became increasingly bureaucratized, hindering the ability of the private farmer to produce. Finally, the State became more involved in attempting to direct the daily affairs of the state farms.

Polish Agricultural Trade



These policies greatly alienated private farmers, who continued to farm nearly three-quarters of Polish agricultural land and were recognized by Polish economists as more cost-efficient than their socialized counterparts. In addition, the managers of state farms were, in many cases, without real autonomy and became increasingly reliant on Government subsidies, lenient credit terms, and readily available material inputs. The impact was such that both sectors were unable to meet their productive potential, and a slowdown and stagnation in domestic agricultural production resulted. In spite of this, the Gierek leadership maintained a commitment to improving the diet of the average Pole, largely through higher meat consumption. These two factors combined to steadily escalate Poland's negative balance in agricultural trade and left Polish meat production roughly 30 percent dependent on imported feeds by the end of the 1970's.

A Change in Direction

The poor weather and widespread flooding that occurred during the summer of 1980 proved to be the breaking point for these agricultural policies. Overall agricultural production that year fell nearly 10 percent, with crop production falling 15 percent. The imports required to maintain food supplies in the face of such a production disaster proved beyond financial reach.

Simultaneously, the Solidarity movement had sprung up in August and September of 1980, bringing with it a change in Party and Government leadership. Soon afterward the nucleus of a future independent farmers' union also came to light. During the course of the next 15 months, a combination of confrontation and negotiation between farmers and the State resulted in the introduction of a major new set of agricultural policies. Most of these policies dealt with improving the prospects for private farming and included the following:

1. guaranteeing the right of ownership and inheritance to private farmers;
2. giving private farmers priority in purchasing land from State land reserves;
3. recognizing the Private Farmers' Solidarity Union and other independent farmers' organizations;
4. equalizing terms of access to credit for all sectors of agriculture;
5. increasing supplies of machinery and spare parts for private farmers, entailing a shift in production from large to small machinery;
6. insuring profitability for farming and a living standard equal to that of urban workers;
7. developing small-scale local industries and services for agriculture.

Furthermore, a major reform of state and collective farms was passed which increased their managerial

autonomy, and placed them on a basis of financial self-sufficiency by greatly reducing operational subsidies from the Government. Finally, agriculture as a whole was to receive greater attention in terms of supplies of industrial inputs, and its share in total investment was to increase. But, as the economy continued to weaken and political pressures grew, it became increasingly apparent that the implementation of some of these reforms would at best be only partial or greatly delayed.

Situation Continues To Worsen

Despite a fairly good harvest in 1981, the food and agricultural situation in Poland continued to deteriorate, largely because of the lagged impact on livestock production of the previous year's disastrous harvest. Much of the problem, however, resulted from growing dislocations in the national economy. An unraveling debt repayment situation forced a major reduction in hard-currency imports, and a growing disequilibrium on retail markets followed as disposable income increased significantly while actual production was falling.

Such a situation posed a number of serious problems for agriculture and the food economy. Firstly, despite all efforts to gear industrial production toward the needs of agriculture, supplies of fertilizer, certain key plant protection chemicals, and most types of machinery and spare parts continued to decline. Secondly, as the buying power of the zloty diminished, consumer goods became an increasingly important store of value; almost all such goods placed on the market were quickly bought up. Unrealistically low prices contributed greatly to long lines for food. Thirdly, the inability to maintain imports of agricultural and food items largely counteracted many gains in domestic production.

In the countryside, the farmer found his production capability deteriorating and the money he received worth less and less. In the cities, problems with declining food supplies were exacerbated by a breakdown in the marketing system.

Declines in per capita consumption of food in 1981, though significant, were far from signaling the onset of starvation. For certain segments of the population, particularly the elderly and large low-income families, however, the impact of the food situation has been more serious.

Imposition of Martial Law

The U.S. Government considered the imposition of martial law on December 13, 1981, a decision taken under pressure from the Soviet Union. Throughout 1981, the Soviet press was increasingly critical of events in Poland. Statements regarding the loss of leadership by the Party in Poland were particularly significant, and pledges of assistance against counterrevolutionary forces became more frequent. The imposition of martial law provided a means of ending an increasingly emboldened experiment without explicit Soviet intervention. In response, the United States has suspended consideration of any new Government-guaranteed agricultural credit for Poland. Favorable trade terms from other sources have also been curtailed. The offering of agricultural commodities at below-market prices by the European Community was suspended, while agricultural credit from individual countries, such as the United Kingdom and Austria, has been greatly reduced.

Thus, the Polish Government is now less able to rely on foreign assistance to correct its agricultural problems. For the farming sector, the major impact of the credit reduction will be on livestock feed supplies, particularly for the broiler industry.

In other areas of agriculture, the initial impact of martial law has been mixed. State procurements of red meat in first-quarter 1982 had recovered from depressed levels of last fall, largely through a clampdown on private sales. Procurement of grain had also improved, but remained markedly short of domestic requirements, posing a possible threat to bread and flour supplies by summer. Milk procurement, which in seasonally adjusted terms had improved during the course of last year, has since martial law declined toward the low levels of the first part of 1981.

The martial law crackdown has provided the Polish Government with the opportunity to implement major retail price increases for food. Such increases, averaging generally between 200 and 300 percent, were essential for establishing a semblance of equilibrium in the food market and for greatly reducing the tremendous Government subsidies to agriculture and the food economy. These subsidies had grown steadily over the course of the 1970's as procurement prices for agricultural commodities increased much more rapidly than retail food prices. By 1981, Government subsidies had reached nearly $11 billion, or more than one-fourth of total budgetary outlays. For the majority of food items the new prices cover costs of production and allow for a "normal" profit for farmers and food processors. Food items continuing to receive subsidies are primarily milk and milk products.

These increases obviously have affected household budgets substantially. The Polish Government, which had recently boosted the minimum wage roughly 50 percent, introduced a system of partial compensation for the food price increases which concentrated assistance on the people who are in the lower half of the income distribution. Excluded from compensation, however, was 20 percent of the population, including private farmers and their families.

Current Prospects

Despite a favorable fall sowing season and a moderate winter, the outlook for Polish agriculture in 1982 is not good. Livestock production could fall another 3 to 6 percent as imports of feed continue to be reduced. Production of pork and milk should increase, while beef production should decline modestly and poultry and egg production is likely to decline significantly.

A failure to improve or in some cases maintain supplies of critical inputs places the prospects for the 1982 crop harvest in jeopardy. In most cases the inability to import has been crucial. Supplies of fertilizer will likely decline 2-4 percent following a 3.7-percent drop in 1981. Shortages of plant protection chemicals for grain and potatoes exist this spring, while such supplies for tobacco, hops, strawberries, pulses, and orchard crops are reportedly less than half of requirements. As a means of replacing hard-currency imports which the country cannot afford, plans now call for increasing domestic production of fairly primitive copper-and sulfur-based agricultural chemicals—both of these elements being abundant in Poland. With spring sowing getting underway, there was also a serious shortage of seed-treatment chemicals for grain.

Another major problem during the 1981/82 crop season has been the worsening situation with machinery and spare parts availabilities. Plans to bolster production of

small machinery and tools, which are in great demand on private farms, by sacrificing production of large tractors apparently have not come to fruition. Production of dual-axle tractors declined 12 percent in 1981, but production of all agricultural machinery—in constant 1979 prices—declined 9.7 percent. Likewise, shortages of spare parts have continued, with batteries and tires in particularly short supply.

Agricultural prospects for 1982 and beyond will be greatly influenced by the status of farmer-Government relations. Thus far it appears that the State is maintaining a commitment to most of the recent reforms. For instance, farmer income is now double what it was before the formation of Solidarity. In addition, tractor inventories and sales of land have been moving in favor of the private sector. Furthermore, supplies of fertilizer to socialized farms have reportedly been cut by 10 percent as a means of maintaining deliveries to private farmers.

A number of factors are undercutting positive farmer-Government relations, however. The most significant for the current year is the shrinking availability of both consumer and producer goods on the rural market. Though farmers' income has increased radically, there is little to buy and therefore little reason to expand ties with the State economy. Instead, private farmers have been holding onto their commodities, particularly grain.

Other factors contributing to problems in the Polish countryside have been the imposition of martial law itself, the suspension of independent farmers' organizations, and the unwillingness to provide specific constitutional guarantees regarding the right of private land ownership and inheritance. At this point it remains uncertain to what extent the State is committed to ensuring local farmer self-management. Furthermore, many farmers continue to doubt the Government's sincerity about promises of long-term stability for private farming.

Grain Procurement Problems

The deteriorating economic situation has led private farmers to reduce their sales to the State of commodities that are easily stored, particularly of grain. Thus far, the Government has attempted a number of strategies to induce farmers to increase their sales (for details on these, see "Marketing and Distribution Problems Acute" in the grain section), but none has proven satisfactory, which means that eventual shortages of bread and flour remain a possibility. Unless grain imports, particularly food grain imports, are maintained, this problem could intensify during the 1982/83 July-June year. The Polish Government might be faced with a decision either to improve supplies of consumer goods on the rural market, thereby ensuring a higher standard of living for farmers than for workers, or to introduce forced deliveries. The latter would likely aggravate the situation further.

Assuming a satisfactory solution is found to the problem of grain procurement, the outlook for food supplies in Poland in 1982 is for a continued deterioration in the quality of the diet, but no threat of starvation. Per capita meat consumption will fall an additional 8 to 9 kilograms in 1982 to 54-55 kilograms. Egg consumption is also expected to register a drop, falling 12-13 percent to an estimated 190-195 units per capita. Declines are expected in the consumption of fish, vegetable oil, and butter. On the other hand, consumption of sugar should rebound to recent levels of 41-43 kilograms, bread and milk consumption should remain fairly constant, and potato consumption should increase.

Longer Term Outlook

The Polish Government clearly understands the need to reduce quickly the negative balance of trade in agricultural items. Preliminary plans for the period through 1985 place increased stress on domestic feed supplies. As a result, meat production is expected to remain well below levels attained in the late seventies and per capita consumption is not likely to exceed 60 kilograms again before 1986. Emphasis will be placed on milk and milk products as a substitute source of animal protein, but for market supplies of these items to improve over the next few years, major improvement is needed in transportation and storage facilities. Though agriculture's share of investment will be higher during 1981-85 than during the previous 5-year period, actual investment in agriculture will probably be 5 to 10 percent lower, indicating the need to improve efficiency of resource use.

For such improved efficiency to be realized, positive relations with the private sector are essential. They will be difficult to foster, though, in an environment of continued economic shortages. Hence, Poland is facing a number of difficult years in agriculture that could well bring further deterioration in the food situation.

AGRICULTURAL AND TRADE PROBLEMS IN ROMANIA

by

Robert Cummings

In 1981, Romanian agriculture registered a second year of declining production. Poor performance in this sector, long neglected by authorities intent on industrial development, has contributed to and coincided with foreign trade and credit problems and a marked slowdown in industrial output. The situation may be as bad as any since 1945.

Severe food shortages have occurred throughout the country since late 1980 and regional food rationing was introduced in October 1981. Retail food prices were increased in February 1982 to reduce state subsidies and curb demand. Poor industrial performance, sluggish demand for Romanian manufactured exports, high energy import costs, and a heavy short-term foreign debt structure have resulted in a balance-of-payments crisis. There continue to be reports of late payments to creditors, including, recently, U.S. banks. To improve the foreign trade balance, the Government has maintained agricultural exports, thus aggravating the domestic food supply problems.

Agricultural Output Down; Official Statistics Contradictory

Gross agricultural production fell 1 percent in 1981 after declining 5 percent in 1980. For the major crops, only potato and grape production increased substantially in 1981. Meat production in the socialized sector was up significantly in 1981 and likely represented the effects of increased slaughter for export and poor feed supplies, particularly forages, rather than any real growth in the livestock sector. The plan fulfillment report placed beginning 1982 livestock numbers for cattle, hogs, sheep, and goats below year-earlier levels. Even though these figures were revised upward in March for most categories, the poor retail supply of meat and official complaints about feeding efficiency indicate disappointing performance in the livestock sector.

While some official figures are available on the general performance of Romanian agriculture in 1981, they are subject to dispute and probably mask the magnitude of 1981's shortfall. Romanian data are scarce and also problematic; grain production, for example, is given in bunker weight—making it difficult to determine the true food and feed value of the crop.

Also, agricultural reporting last year was poor. For example, from July through October, the Romanian press consistently cited significant drought damage to the grain crop. Foreign agricultural visitors were shown seriously damaged grain fields, reportedly representative of most grain areas, and were given pessimistic production estimates for the crop. However, on November 1, President Ceausescu announced a grain harvest of "around 20 million tons," the second best ever. Many feel the figure was too optimistic. Weather conditions in 1980/81 were not conducive to such good yields in Romania, and Ceausescu himself stated in the same speech that there were "several hundred thousand hectares" of cut grain remaining to be collected in the fields. Most importantly, the market supply of bread and flour did not improve following the harvest.

A similar scenario occurred with recent livestock figures. In a February 26 speech, only 2 weeks after the publication of the 1981 plan fulfillment report, President Ceausescu spoke of the February 1, 1982, livestock census showing an almost 2-million-head increase in sheep and a 900,000-head increase in hogs over year-earlier levels. These figures contradicted those given in the plan fulfillment report and, in light of this, the livestock census was revised in late March to correspond closely to Ceausesu's figures. The revision came in spite of the large increase in 1981 reported industrial meat production and officially acknowledged problems with fodder quality and feeding efficiency—both factors which should have worked against increases in the livestock population for 1981/82.

Food Rationing and Price Hikes Announced; Agricultural Exports Continue

Persistent food shortages from the fall of 1980 led to the imposition of rationing on October 17, 1981. The food rationing decree, the first since the forties, was extremely vague and left the actual mechanics of rationing up to local officials. The most common form was restricting shoppers to their local market and/or factory canteen for purchases. Stores reportedly keep a list of authorized customers and the actual rationing of food consists, in most cases, of restricting monthly purchases to a "normal" 30-day supply for a family.

In a further effort to curtail demand and to cut subsidies from the national budget, retail food prices were increased an average 35 percent on February 15, 1982. All prices of staple foods increased, reportedly as much as 90 percent for some items. Many of these prices had been unchanged for 20 years or more. Although pensions and several other Government income-support payments were increased, the net effect of the retail price changes will be a substantial real increase in the price of food.

Exacerbating the tight domestic food supply is the current level of agricultural exports. Romania traditionally is an agricultural exporter, and the country has turned to these commodities to take the place of faltering manufactured exports. In 1980, agricultural exports accounted for approximately 15 percent of the value of total exports, slightly above the level for Eastern Europe as a whole.

Although Romanian 1981 trade data are unavailable, there is no indication that agricultural exports declined significantly from 1980's level. These exports earn Romania important hard currency from the Middle East, for example, where Romanian poultry and other exports of livestock products help pay for petroleum imports. However, it is likely that Romania's agricultural imports declined in 1981. In 1980, agricultural imports from the United States represented slightly more than 40 percent of the value of all such Romanian imports. Imports from the United States fell almost 16 percent in 1981, and this drop could be representative of total agricultural imports. Also, the continued deterioration of the food

supply in 1981 indicates no significant net increase in 1981 agricultural imports.

Foreign Trade and Credit Problems

The current campaign to raise agricultural production is related directly to Romania's foreign trade and credit problems. Increased agricultural exports represent a relatively quick way to generate foreign exchange. This is especially so today, as recent import restraint policies could reduce intermediate product imports used to make manufactured exports. Also, higher agricultural production, particularly of forages, is intended to cut down on costly grain imports.

Among the most visible examples of Romania's foreign trade problems was the country's recent failure to meet a payment deadline to U.S. banks on outstanding CCC loan guarantees. However, there have been reports since mid-1981 citing Romanian payment delays to Western bankers and suppliers. The Romanian Government itself has admitted to its difficulties by asking for a "limited" rescheduling of its foreign debt. Talks on this subject between officials and Western creditors began in Frankfurt in early 1982.

The Romanian hard currency debt is currently estimated at $10-$11 billion, with a significant percent of this amount due within 12 months. This relatively short-term debt structure, rather than the absolute size of the debt itself, is responsible for the bulk of Romania's repayment problems. There are reports that in 1982 alone, Romania is required to repay close to 40 percent of the total it owes.

The single most important factor in Romania's foreign trade problems is the large dependence, by East European standards, on sources outside of the Soviet bloc for raw material imports, particularly energy. In the late sixties Romanian officials increasingly directed foreign trade activity outside the CEMA group, with the result that by 1981 the CEMA share in Romanian fuel and raw material imports had fallen to 21 percent from 47 percent in 1970. As the cost of energy has risen, Romania's payments for its non-CEMA energy have risen faster than those for its CEMA energy.

Although the country reported a balance of trade surplus for 1981, the foreign trade situation remains serious and basic reforms in the rigidly planned economy are necessary for any real recovery. In order to support a reform program drawn up by Romanian officials, the IMF made available a $1.3-billion credit line to Romania in June 1981. However, this line was closed in November 1981 by the IMF as the Romanians failed to fulfill a key provision of the loan agreement: the payment of all outstanding arrearages to foreign suppliers and creditors. By mid-1982, Romanian and IMF officials were negotiating a resumption of the loan.

Reform Measures Emphasize Prices, Better Management, and Private Production

Romanian agriculture is in need of serious reform. It is tightly managed by authorities in Bucharest using annual and 5-year plans with little scope for local decisionmaking or initiative. The result is a highly bureaucratic sector where prices have had little influence on resource allocation and private production has received inadequate attention. According to one local agricultural official:

> ...in our county we must give operative reports three times a week. Instead of following up on the spot how production is going, what problems are rising, how they are being solved, a lot of work is done to draw up situations, tables, and so forth. Sometimes you have the impression that the figures, the papers we produce, are of more interest than the actual production of meat, milk, and eggs achieved.

Since September 1980, the Romanian Government has taken a number of steps to raise agricultural output with the goals of increasing deliveries to state stocks and achieving agricultural self-sufficiency on a regional basis. Attainment of these twin goals would reduce local demands on state stocks for food (except for nonagricultural areas), thus freeing up larger supplies for export. Current policy efforts are a mix of bureaucratic direction and profit-based incentives.

Agricultural income and profitability, particularly in the cooperative sector, have lagged behind that of industry for years. In an effort to remedy this situation, officials in September 1980 and February 1981 announced increases in cooperative members' incomes. Also, a profit-sharing scheme and pensions for cooperative members were introduced for the first time in early 1982. Most of these increases were financed by higher purchase prices for agricultural goods. On January 1, 1981, all delivery, contracting, and purchase prices were increased 12 percent, and on December 15, 1981, procurement price bonuses of up to 59 percent were announced for deliveries of certain products to state stocks. The actual level of these bonuses depends on the quality of produce delivered.

These measures were greatly needed. The level of profits on state and collective farms is extremely low, resulting in rising state subsidies and little incentive to produce. For example, of the 25 major products produced on state farms in 1981, only 9 were considered profitable. The bonus price system is expected to raise gross agricultural income by 14 billion lei ($1 = 11 lei) and allow the Government to reduce its subsidies to state and cooperative farms by 7 billion lei. As an added incentive to sell produce to state procurement centers, all cooperatives, cooperative members, and private farmers who contract to sell are eligible to receive credit; purchase seed, fertilizers, chemicals, and fodder concentrates from state stocks; and in addition receive free veterinary services, technical assistance, and grazing rights on state-owned pastures. Increased use of these inputs is essential if local agricultural production is to increase.

Perhaps the most significant indicator of the Government's concern is its positive attitude toward the private sector. Although official views on the private sector have become more positive throughout the region recently, traditional Romanian views have not been supportive. Production from the private sector (private plots plus private farms) accounts for 40 percent of meat production, 35 percent of milk, 55 percent of fruit and vegetables, and 35 percent of potatoes. Higher output from this sector is essential for improved local food supplies, enabling collective and state farms to produce for state stocks. To spur private output, the Government plans to step up the production of small implements, provide breeding animals, and allow farmers to purchase feed in exchange for livestock and/or livestock products.

Nevertheless, the Government has not abandoned bureaucratic measures in the drive for higher production.

In late 1980, a decree was published legally requiring all inhabitants who possess farmland to cultivate it to help meet their own consumption needs and provide supplies to state stocks. Failure to cultivate is punishable as a criminal offense.

In early 1982, the right to use private plots was restricted to those cooperative members who fulfill their work assignments on the collective. Also, the legal authority of officials to mobilize the nonagricultural population for field work during peak periods was strengthened. Furthermore, the quantity of foodstuffs from the state stocks supplied to each county is to be set annually. This is significant as central control over local food supplies is tight. The majority of staple foods are bought from local producers by State and regional organizations, which in turn market them in their own retail networks. For example, deliveries from State stocks account for 90 percent of retail meat supplies, 85 percent of milk supplies, and 70 percent of vegetable supplies. Should local producers fail to meet their procurement targets, supplies from State stocks would be reduced. Conversely, should producers overfulfill their procurement contracts, shipments from State stocks will increase over planned levels. The increase would range from 10 percent of the overprocurement from state farms to 70 percent of that from private producers. By placing ceilings on State stock deliveries, authorities can regulate the local food supply and place final responsibility for their adequacy on local producers.

The Program on Regional Self-Supply and Self-Management, adopted in October 1981, is the culmination of the bureaucratic side of recent Romanian agricultural policy. The program again places the responsibility for local food supplies squarely on local officials, but provides no evidence of wider decisionmaking authority for them. While the program promises adequate supplies for nonagricultural areas from state stocks, it is extremely vague on measures to build local food processing and distribution facilities necessary for rural self-sufficiency.

Outlook for Improvement Poor

The outlook for Romanian agriculture is not good. Any realistic hope of long-term success rests on an improvement in the quality of agricultural management, wider use of the price mechanism in decisionmaking, and development of the private sector. The economy of the country cannot support a major increase in capital inputs for agriculture, making price incentives essential to induce higher output.

However, the country's long experience with, and preference for, bureaucratic management makes it very difficult to carry out fully the price measures described, and the current policy emphasis on regional self-sufficiency indicates a shift in responsibility for adequate food supplies to the local level without a corresponding shift of management authority. By delegating responsibility to local officials while retaining their own authority, central officials can escape accountability for inadequate food supplies at the same time that they encourage deliveries to state stocks. But, should rural residents expect little improvement in the food supply from state stocks, the incentive to deliver produce to the State in exchange for money will be reduced. There are already indications that the Government is not fulfilling its supply commitments of fodder to private farmers who deliver slaughter livestock to the State. If this is a common occurrence, efforts to increase private output will be unsuccessful. Even though the severity of the present problems may force officials to carry out significant reform, the Romanian record on economic reform is unenviable. In any event, improvement in the agricultural situation will require several years plus a simultaneous improvement in the foreign trade sector.

Table 1—Production of grains, Eastern Europe, annual 1972-81[1]

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
				1,000 tons				
Wheat								
1972	3,582	4,017	2,744	4,089	5,174	6,041	4,843	30,490
1973	3,258	4,646	2,861	4,498	5,807	5,487	4,750	31,307
1974	3,034	5,059	3,154	4,968	6,409	4,999	6,282	33,905
1975	2,996	4,202	2,736	4,005	5,207	4,860	4,404	28,410
1976	3,511	4,807	2,715	5,148	5,745	6,723	5,979	34,628
1977	3,384	5,214	2,914	5,315	5,308	6,463	5,595	34,193
1978	3,466	5,601	3,147	5,673	6,029	6,250	5,355	35,521
1979	3,355	3,736	3,116	3,703	4,187	4,666	4,512	27,275
1980	3,847	5,386	3,098	6,068	4,175	6,417	5,091	34,082
1981	4,429	4,325	2,942	4,600	4,203	5,320	4,270	30,089
Rye								
1972	21	634	1,904	171	8,149	58	120	11,057
1973	19	690	1,699	175	8,268	42	118	11,011
1974	21	671	1,949	175	7,881	50	120	10,867
1975	18	530	1,563	147	6,270	52	98	8,678
1976	15	561	1,455	156	6,922	49	105	9,263
1977	15	641	1,644	142	6,250	(50)	87	8,829
1978	19	630	1,895	137	7,434	(50)	81	10,246
1979	25	486	1,830	92	5,201	(50)	81	7,765
1980	28	570	1,917	139	6,566	(50)	79	9,349
1981	35	544	1,797	115	6,731	45	75	9,342
Barley								
1972	1,427	2,651	2,592	802	2,750	838	487	11,547
1973	1,368	2,962	2,848	871	3,158	730	676	12,613
1974	1,636	3,375	3,422	894	3,908	916	794	14,945
1975	1,699	3,114	3,682	699	3,638	952	703	14,487
1976	1,781	2,901	3,456	747	3,617	1,231	653	14,386
1977	1,481	3,207	3,681	706	3,396	1,859	650	14,980
1978	1,488	3,642	4,135	760	3,636	2,307	560	16,528
1979	1,536	3,604	3,323	707	3,731	2,044	631	15,576
1980	1,375	3,575	3,979	925	3,420	2,466	826	16,566
1981	1,401	3,392	3,476	900	3,541	2,580	720	16,010
Oats								
1972	75	726	890	60	3,212	111	260	5,334
1973	51	740	805	67	3,220	102	298	5,283
1974	67	687	922	78	3,244	91	353	5,442
1975	56	591	780	87	2,920	57	368	4,859
1976	65	379	506	86	2,695	55	320	4,106
1977	88	454	411	64	2,552	61	309	3,939
1978	76	456	595	77	2,492	57	284	4,037
1979	66	404	532	87	2,186	60	283	3,618
1980	54	422	582	106	2,245	47	294	3,750
1981	61	431	598	125	2,730	59	311	4,315

—Continued

Table 1—Production of grains, Eastern Europe, annual 1972-81[1]—Continued

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Total Yugo-slavia	Eastern Europe
				1,000 tons				
Corn								
1972	2,974	642	27	5,554	10	9,817	7,930	26,954
1973	2,586	619	13	5,963	13	7,397	8,253	24,844
1974	1,627	574	3	6,247	19	7,440	8,031	23,941
1975	2,822	843	2	7,172	79	9,241	9,389	29,548
1976	3,031	514	—	5,141	231	11,583	9,106	29,606
1977	2,513	792	2	6,007	232	10,114	9,870	29,532
1978	2,236	619	2	6,655	120	10,208	7,585	27,425
1979	3,223	949	6	7,396	181	12,425	10,084	34,264
1980	2,256	745	—	6,535	58	11,153	9,317	30,064
1981	2,477	706	—	6,800	79	11,870	9,766	31,698
Rice								
1972	47	—	—	61	—	45	31	184
1973	62	—	—	69	—	50	32	213
1974	58	—	—	56	—	53	31	198
1975	68	—	—	69	—	68	37	242
1976	41	—	—	32	—	37	23	133
1977	68	—	—	35	—	47	36	186
1978	61	—	—	23	—	58	34	176
1979	73	—	—	41	—	60	34	208
1980	67	—	—	24	—	39	42	172
1981	60	—	—	35	—	50	40	185
Other coarse grains[2]								
1972	1	—	379	—	1,140	3	15	1,538
1973	—	—	276	—	1,392	3	15	1,686
1974	—	—	254	24	1,516	2	13	1,809
1975	—	—	148	13	1,443	36	11	1,651
1976	—	—	58	9	1,653	112	9	1,841
1977	—	—	43	5	1,661	20	7	1,736
1978	—	—	47	4	1,826	44	6	1,927
1979	—	—	51	—	1,855	33	6	1,945
1980	—	—	50	—	1,872	28	5	1,955
1981	—	—	50	—	2,490	45	5	2,590
Total grain								
1972	8,127	8,670	8,536	10,737	20,435	16,913	13,686	87,104
1973	7,344	9,657	8,503	11,643	21,858	13,811	14,142	86,958
1974	6,445	10,366	9,703	12,459	22,977	13,551	15,624	91,125
1975	7,656	9,280	8,910	12,201	19,557	15,266	15,010	87,880
1976	8,444	9,162	8,190	11,328	20,863	19,790	16,195	93,972
1977	7,549	10,308	8,696	12,274	19,399	18,614	16,554	93,394
1978	7,346	10,948	9,821	13,329	21,537	18,974	13,905	95,860
1979	8,278	9,179	8,857	12,026	17,341	19,337	15,631	90,649
1980	7,627	10,699	9,626	13,797	18,336	20,200	15,654	95,939
1981	8,463	9,398	8,863	12,575	19,774	19,969	15,187	94,229

— = No information reported, or amount under 2,000 tons. ( ) = Estimate.

[1]1981 data are preliminary. [2]Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 2—Area of grains, Eastern Europe, annual 1972-81[1]

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
				1,000 hectares				
Wheat								
1972	961	1,197	690	1,317	2,048	2,523	1,924	10,660
1973	934	1,235	696	1,294	1,962	2,358	1,697	10,176
1974	904	1,276	728	1,324	2,022	2,389	1,842	10,485
1975	912	1,183	688	1,251	1,842	2,345	1,615	9,836
1976	918	1,278	762	1,325	1,832	2,388	1,723	10,226
1977	910	1,287	732	1,311	1,834	2,269	1,604	9,947
1978	935	1,274	686	1,324	1,852	2,284	1,712	10,067
1979	958	1,111	712	1,135	1,549	2,100	1,524	9,089
1980	968	1,197	707	1,276	1,609	2,239	1,516	9,512
1981	1,032	1,089	675	1,151	1,418	2,106	1,386	8,857
Rye								
1972	17	232	646	119	3,543	42	104	4,703
1973	16	225	646	107	3,416	34	96	4,540
1974	15	219	637	106	3,138	(40)	91	4,246
1975	17	191	593	104	2,792	(40)	84	3,821
1976	13	186	600	93	2,934	(40)	76	3,941
1977	13	212	619	91	3,116	(40)	69	4,160
1978	13	187	652	78	3,030	(40)	63	4,063
1979	16	166	678	69	2,868	(40)	59	3,896
1980	20	179	678	73	3,039	(40)	55	4,084
1981	27	171	656	75	3,002	35	54	4,020
Barley								
1972	446	854	618	291	1,016	327	290	3,842
1973	458	873	692	287	1,083	315	328	4,036
1974	477	867	779	271	1,230	402	330	4,356
1975	575	980	929	257	1,335	442	360	4,878
1976	524	857	960	228	1,210	410	293	4,482
1977	529	856	997	224	1,235	595	306	4,742
1978	473	919	1,035	225	1,202	722	273	4,849
1979	472	1,042	945	262	1,470	772	291	5,254
1980	426	921	969	246	1,322	810	324	5,018
1981	382	996	964	286	1,294	920	310	5,152
Oats								
1972	65	323	247	48	1,359	121	256	2,419
1973	46	278	238	37	1,271	105	251	2,226
1974	47	226	222	33	1,182	85	249	2,044
1975	50	221	243	45	1,291	70	270	2,190
1976	44	198	190	39	1,115	45	232	1,863
1977	57	174	153	32	1,097	54	231	1,798
1978	51	151	153	27	1,030	48	210	1,670
1979	53	149	136	44	1,094	60	209	1,745
1980	41	139	155	35	997	51	194	1,612
1981	46	160	172	56	1,156	60	194	1,844

—Continued

Table 2—Area of grains, Eastern Europe, annual 1972-81[1]—Continued

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
				1,000 hectares				
Corn								
1972	689	148	9	1,392	6	3,196	2,383	7,823
1973	627	169	4	1,461	4	2,957	2,377	7,599
1974	523	167	1	1,461	5	2,963	2,256	7,376
1975	652	158	—	1,413	15	3,305	2,363	7,906
1976	731	204	—	1,339	52	3,378	2,374	8,078
1977	702	203	—	1,281	57	3,318	2,321	7,882
1978	601	202	1	1,283	33	3,179	2,130	7,429
1979	666	206	1	1,352	46	3,311	2,251	7,833
1980	579	192	—	1,229	18	3,288	2,202	7,508
1981	571	178	—	1,165	20	3,159	2,297	7,390
Rice								
1972	15	—	—	28	—	27	7	77
1973	16	—	—	27	—	23	7	73
1974	17	—	—	28	—	23	7	75
1975	17	—	—	27	—	22	8	74
1976	17	—	—	28	—	21	8	74
1977	17	—	—	28	—	20	8	73
1978	17	—	—	24	—	22	8	71
1979	16	—	—	20	—	22	8	66
1980	16	—	—	16	—	20	9	61
1981	15	—	—	20	—	23	9	67
Other coarse grain[2]								
1972	1	—	120	—	513	2	14	650
1973	1	1	101	—	514	3	15	635
1974	—	—	76	12	531	1	10	630
1975	—	—	58	8	589	15	9	679
1976	—	—	29	5	625	68	7	734
1977	—	—	19	3	663	12	6	703
1978	—	—	17	2	705	23	6	753
1979	—	—	18	—	845	13	5	881
1980	—	—	17	—	862	21	4	904
1981	—	—	21	—	1,021	15	5	1,062
Total grain								
1972	2,194	2,754	2,330	3,195	8,485	6,238	4,978	30,174
1973	2,097	2,781	2,377	3,213	8,250	5,793	4,771	29,282
1974	1,983	2,755	2,444	3,235	8,108	5,901	4,785	29,211
1975	2,222	2,733	2,513	3,105	7,864	6,239	4,709	29,385
1976	2,247	2,723	2,541	3,057	7,768	6,350	4,713	29,399
1977	2,228	2,732	2,520	2,970	8,002	6,308	4,545	29,305
1978	2,090	2,733	2,544	2,963	7,852	6,318	4,402	28,902
1979	2,181	2,674	2,490	2,882	7,872	6,318	4,347	28,764
1980	2,050	2,628	2,526	2,875	7,847	6,469	4,303	28,698
1981	2,073	2,594	2,488	2,753	7,911	6,318	4,255	28,392

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

[1]1981 data are preliminary. [2]Includes buckwheat, millet, spelt, mixed grains, and sorghum.

Table 3—Production of selected crops, Eastern Europe, annual 1972-81[1]

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
				1,000 tons				
Potatoes								
1972	382	5,058	12,140	1,310	48,735	3,672	2,406	73,703
1973	328	5,087	11,401	1,163	51,928	2,644	2,974	75,525
1974	345	4,522	13,404	1,364	48,519	4,119	3,127	75,400
1975	318	3,565	7,673	1,268	46,429	2,716	2,394	64,363
1976	351	4,214	6,816	1,087	49,951	4,788	2,828	70,035
1977	383	3,760	10,313	1,335	41,148	4,207	3,034	64,180
1978	391	3,995	10,777	1,515	46,648	4,465	2,501	70,292
1979	424	3,725	12,243	1,092	49,572	4,562	2,724	74,342
1980	301	2,695	9,214	941	26,391	4,135	2,440	46,117
1981	407	3,743	10,378	1,070	42,552	4,485	2,712	65,347
Sugar beets								
1972	1,951	6,884	7,223	2,908	14,341	5,581	3,274	42,162
1973	1,719	6,163	6,682	2,752	13,664	4,380	3,338	38,698
1974	1,611	8,219	6,959	3,707	12,971	4,947	4,300	42,714
1975	1,758	7,734	6,414	4,089	15,707	4,905	4,213	44,820
1976	2,327	5,248	5,106	3,942	15,107	6,911	4,711	43,352
1977	1,751	8,229	8,578	3,889	15,640	6,246	5,287	49,620
1978	1,600	7,282	7,568	4,192	15,707	5,845	5,157	47,351
1979	2,045	7,645	6,695	3,927	14,154	6,109	5,924	46,499
1980	1,414	7,255	7,034	3,927	10,139	5,562	5,213	40,544
1981	1,313	6,969	8,043	4,675	15,850	5,410	6,140	48,400
Sunflowerseed								
1972	494	6	—	132	—	850	277	1,759
1973	448	7	—	152	—	756	434	1,797
1974	368	3	—	120	—	681	298	1,470
1975	426	5	—	154	—	728	272	1,585
1976	362	7	—	185	—	799	319	1,672
1977	423	11	—	212	—	807	479	1,932
1978	369	15	—	223	—	816	539	1,962
1979	426	26	—	417	—	888	525	2,282
1980	380	29	—	454	—	817	302	1,982
1981	448	33	—	620	—	824	320	2,245
Rapeseed								
1972	—	107	234	52	430	—	14	837
1973	—	117	246	68	512	—	8	951
1974	—	94	298	45	523	16	12	988
1975	—	131	363	65	726	17	14	1,316
1976	—	134	320	66	980	11	24	1,535
1977	—	162	308	89	708	6	40	1,313
1978	—	166	318	107	691	11	73	1,366
1979	—	80	200	41	234	11	93	659
1980	—	214	308	98	566	19	68	1,273
1981	—	199	284	63	485	15	65	1,111
Soybeans								
1972	[2]12	—	—	—	—	186	6	204
1973	[2]30	1	—	—	—	244	13	288
1974	33	6	—	14	—	298	14	365
1975	80	6	—	41	—	213	30	370
1976	99	3	—	42	—	213	48	405
1977	90	5	—	41	—	191	67	394
1978	120	3	—	28	—	230	63	444
1979	156	5	—	(35)	—	383	67	646
1980	107	6	—	(40)	—	448	34	635
1981	113	6	—	30	—	270	93	512

—Continued

Table 3—Production of selected crops, Eastern Europe, annual 1972-81[1]—Continued

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
				1,000 tons				
Tobacco								
1972	158	4	4	17	75	38	62	258
1973	142	5	5	20	78	38	65	353
1974	145	6	6	17	65	39	59	337
1975	162	6	5	17	102	40	70	402
1976	165	5	5	19	125	64	80	463
1977	118	5	5	24	87	47	69	355
1978	139	5	5	21	59	41	62	332
1979	159	5	4	24	74	40	67	374
1980	122	5	4	14	57	37	57	296
1981	134	5	5	22	90	28	70	354
Corn silage								
1972	4,114	12,498	14,641	4,998	9,820	5,523	1,030	52,624
1973	4,627	10,474	10,712	4,882	11,940	5,496	961	49,092
1974	3,885	12,823	11,802	4,689	14,824	5,722	1,022	54,767
1975	3,980	14,849	9,600	5,503	17,320	4,729	1,006	56,987
1976	4,755	12,443	6,748	5,638	19,723	4,655	1,103	55,065
1977	4,251	16,138	14,734	5,703	22,775	4,542	1,178	69,321
1978	5,067	14,302	8,342	6,344	21,383	4,038	1,184	60,660
1979	5,759	17,118	13,496	6,222	25,680	4,818	1,341	74,434
1980	4,498	14,647	11,434	6,613	18,000	3,688	1,460	60,340
1981	5,026	15,642	13,434	—	20,997	—	1,477	—
Hay[3]								
1972	1,488	6,278	4,086	2,774	8,691	5,172	3,094	31,583
1973	1,824	5,854	3,884	2,796	9,295	5,428	3,424	32,505
1974	1,547	6,247	4,181	2,984	9,290	5,347	3,468	33,064
1975	1,981	6,098	3,707	3,121	8,484	6,206	3,561	33,158
1976	2,032	5,067	3,066	2,470	8,469	5,465	3,508	30,077
1977	2,027	6,370	4,978	2,894	8,390	5,743	3,485	33,887
1978	1,960	5,778	4,735	3,068	8,189	6,105	3,280	33,115
1979	2,160	6,260	5,155	2,951	8,334	5,552	3,420	33,832
1980	2,080	7,169	6,113	3,128	8,089	5,312	3,378	35,269
Feed roots								
1972	1,047	2,608	9,362	1,281	7,967	2,230	688	25,183
1973	715	1,857	6,858	946	8,534	1,990	722	21,622
1974	661	1,975	6,303	1,045	8,016	2,899	723	21,622
1975	722	1,545	3,415	842	7,773	2,321	722	17,340
1976	886	961	1,872	723	8,378	4,115	740	17,675
1977	600	1,090	3,670	718	8,530	3,740	811	19,159
1978	738	774	2,732	668	9,654	3,826	687	19,079
1979	747	812	2,019	689	10,673	3,358	823	19,121
1980	479	715	1,714	661	8,044	2,986	685	15,284

— = No information reported, or amount under 2,000 tons. ( ) = Estimates.

[1]1981 data are preliminary. [2]Derived figure. [3]Does not include meadow hay and includes only lucerne, clover, and vetch in Yugoslavia.

Table 4—Area of selected crops, Eastern Europe, annual 1972-81[1]

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
				1,000 hectares				
Potatoes								
1972	30	322	646	118	2,656	296	315	4,383
1973	27	305	650	106	2,678	284	317	4,367
1974	31	280	635	108	2,684	295	321	4,354
1975	30	251	574	100	2,581	289	314	4,139
1976	29	240	599	90	2,466	289	308	4,021
1977	34	237	587	99	2,437	295	315	4,004
1978	37	221	579	94	2,360	293	298	3,882
1979	39	216	549	76	2,441	294	296	3,911
1980	35	199	513	63	2,344	286	287	3,727
1981	36	200	505	60	2,258	295	290	3,644
Sugar beets								
1972	55	187	222	79	438	197	79	1,257
1973	60	197	229	92	445	234	86	1,343
1974	61	205	234	98	440	218	104	1,360
1975	78	217	266	127	496	247	108	1,539
1976	73	214	267	129	555	236	107	1,581
1977	73	216	269	122	532	255	122	1,589
1978	63	218	261	123	523	249	126	1,563
1979	64	218	254	112	455	259	140	1,502
1980	56	218	250	104	460	238	128	1,454
1981	53	220	261	121	468	283	147	1,553
Sunflowerseed								
1972	274	4	—	108	—	554	171	1,111
1973	252	4	—	103	—	512	224	1,095
1974	262	3	—	113	—	509	201	1,088
1975	238	4	—	129	—	511	194	1,076
1976	226	6	—	135	—	521	175	1,063
1977	237	9	—	138	—	513	209	1,106
1978	226	11	—	151	—	512	249	1,149
1979	230	21	—	228	—	519	257	1,255
1980	248	20	—	273	—	508	180	1,229
1981	261	19	—	306	—	506	194	1,286
Rapeseed								
1972	—	53	111	50	276	—	9	499
1973	—	57	122	50	315	—	5	549
1974	—	45	123	33	258	13	5	477
1975	—	63	132	46	309	13	7	570
1976	—	63	130	52	398	7	11	661
1977	—	73	125	60	400	4	20	682
1978	—	79	124	70	337	8	35	653
1979	—	55	113	33	180	8	41	430
1980	—	91	125	51	320	14	32	633
1981	—	95	125	52	277	8	31	588
Soybeans								
1972	14	—	—	—	—	109	4	127
1973	19	2	—	—	—	183	9	213
1974	25	4	—	15	—	238	9	291
1975	36	4	—	25	—	121	15	201
1976	56	5	—	39	—	155	31	286
1977	69	3	—	29	—	171	32	304
1978	99	3	—	19	—	202	34	357
1979	96	3	—	20	—	302	31	452
1980	94	3	—	20	—	364	17	498
1981	94	3	—	20	—	310	45	472
Tobacco								
1972	122	4	3	15	46	39	57	286
1973	119	4	3	17	48	52	57	300
1974	123	4	3	17	52	53	57	309
1975	127	4	3	16	50	57	63	320
1976	121	4	3	15	60	53	70	326
1977	122	4	3	16	55	51	65	316
1978	115	4	3	18	44	50	61	295
1979	115	4	3	16	43	44	59	284
1980	108	4	3	14	52	44	57	282
1981	106	4	3	16	49	39	64	283

—Continued

Table 4—Area of selected crops, Eastern Europe, annual 1972-81[1] —Continued

Commodity and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
				1,000 hectares				
Corn silage								
1972	244	373	353	239	220	243	35	1,707
1973	312	384	321	250	277	415	36	1,995
1974	387	435	328	237	384	359	36	2,166
1975	187	439	350	256	438	203	36	1,909
1976	210	450	354	331	538	177	36	2,096
1977	230	442	404	325	579	288	39	2,307
1978	310	448	355	298	660	185	43	2,299
1979	257	436	384	314	675	166	42	2,274
1980	360	418	365	329	668	44	49	2,233
Hay[2]								
1972	392	1,097	529	698	1,532	1,196	644	6,088
1973	410	1,062	527	696	1,624	1,255	677	6,251
1974	425	1,015	486	676	1,655	1,163	672	6,092
1975	463	972	473	648	1,813	1,147	672	6,188
1976	452	944	464	661	1,735	1,052	659	5,967
1977	437	945	509	669	1,643	980	659	5,842
1978	452	923	536	661	1,674	1,026	657	5,929
1979	457	973	587	653	1,748	947	661	6,026
1980	468	998	604	635	1,692	704	660	5,761
Feed roots								
1972	20	53	183	32	236	53	35	612
1973	17	44	155	26	249	69	36	596
1974	16	39	140	25	256	80	36	592
1975	16	30	116	22	252	77	37	550
1976	16	25	55	21	256	87	35	495
1977	15	21	77	22	242	90	35	502
1978	16	18	63	20	267	88	35	507
1979	13	19	42	20	267	82	35	478
1980	12	20	40	19	257	76	34	458

— = No information reported, or amount less than 2,000 hectares.

[1]1981 data are preliminary. [2]Does not include meadow hay and includes only lucerne, clover, and vetch in Yugoslavia.

Table 5—January livestock numbers, Eastern Europe, 1972-82[1]

Category and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
				1,000 head				
Cattle								
1972	1,379	4,349	5,293	1,883	10,562	5,528	5,148	34,142
1973	1,441	4,466	5,379	1,893	11,265	5,767	5,366	35,577
1974	1,454	4,556	5,482	1,931	12,309	5,897	5,681	37,310
1975	1,554	4,566	5,585	2,018	12,815	5,983	5,872	38,393
1976	1,656	4,555	5,532	1,904	12,764	6,126	5,755	38,293
1977	1,722	4,654	5,471	1,887	12,002	6,351	5,641	37,728
1978	1,736	4,758	5,549	1,949	12,360	6,306	5,550	38,208
1979	1,762	4,887	5,572	1,966	12,409	6,511	5,491	38,598
1980	1,787	4,915	5,596	1,925	12,164	6,513	5,436	38,336
1981	1,796	5,002	5,722	1,918	11,337	6,485	5,474	37,734
1982	1,807	5,103	5,749	1,945	11,494	6,303	5,522	37,923
Cows								
1972	607	1,900	2,173	750	5,904	2,385	2,786	16,505
1973	620	1,906	2,169	762	6,023	2,447	2,921	16,848
1974	615	1,927	2,164	786	6,268	2,498	3,056	17,314
1975	644	1,927	2,157	797	6,350	2,537	3,195	17,607
1976	670	1,903	2,155	760	6,138	2,560	3,267	17,453
1977	691	1,898	2,146	766	5,786	2,568	3,227	17,082
1978	695	1,898	2,158	781	5,878	2,580	3,184	17,175
1979	717	1,909	2,140	788	5,929	2,670	3,134	17,287
1980	712	1,903	2,124	772	5,840	2,682	3,091	17,124
1981	702	1,902	2,138	765	5,666	2,670	3,086	16,929
1982	706	1,905	2,122	760	5,718	2,670	3,090	16,971
Hogs								
1972	2,806	5,935	9,995	7,594	16,946	7,742	6,216	57,234
1973	2,598	6,093	10,361	6,858	19,023	8,785	6,342	60,060
1974	2,431	6,266	10,849	8,011	21,451	8,987	7,401	65,396
1975	3,422	6,719	11,518	8,293	21,709	8,566	7,683	67,910
1976	3,889	6,683	11,501	6,953	21,647	8,813	6,536	66,022
1977	3,456	6,820	11,291	7,854	16,766	10,193	7,326	63,706
1978	3,400	7,510	11,757	7,850	20,591	9,744	8,452	69,304
1979	3,772	7,601	11,734	8,011	21,108	10,336	7,747	70,309
1980	3,830	7,588	12,132	8,355	20,983	10,899	7,502	71,289
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	19,049	11,464	7,702	70,530
Sheep								
1972	10,127	932	1,607	2,054	2,653	14,071	8,326	39,770
1973	9,920	889	1,657	1,936	2,627	14,455	7,774	39,258
1974	9,765	842	1,742	1,878	2,595	14,302	7,852	38,976
1975	9,791	811	1,847	2,021	2,660	13,929	8,175	39,234
1976	10,014	805	1,882	2,039	3,178	13,865	7,831	39,614
1977	9,723	797	1,870	2,350	3,151	14,331	7,484	39,706
1978	10,145	841	1,927	2,619	3,593	14,463	7,514	41,102
1979	10,105	865	1,965	2,863	3,704	15,612	7,339	42,453
1980	10,536	875	1,979	2,927	3,633	15,820	7,354	43,124
1981	10,433	910	2,038	3,090	3,490	15,865	7,384	43,210
1982	10,726	959	2,169	3,140	3,440	17,288	7,288	45,051
Horses								
1972	159	118	106	211	2,469	654	1,015	4,732
1973	148	100	94	188	2,401	631	964	4,526
1974	142	84	82	172	2,387	594	945	4,406
1975	137	71	76	163	2,330	557	922	4,256
1976	133	62	70	156	2,100	562	864	3,947
1977	128	57	68	147	2,080	576	812	3,868
1978	125	53	65	144	1,976	550	759	3,672
1979	124	49	66	134	1,870	571	701	3,515
1980	120	47	66	126	1,825	566	617	3,367
1981	120	45	70	118	1,775	550	580	3,258
1982	118	45	70	115	1,740	550	550	3,188
Poultry								
1972	34,102	38,238	43,343	58,800	88,854	61,262	44,584	369,183
1973	34,788	39,170	43,658	50,600	92,875	64,496	49,206	374,793
1974	36,939	41,232	45,667	55,300	94,227	66,511	54,685	394,561
1975	35,089	39,476	47,530	57,500	96,583	67,672	54,991	398,841
1976	38,061	40,130	47,122	56,055	99,795	78,626	54,764	414,558
1977	39,504	44,142	48,444	63,501	79,193	91,503	59,031	425,318
1978	41,080	44,774	48,258	64,561	83,708	89,019	60,398	431,798
1979	40,297	46,957	50,240	66,293	83,696	99,725	61,513	448,721
1980	41,003	48,351	51,444	64,600	84,901	95,417	63,055	448,771
1981	41,636	47,283	51,611	64,900	81,200	97,800	65,690	450,120
1982	40,554	47,388	54,392	64,500	79,000	109,244	67,000	462,078

[1]1982 data are preliminary.

Table 6—Production of principal livestock products, Eastern Europe, annual 1972-81[1]

Category and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
				1,000 tons				
Beef and veal[2]								
1972	110	377	349	187	586	219	277	2,105
1973	126	404	368	210	627	251	286	2,272
1974	116	431	389	187	808	250	328	2,509
1975	112	431	476	229	870	267	351	2,736
1976	127	415	477	200	920	283	356	2,776
1977	142	414	435	199	846	308	359	2,703
1978	142	421	451	200	844	300	366	2,724
1979	148	432	441	212	887	336	371	2,827
1980	153	436	431	196	846	304	360	2,726
1981	149	413	455	188	660	313	355	2,533
Mutton, lamb, and goat meat[2]								
1972	101	8	11	15	30	63	50	278
1973	100	8	11	17	29	69	50	284
1974	100	7	13	16	28	70	49	283
1975	90	7	14	17	26	71	56	281
1976	101	6	20	14	25	67	61	294
1977	88	6	19	14	27	78	57	289
1978	98	5	20	14	30	71	62	300
1979	102	6	20	16	32	85	63	324
1980	104	6	21	16	30	78	59	314
1981	106	6	21	16	28	80	60	317
Pork[2]								
1972	243	681	927	820	1,643	615	617	5,546
1973	223	671	970	733	1,833	701	559	5,690
1974	212	703	1,041	861	1,948	779	715	6,259
1975	329	738	1,198	892	1,852	754	722	6,485
1976	370	728	1,158	799	1,594	796	677	6,122
1977	321	780	1,160	931	1,599	829	770	6,390
1978	321	828	1,184	932	1,825	852	886	6,828
1979	363	828	1,204	963	1,855	925	843	6,981
1980	372	852	1,285	977	1,768	977	815	7,046
1981	383	860	1,295	982	1,430	995	840	6,785
Poultry meat[2]								
1972	108	119	107	243	172	190	144	1,083
1973	113	124	111	252	196	209	160	1,165
1974	131	129	124	272	223	238	181	1,298
1975	123	134	125	280	254	282	188	1,386
1976	130	141	131	308	294	303	204	1,511
1977	149	152	134	320	341	338	227	1,661
1978	158	161	135	331	377	356	254	1,772
1979	162	169	140	325	419	411	267	1,893
1980	145	172	145	347	441	406	276	1,932
1981	146	170	147	350	454	410	285	1,962
Total meat[2, 3]								
1972	565	1,225	1,423	1,270	2,480	1,063	1,107	9,133
1973	566	1,242	1,490	1,217	2,729	1,203	1,067	9,514
1974	562	1,307	1,598	1,341	3,061	1,307	1,283	10,459
1975	657	1,349	1,837	1,422	3,062	1,373	1,329	11,029
1976	732	1,322	1,808	1,324	2,896	1,449	1,309	10,840
1977	704	1,383	1,767	1,467	2,883	1,553	1,425	11,182
1978	726	1,446	1,809	1,482	3,142	1,582	1,570	11,757
1979	782	1,467	1,824	1,521	3,257	1,760	1,555	12,166
1980	781	1,500	1,899	1,541	3,141	1,769	1,530	12,161
1981	788	1,483	1,935	1,541	2,619	1,801	1,560	11,727
Milk[4]								
1972	1,308	5,123	7,515	1,810	15,765	3,164	2,813	37,498
1973	1,344	5,430	7,738	1,957	16,243	3,390	3,105	39,207
1974	1,410	5,503	8,075	2,020	16,667	3,387	3,487	40,549
1975	1,436	5,462	8,095	1,822	16,375	3,458	3,654	40,302
1976	1,458	5,400	8,092	1,931	16,520	3,826	3,846	41,073
1977	1,550	5,530	7,939	2,142	16,929	4,212	4,072	42,374
1978	1,621	5,642	8,225	2,336	17,122	4,368	4,132	43,446
1979	1,804	5,663	8,198	2,457	16,959	4,365	4,286	43,732
1980	1,830	5,909	8,321	2,537	16,494	4,148	4,342	43,581
1981	1,890	5,918	8,250	2,635	15,307	4,150	4,430	42,580
				Millions				
Eggs								
1972	1,703	4,120	4,425	3,217	7,475	4,300	2,964	28,204
1973	1,736	4,254	4,554	3,285	7,437	4,655	3,201	29,122
1974	1,753	4,468	4,922	3,628	7,871	4,871	3,674	31,187
1975	1,851	4,499	5,047	4,001	8,013	5,412	3,590	32,407
1976	1,848	4,492	5,217	3,995	8,020	6,153	3,825	33,550
1977	2,026	4,639	5,266	4,528	8,494	6,299	4,041	35,293
1978	2,221	4,690	5,219	4,748	8,531	6,650	4,062	36,121
1979	2,287	4,732	5,219	4,721	8,670	7,085	4,265	36,979
1980	2,434	4,900	5,514	4,385	8,902	6,727	4,394	37,256
1981	2,450	4,967	5,700	4,295	8,897	6,800	4,450	37,559

[1]1981 data are preliminary. [2]Data include offal and edible slaughter fat, and live animal exports for slaughter. CEMA data except for Yugoslavia. [3]Includes horse and rabbit meat, CEMA data except for Yugoslavia. [4]Data include only cow milk for consumption in Romania and Yugoslavia for the entire series, and in Hungary since 1975. 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 equal to 1.031 kilograms.

Table 7—Per capita consumption of selected foods, Eastern Europe, 1972-81

Commodity and country	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania[1]	Yugoslavia
				Kilograms			
Total meat							
1972	49.0	75.8	70.8	61.5	59.3	—	37.8
1973	50.0	76.7	73.5	63.7	62.1	—	38.5
1974	51.6	78.4	75.3	66.2	65.6	—	43.7
1975	58.0	81.1	77.8	68.5	70.3	45.7	48.3
1976	62.0	81.0	80.9	67.5	70.0	48.4	48.4
1977	59.3	81.4	83.5	68.9	69.1	51.9	49.4
1978	61.1	83.2	86.1	71.2	70.6	54.9	51.6
1979	62.1	84.3	87.8	70.4	73.0	—	57.3
1980	61 2	84.6	89.4	(70.5)	74.0	60.0	(56.2)
1981	(63.0)	(84.6)	—	—	(63.9)	—	(55.8)
Eggs[2]							
1972	126	273	240	260	196	—	149
1973	135	293	250	264	200	—	154
1974	140	293	264	270	205	—	162
1975	146	297	269	274	209	214	166
1976	149	294	274	270	214	—	164
1977	171	308	274	308	214	238	180
1978	197	311	282	314	219	—	180
1979	187	311	284	328	220	270	188
1980	204	312	290	342	222	270	—
1981	(209)	(312)	—	—	—	—	—
Vegetable oil							
1972	12.9	6.1	2.3	2 2	5.8	—	9.7
1973	13.0	6.1	2.0	2 5	6.2	—	10.1
1974	13.7	6.1	2.0	2.8	6.5	—	10.8
1975	14 1	6.7	2.0	2.9	6.5	—	10.6
1976	14 1	6.8	2 5	3.3	6.8	—	10.5
1977	14.5	6.8	1.9	3.6	7.1	—	10.8
1978	14.6	7.0	1.8	3.8	7.0	—	10.5
1979	15 1	7 0	1.7	4.1	7.0	—	10.7
1980	15.1	(7 0)	1.7	(4.0)	6.8	—	—
1981	—	—	—	—	—	—	—
Sugar							
1972	31.6	37.7	35.5	35.5	40.9	—	29.1
1973	33.0	38.6	35.1	37.1	42.0	—	29.4
1974	33.2	38.6	36.9	37.7	43.9	—	33.1
1975	32.5	38.0	36.8	39.4	43.2	20.3	32.8
1976	34.5	38.1	38.6	31.6	43.9	—	32.8
1977	34.0	35.6	37.8	34.9	41.5	25.2	32.8
1978	35.0	38.3	39.3	36.4	42.7	—	32.0
1979	34.2	38 6	40.8	34.1	43.9	(28.0)	30.9
1980	34.7	38.0	40.7	35.0	41.4	28.2	—
1981	(35.5)	(38.0)	—	—	—	—	—
Grains (in flour equivalent)							
1972	173	111	96	122	127	—	186
1973	170	109	94	120	125	—	181
1974	165	108	94	120	123	—	188
1975	162	108	95	118	120	189	183
1976	164	108	95	116	122	—	180
1977	157	106	94	115	121	—	178
1978	159	108	94	115	120	—	176
1979	159	107	95	113	120	183	176
1980	160	107	94	111	124	172	—
1981	—	—	—	—	—	180	—
Vegetables							
1972	116	74	93	83	84	—	84
1973	116	71	94	87	93	—	95
1974	125	76	88	87	84	—	90
1975	127	74	90	85	109	113	87
1976	114	71	86	84	99	—	96
1977	123	75	94	86	96	124	104
1978	127	69	94	83	105	—	81
1979	141	71	98	85	119	(140)	93
1980	126	71	97	—	101	140	—
1981	(132)	—	—	—	—	—	—
Potatoes							
1972	29	106	146	69	187	—	63
1973	27	106	145	67	183	—	71
1974	27	108	141	66	177	—	71
1975	23	96	142	67	173	96	66
1976	25	97	144	64	173	—	67
1977	25	94	139	60	168	—	68
1978	30	88	141	60	166	—	62
1979	27	83	143	61	160	—	60
1980	26	90	142	62	158	71	—
1981	—	—	—	—	—	—	—

— = No information reported

( ) = Estimate

[1]*Revista Economica*, Dec 29, 1978, *Lumea*, Oct 30, 1981, Bucharest Domestic Service, Nov 1, 1981, *Scinteia*, Nov 29, 1981. [2]Numbers.

Table 8—Total and agricultural trade, Eastern Europe, 1976-81

Commodity and country	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
				Million dollars				
Export[1]								
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	7,021	5,240	59,035
1978	7,478	11,747	13,267	6,345	14,114	8,077	5,537	66,565
1979	8,869	13,198	15,063	7,938	16,249	9,724	6,240	77,281
1980	10,372	14,891	17,312	8,677	16,997	12,230	8,367	88,846
1981[2]	11,465	16,290	19,135	8,980	14,380	13,610	10,185	94,045
Import[1]								
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	9,609	69,680
1978	7,651	12,565	14,572	7,902	16,089	8,910	9,774	77,463
1979	8,514	14,262	16,214	8,674	17,584	10,916	12,370	88,534
1980	9,650	15,148	19,082	9,235	19,089	13,201	14,029	99,434
1981[2]	11,555	16,025	20,900	9,430	16,835	12,225	14,660	101,630
Balance								
1976	−244	−671	−1,835	−594	−2,850	43	−2,325	−8,476
1977	−42	−885	−2,310	−691	−2,351	3	−4,369	−10,645
1978	−173	−818	−1,305	−1,557	−1,975	−833	−4,237	−11,898
1979	355	−1,064	−1,151	−736	−1,335	−1,192	−6,130	−11,253
1980	772	−257	−1,770	−558	−2,092	−971	−5,662	−10,588
1981	−90	265	−1,765	−450	−2,455	1,385	−4,475	−7,585
Agricultural export[3]								
1976	955	329	333	1,453	978	929	617	5,594
1977	1,037	342	325	1,750	1,024	1,275	595	6,348
1978	1,068	401	406	1,786	1,080	1,275	713	6,729
1979	1,239	531	451	2,105	1,201	1,169	815	7,511
1980	1,379	628	512	2,064	1,137	1,387	1,143	8,190
Agricultural import[3]								
1976	504	1,462	1,880	938	1,892	881	902	8,459
1977	453	1,640	1,895	1,156	2,039	810	1,132	9,125
1978	500	1,640	2,034	1,163	2,294	863	1,067	9,561
1979	600	2,164	2,212	1,203	2,551	1,164	1,515	11,409
1980	610	2,156	2,556	1,070	3,092	1,409	1,826	12,719
Agricultural trade balance								
1976	451	−1,133	−1,547	515	−914	48	−285	−2,865
1977	584	−1,298	−1,570	594	−1,015	465	−537	−2,777
1978	568	−1,239	−1,628	623	1,214	412	−354	−2,832
1979	639	−1,633	−1,761	902	−1,350	5	−700	−3,898
1980	769	−1,528	−2,044	934	−1,955	−22	−683	−4,529

[1]United Nations data. [2]Preliminary. [3]FAO data.

Table 9—Grain imports, Eastern Europe, 1972-80

Commodity and country	1972	1973	1974	1975	1976	1977	1978	1979	1980
					1,000 tons				
Total grains									
Bulgaria	1	140	643	659	439	194	648	908	692
Czechoslovakia	1,718	1,737	1,171	970	2,187	1,207	936	2,085	1,984
GDR	3,820	3,074	2,821	3,422	5,067	2,733	3,498	3,717	4,456
Hungary	800	282	408	189	233	314	428	326	153
Poland	3,194	3,317	4,155	4,025	6,131	5,754	7,366	7,338	7,811
Romania[1]	459	392	1,376	1,230	1,670	1,328	1,195	2,102	2,172
Yugoslavia	990	283	977	22	818	566	131	1,573	1,416
Total	10,982	9,225	11,551	10,508	16,608	12,096	14,202	18,049	18,684
Wheat									
Bulgaria	—	—	77	105	32	119	59	379	30
Czechoslovakia	1,193	1,066	671	525	689	374	257	736	537
GDR	2,040	1,594	1,219	1,130	1,691	1,100	687	811	476
Hungary	35	—	2	30	33	4	—	2	1
Poland	1,274	1,620	1,758	1,477	2,311	2,599	2,311	2,927	3,466
Romania[1]	29	184	468	402	989	540	300	800	900
Yugoslavia	448	225	845	—	864	521	3	417	1,347
Total	5,019	4,689	5,040	3,669	6,609	5,257	3,617	6,072	6,757
Barley									
Bulgaria	—	53	201	278	1	3	62	299	1
Czechoslovakia	112	132	90	82	158	272	20	11	169
GDR	675	298	104	390	796	581	806	1,161	564
Hungary	548	199	333	101	153	31	95	287	84
Poland	1,332	780	1,135	1,376	742	1,268	2,413	1,498	1,130
Romania[1]	218	50	216	53	20	23	150	165	60
Yugoslavia	66	10	5	15	—	10	11	53	35
Total	2,951	1,522	2,084	2,295	1,870	2,188	3,557	3,474	2,043
Corn									
Bulgaria	—	68	359	222	375	61	519	225	653
Czechoslovakia	302	469	332	283	1,260	471	590	1,206	1,181
GDR	1,031	1,086	1,328	1,795	2,346	940	1,229	1,201	3,161
Hungary	107	2	6	2	20	248	284	—	30
Poland	337	684	765	634	2,035	1,401	1,807	2,128	2,553
Romania[1]	183	77	652	595	102	300	310	920	1,090
Yugoslavia	417	42	81	—	—	—	106	1,094	1
Total	2,377	2,428	3,523	3,531	6,138	3,421	4,845	6,774	8,669
Other coarse grains[1, 2]									
Bulgaria	—	15	—	49	24	—	—	—	—
Czechoslovakia	41	—	4	9	—	6	—	46	24
GDR	30	45	119	69	192	67	733	500	211
Hungary	100	67	55	42	14	4	20	16	15
Poland	181	179	434	464	924	429	756	697	569
Romania	—	11	—	120	501	427	373	150	65
Yugoslavia	51	1	9	2	9	5	3	1	2
Total	403	318	621	755	1,664	938	1,885	1,410	886
Rice									
Bulgaria	1	4	6	5	7	9	8	5	8
Czechoslovakia	70	70	74	71	80	84	69	86	73
GDR	44	51	51	38	42	45	43	44	44
Hungary	10	14	12	14	13	27	29	21	23
Poland	70	54	63	74	119	57	79	88	93
Romania	29	70	40	62	58	38	62	67	57
Yugoslavia	8	5	37	5	8	32	8	8	31
Total	232	268	283	269	327	292	298	319	329

— = No information reported, or amount less than 2,000 tons.

[1]FAO data. [2]Rye, oats, and grain sorghum.

Table 10—Grain exports, Eastern Europe, 1972-80

Commodity and country	1972	1973	1974	1975	1976	1977	1978	1979	1980
					1,000 tons				
Total grains									
Bulgaria	834	367	149	195	452	446	202	396	651
Czechoslovakia	35	33	207	73	197	34	33	14	56
GDR	325	343	312	240	386	329	339	382	440
Hungary	539	1,732	1,836	1,266	1,693	1,035	874	645	931
Poland	208	410	262	104	70	22	6	67	6
Romania[1]	900	1,126	712	1,163	1,633	2,052	1,853	629	1,720
Yugoslavia	22	389	343	68	485	335	248	22	292
Total	2,863	4,400	3,821	3,109	4,916	4,253	3,555	2,155	4,096
Wheat									
Bulgaria	509	220	139	113	253	271	201	396	509
Czechoslovakia	—	—	—	—	—	—	—	1	20
GDR[1]	61	82	68	73	75	55	60	55	50
Hungary	369	925	934	922	707	790	560	541	814
Poland	—	—	—	—	—	—	—	—	—
Romania[2]	543	776	641	705	1,385	1,652	863	251	704
Yugoslavia	—	—	4	—	—	5	78	2	5
Total	1,482	2,003	1,786	1,813	2,420	2,773	1,762	1,246	2,102
Barley									
Bulgaria	40	16	—	—	44	2	—	—	46
Czechoslovakia	35	33	33	48	183	34	33	13	33
GDR[1]	167	173	152	62	162	105	137	179	150
Hungary	122	88	14	—	1	9	2	4	22
Poland	129	43	68	29	49	22	—	10	—
Romania	—	—	—	—	—	—	—	—	—
Yugoslavia	—	103	33	11	9	—	—	—	10
Total	493	456	300	150	448	172	172	206	251
Corn									
Bulgaria	285	130	10	82	155	173	—	—	90
Czechoslovakia	—	—	—	—	—	—	—	—	—
GDR	—	—	—	—	—	—	—	—	—
Hungary	44	714	848	344	966	216	298	89	83
Poland	—	—	—	—	—	—	—	—	—
Romania[2]	357	350	71	458	248	400	990	378	994
Yugoslavia	20	277	291	52	459	326	168	20	273
Total	706	1,471	1,220	936	1,828	1,115	1,456	487	1,440
Other coarse grains[1]									
Bulgaria	—	1	—	—	—	—	1	—	—
Czechoslovakia	—	—	174	25	15	—	—	—	3
GDR	97	88	92	105	149	169	142	148	240
Hungary	4	5	40	—	19	20	14	11	12
Poland	79	367	194	75	21	—	6	57	6
Romania	—	—	—	—	—	—	—	—	22
Yugoslavia	2	9	15	5	18	4	2	—	4
Total	182	470	515	210	222	193	165	216	287

— = No information reported, or amount less than 2,000 tons.

[1]Trading partners' data. [2]FAO data.

Table 11—Imports of selected agricultural commodities, Eastern Europe, 1972-80

Commodity and country	1972	1973	1974	1975	1976	1977	1978	1979	1980
					1,000 tons				
Oilseeds[1]									
Bulgaria	—	—	—	1	1	1	—	36	6
Czechoslovakia	115	147	139	132	148	149	116	170	91
GDR	165	117	116	112	38	40	61	51	84
Hungary	1	1	1	1	3	2	—	22	15
Poland	109	147	203	125	84	10	131	211	279
Romania	19	20	20	20	221	116	310	329	279
Yugoslavia	2	—	38	4	27	78	224	253	233
Total	411	432	517	395	522	396	842	1,072	987
Vegetable oil, edible									
Bulgaria	—	—	—	2	2	—	—	—	2
Czechoslovakia	58	40	46	49	53	44	50	51	21
GDR	161	98	127	97	104	111	132	106	112
Hungary	7	21	20	17	17	15	14	12	9
Poland	69	66	68	61	87	79	58	64	103
Romania	1	1	5	7	10	6	3	4	20
Yugoslavia	128	48	59	130	106	51	10	11	81
Total	424	274	325	363	379	306	267	248	348
Oilseed meal									
Bulgaria	179	170	302	218	256	214	181	136	184
Czechoslovakia	488	604	564	616	671	592	606	593	753
GDR	834	769	829	875	875	998	941	986	943
Hungary	377	376	577	505	541	594	692	622	620
Poland	545	719	794	948	1,024	1,051	1,088	1,274	1,361
Romania	117	215	227	273	320	240	270	270	385
Yugoslavia	150	200	272	150	246	211	163	90	148
Total	2,700	3,053	3,565	3,585	3,934	3,900	3,941	3,971	4,394
Cotton									
Bulgaria	56	61	58	51	48	61	55	56	64
Czechoslovakia	108	104	119	116	95	117	96	122	114
GDR	91	86	99	100	79	102	86	84	99
Hungary	72	73	74	93	87	68	99	96	117
Poland	157	145	152	160	145	176	159	163	173
Romania	97	108	104	111	108	101	119	109	120
Yugoslavia	86	94	109	85	103	103	123	98	110
Total	667	671	715	716	665	728	737	728	797
Hides and skins									
Bulgaria	8	7	10	7	7	4	5	7	5
Czechoslovakia[2]	48	65	48	47	49	50	53	(53)	53
GDR	17	23	14	14	15	17	15	19	19
Hungary	27	30	31	28	26	38	38	32	34
Poland	53	61	52	47	35	45	44	42	43
Romania	46	40	40	37	49	36	40	54	43
Yugoslavia	23	20	23	22	27	42	21	21	30
Total	222	246	218	202	208	232	216	228	227
Meat and meat products[3]									
Bulgaria	10	15	39	19	17	11	8	3	5
Czechoslovakia	46	22	41	32	22	31	23	22	31
GDR	47	43	25	23	20	30	21	20	31
Hungary	14	27	19	12	27	10	6	10	10
Poland	65	55	6	16	46	104	33	2	54
Romania	43	8	10	3	11	3	36	55	89
Yugoslavia	11	46	20	8	10	28	39	48	64
Total	236	216	160	113	153	217	166	160	284
Sugar[4]									
Bulgaria	160	232	212	295	239	214	226	224	238
Czechoslovakia	143	148	165	48	109	64	80	94	99
GDR	331	260	285	166	189	234	213	223	188
Hungary	145	174	226	198	151	91	59	80	40
Poland	37	29	50	41	16	30	60	62	124
Romania	82	80	88	21	129	222	—	123	87
Yugoslavia	295	463	119	119	342	85	—	—	—
Total	1,193	1,386	1,145	888	1,175	940	638	806	776
Tobacco									
Bulgaria	12	5	7	9	4	5	8	8	12
Czechoslovakia	21	18	16	14	15	16	29	20	26
GDR	23	18	20	20	16	18	19	20	26
Hungary	9	9	9	8	7	9	6	4	7
Poland	3	7	4	10	11	7	8	13	23
Romania	2	2	7	2	2	1	1	—	—
Yugoslavia	6	2	2	6	2	4	3	4	7
Total	76	61	65	69	57	60	74	69	101

( ) = Estimate

[1]Flaxseed, rapeseed, soybeans, and sunflowerseed. [2]Converted from pieces to metric tons at 22 kg per piece. [3]Includes poultry meat. [4]Raw basis

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

Table 12—Exports of selected agricultural commodities, Eastern Europe, 1972-80

Commodity and country	1972	1973	1974	1975	1976	1977	1978	1979	1980
					1,000 tons				
Oilseeds[1]									
Bulgaria	92	33	10	4	11	30	13	40	15
Czechoslovakia	4	3	2	1	1	6	—	—	—
GDR	—	—	9	8	13	15	10	22	—
Hungary	36	27	32	47	42	57	90	133	76
Poland	1	53	—	74	173	78	4	—	—
Romania	50	19	35	15	5	11	1	2	—
Yugoslavia	13	5	20	1	1	—	1	68	8
Total	196	140	108	150	246	197	119	265	99
Vegetable oil, edible									
Bulgaria	26	19	23	21	23	21	7	15	13
Czechoslovakia	1	1	1	1	1	3	2	—	—
GDR	—	—	—	—	—	—	—	—	—
Hungary	41	41	39	38	39	50	57	49	95
Poland	62	47	47	57	76	101	61	39	7
Romania	129	142	165	141	87	158	131	146	84
Yugoslavia	1	3	7	—	—	2	13	40	17
Total	260	253	282	258	226	335	271	289	216
Meat and meat products[2]									
Bulgaria	74	65	61	99	118	106	98	102	117
Czechoslovakia	25	50	9	16	12	10	22	60	54
GDR	71	68	39	69	134	121	152	134	122
Hungary	163	134	201	249	210	293	265	310	347
Poland	173	194	234	209	157	142	153	167	162
Romania	69	111	133	165	165	194	158	225	191
Yugoslavia	108	91	57	85	89	62	77	80	60
Total	683	713	734	892	885	928	925	1,078	1,053
Sugar[3]									
Bulgaria	—	—	—	—	—	9	—	—	—
Czechoslovakia	226	225	189	227	72	171	300	249	186
GDR	158	120	186	64	67	92	82	77	94
Hungary	2	2	13	7	1	2	12	35	106
Poland	352	425	180	73	354	272	285	105	48
Romania	170	—	116	28	—	174	92	7	87
Yugoslavia	—	—	7	2	—	1	—	71	318
Total	908	772	691	401	494	721	771	544	839
Tobacco									
Bulgaria	63	69	69	71	70	70	62	72	73
Czechoslovakia	3	1	2	2	1	—	2	—	—
GDR	2	2	2	2	2	2	2	2	3
Hungary	3	2	1	1	1	1	1	1	3
Poland	9	12	13	10	10	10	9	9	9
Romania	3	6	6	9	10	8	6	5	8
Yugoslavia	17	18	19	25	25	19	27	26	25
Total	100	110	112	118	119	110	109	115	121

— = No information reported.

[1]Flaxseed, rapeseed, soybeans, and sunflowerseed. [2]Includes poultry meat. [3]Raw basis.

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

Table 13—Value of U.S. agricultural exports to Eastern Europe, 1976-81[1]

Commodity and country	1976	1977	1978	1979	1980	1981[2]
			Million dollars			
Total grains						
Bulgaria	28.46	.17	24.85	5.52	80.10	134.00
Czechoslovakia	112.85	8.90	44.60	177.11	142.90	52.20
GDR	359.53	134.58	122.25	257.27	455.70	271.70
Hungary	—	12.94	11.86	.67	.80	.80
Poland	356.73	201.59	278.86	411.73	406.40	359.90
Romania	74.03	36.83	32.41	118.41	273.70	247.50
Yugoslavia	—	—	27.93	196.40	140.50	19.90
Total	931.60	395.01	542.76	1,167.11	1,500.10	1,086.00
Wheat						
Bulgaria	—	—	—	—	—	—
Czechoslovakia	21.40	0.03	—	78.69	44.60	—
GDR	106.28	9.54	28.13	35.26	49.50	34.20
Hungary	—	—	—	—	—	—
Poland	101.64	59.17	68.04	120.29	66.20	17.00
Romania	48.45	15.97	—	12.51	92.30	8.30
Yugoslavia	—	—	—	68.85	140.50	19.90
Total	277.77	84.71	96.17	315.60	393.10	79.40
Corn						
Bulgaria	28.45	—	24.85	5.40	80.10	134.00
Czechoslovakia	55.30	—	47.15	98.42	98.20	52.20
GDR	16.30	122.37	98.27	196.58	392.60	224.70
Hungary	—	—	11.86	—	—	—
Poland	184.16	136.57	161.42	249.62	328.00	335.40
Romania	7.50	21.22	22.65	105.85	173.10	238.40
Yugoslavia	—	—	30.80	116.03	—	—
Total	291.71	280.16	397.00	771.90	1,072.00	984.70
Soybeans						
Bulgaria	—	0.28	—	—	—	6.20
Czechoslovakia	9.41	6.92	5.00	0.43	0.40	—
GDR	—	3.09	1.46	1.08	0.40	0.20
Hungary	—	—	—	—	—	—
Poland	10.80	—	39.83	54.86	72.30	25.30
Romania	45.28	38.65	54.63	73.98	61.80	35.70
Yugoslavia	0.21	23.48	48.48	78.48	60.40	70.10
Total	65.70	72.42	149.40	208.83	195.30	137.50
Vegetable oil						
Bulgaria	—	—	—	—	—	—
Czechoslovakia	—	—	—	—	—	—
GDR	4.15	0.72	—	—	—	—
Hungary	—	—	—	—	—	—
Poland	4.73	—	8.10	23.90	7.20	7.30
Romania	—	—	—	—	—	—
Yugoslavia	—	—	—	—	12.20	3.80
Total	8.88	0.72	8.10	23.90	19.40	11.10

—Continued

Table 13—Value of U.S. agricultural exports to Eastern Europe, 1976-81[1]—Continued

Commodity and country	1976	1977	1978	1979	1980	1981[2]
			Million dollars			
Soybean meal and cake						
Bulgaria	1.59	—	11.64	23.31	47.90	52.10
Czechoslovakia	81.13	72.95	25.80	57.16	46.30	8.30
GDR	41.80	96.36	54.83	109.90	75.70	58.40
Hungary	14.52	23.50	32.36	16.36	27.20	—
Poland	73.85	41.26	108.55	81.64	75.10	77.00
Romania	17.70	9.40	8.47	65.48	79.10	101.40
Yugoslavia	29.06	22.83	22.59	18.98	45.40	34.10
Total	259.65	266.30	264.24	372.83	396.70	331.30
Cotton, excluding linters						
Bulgaria	—	—	—	—	—	—
Czechoslovakia	—	—	—	—	—	—
GDR	—	—	—	—	—	—
Hungary	—	—	0.02	1.74	—	3.90
Poland	9.84	3.95	14.73	22.25	10.70	15.00
Romania	—	6.55	13.53	23.99	33.00	—
Yugoslavia	—	—	—	1.78	0.50	—
Total	9.84	10.50	28.28	49.76	44.20	18.90
Cattle hides						
Bulgaria	0.75	0.58	1.13	1.88	1.20	—
Czechoslovakia	11.12	13.05	14.00	29.23	8.40	8.50
GDR	0.16	0.66	0.75	1.11	0.80	—
Hungary	3.49	4.35	4.07	5.38	2.20	3.00
Poland	6.29	9.11	8.32	19.57	19.50	5.50
Romania	26.52	26.66	52.22	59.67	28.90	22.00
Yugoslavia	5.08	10.93	3.57	15.12	4.90	7.70
Total	53.41	65.34	84.06	131.96	76.20	46.70
Other						
Bulgaria	0.77	1.64	2.12	10.31	9.60	11.30
Czechoslovakia	15.60	12.04	7.76	8.50	7.50	4.00
GDR	7.31	4.68	2.56	1.23	1.70	2.70
Hungary	4.44	8.25	3.78	3.35	3.40	5.20
Poland	29.21	43.24	53.58	55.75	31.20	106.40
Romania	8.05	.22	1.12	5.14	14.40	6.70
Yugoslavia	5.36	13.70	81.27	13.58	19.20	13.20
Total	70.74	83.77	79.19	97.86	87.00	149.50
Total agricultural exports						
Bulgaria	31.56	2.68	39.73	41.02	138.90	203.60
Czechoslovakia	230.11	113.86	97.16	272.43	205.50	73.00
GDR	412.95	240.09	181.85	370.59	534.30	333.00
Hungary	22.44	49.04	52.10	27.50	33.70	12.90
Poland	491.45	299.14	511.97	669.71	622.40	596.40
Romania	171.58	118.30	162.38	346.64	490.90	413.30
Yugoslavia	39.71	70.94	110.95	324.34	293.20	148.80
Total	1,399.80	894.05	1,156.14	2,052.23	2,318.90	1,781.00

— = Amount less than $1 million.

[1]Including estimated transshipments through Belgium, Canada, FRG, and Netherlands. [2]Preliminary.

Sources: Census Bureau, U.S. Department of Commerce; U.S. Foreign Agricultural Trade Statistical Report, USDA/ERS; U.S. Export Sales, USDA/FAS.

Table 14—U.S. exports to Eastern Europe, total and agricultural, 1976-81

Country	1976	1977	1978	1979	1980	1981
			Million dollars			
Bulgaria						
Nonagricultural exports	11.7	21.5	8.2	15.5	33.5	53.8
Direct agricultural exports	31.6	2.4	39.9	41.0	127.3	197.3
Agricultural transshipments	—	—	—	—	11.5	6.3
Total exports	43.3	23.9	48.1	56.5	172.3	257.4
Czechoslovakia						
Nonagricultural exports	25.0	20.2	26.3	23.1	30.6	24.2
Direct agricultural exports	123.7	54.5	77.1	258.1	154.6	58.2
Agricultural transshipments	106.4	62.8	3.5	14.4	50.9	14.8
Total exports	255.1	137.5	106.9	295.6	236.1	97.2
GDR						
Nonagricultural exports	6.6	4.9	16.1	18.9	25.3	11.4
Direct agricultural exports	58.3	31.2	154.0	337.1	453.3	284.2
Agricultural transshipments	354.7	208.7	48.9	33.5	81.0	48.8
Total exports	419.6	244.8	219.0	389.5	559.6	344.4
Hungary						
Nonagricultural exports	40.7	46.7	45.0	53.4	55.6	64.6
Direct agricultural exports	22.4	33.9	52.7	24.5	24.4	12.9
Agricultural transshipments	—	14.8	—	3.0	9.2	—
Total exports	63.1	95.4	97.7	80.9	89.2	77.5
Poland						
Nonagricultural exports	142.1	146.5	173.5	141.3	142.2	87.7
Direct agricultural exports	481.3	292.4	503.5	651.7	571.5	592.9
Agricultural transshipments	10.2	4.1	12.1	18.0	50.9	3.5
Total exports	633.6	443.0	689.1	811.0	764.6	684.1
Romania						
Nonagricultural exports	78.7	141.7	169.4	164.7	259.4	135.5
Direct agricultural exports	171.6	118.3	148.5	336.5	462.6	368.4
Agricultural transshipments	—	—	4.2	10.1	28.3	44.9
Total exports	250.3	260.0	322.1	511.3	750.3	548.8
Yugoslavia						
Nonagricultural exports	259.4	286.0	417.6	472.1	478.2	521.1
Direct agricultural exports	37.5	70.3	111.0	284.4	277.5	137.9
Agricultural transshipments	2.2	—	16.8	39.9	15.7	10.9
Total exports	299.1	356.3	545.4	796.4	771.4	669.9
Eastern Europe						
Nonagricultural exports	564.3	667.5	856.1	889.0	1,024.8	898.3
Direct agricultural exports	926.3	603.0	1,086.8	1,933.3	2,071.2	1,651.8
Agricultural transshipments	473.5	290.4	85.6	119.4	247.6	129.2
Total exports	1,964.1	1,560.9	2,028.3	2,941.3	3,343.6	2,679.3

— = Amount less than $1 million.

Sources: U.S. Foreign Agricultural Trade Statistical Report, USDA/ERS; U.S. Export Sales, USDA/FAS; Census Bureau, U.S. Dept. of Commerce.

Table 15—U.S. total and agricultural trade balance with Eastern Europe, 1977-81

Category and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Eastern Europe
				Million dollars				
U.S. exports								
1977	23.9	137.5	244.8	95.4	443.0	260.0	356.3	1,560.9
1978	48.1	106.9	219.0	97.7	689.1	322.1	545.4	2,028.3
1979	56.5	295.6	389.5	80.9	811.0	511.3	796.4	2,941.3
1980	172.3	236.1	559.6	89.2	764.6	750.3	771.4	3,343.5
1981	257.4	97.2	344.4	77.5	684.1	548.8	669.9	2,679.3
U.S. imports								
1977	18.0	36.6	16.8	46.6	328.5	233.3	335.8	1,015.6
1978	19.1	58.0	35.1	68.5	438.3	346.6	394.6	1,360.2
1979	34.7	50.9	36.4	112.2	425.6	329.3	388.9	1,377.9
1980	24.9	65.9	43.4	107.5	418.4	312.2	446.3	1,418.6
1981	34.1	67.2	47.7	128.6	365.1	560.1	437.2	1,640.0
Balance								
1977	5.9	100.9	228.0	48.8	114.5	26.7	20.5	545.3
1978	29.0	48.9	183.9	29.2	250.8	-24.5	150.8	668.1
1979	21.8	244.7	353.1	-31.3	385.4	182.0	407.5	1,563.4
1980	147.4	170.2	516.2	-18.3	346.2	438.1	325.1	1,924.9
1981	223.3	30.0	296.7	-51.1	319.0	-11.3	232.7	1,039.3
U.S. agricultural exports								
1977	2.4	117.3	239.9	48.7	296.5	118.3	70.3	893.4
1978	39.9	80.6	202.9	52.7	515.6	152.7	127.8	1,172.4
1979	41.0	272.5	370.6	27.5	669.7	346.6	324.3	2,052.2
1980	138.8	205.5	534.3	33.6	622.4	490.9	293.2	2,318.7
1981	203.6	73.0	333.0	12.9	596.4	413.3	148.8	1,781.0
U.S. agricultural imports								
1977	23.4	5.4	1.7	23.5	125.4	20.5	85.7	285.6
1978	24.8	6.1	2.8	32.3	154.6	31.6	113.4	365.6
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	0.9	33.7	109.1	28.0	71.7	277.0
Balance								
1977	-21.0	111.9	238.2	25.2	171.1	97.8	-15.4	607.8
1978	15.1	74.5	200.1	20.4	361.0	121.1	14.4	806.8
1979	17.8	264.8	368.4	-8.3	505.7	313.0	237.9	1,699.3
1980	121.4	195.1	531.5	3.0	466.7	460.4	229.6	2,007.7
1981	182.1	60.9	332.1	-20.8	487.3	385.3	77.1	1,504.0

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

Table 16—Volume of U.S. agricultural exports to Eastern Europe, 1976-81[1]

Commodity and country	1976	1977	1978	1979	1980	1981
			1,000 tons			
Total grains						
Bulgaria	246	3	226	42	635	934
Czechoslovakia	912	81	398	1,252	974	412
GDR	2,877	1,332	1,145	1,898	3,120	1,796
Hungary	—	112	107	1	1	1
Poland	2,811	2,133	2,683	3,301	2,915	2,340
Romania	666	413	327	998	1,918	1,631
Yugoslavia	—	—	269	1,498	844	136
Total	7,512	4,074	5,155	8,990	10,407	7,250
Wheat						
Bulgaria	—	—	—	—	—	—
Czechoslovakia	143	—	—	442	239	—
GDR	719	84	219	196	252	174
Hungary	—	—	—	—	—	—
Poland	698	637	584	817	349	92
Romania	427	171	—	81	540	63
Yugoslavia	—	—	—	406	844	136
Total	1,987	892	803	1,942	2,224	465
Corn						
Bulgaria	299	—	226	42	635	934
Czechoslovakia	772	—	426	810	735	412
GDR	1,767	1,274	942	1,501	2,766	1,511
Hungary	—	—	106	—	—	—
Poland	1,518	1,416	1,566	2,153	2,549	2,233
Romania	26	232	227	917	1,318	1,568
Yugoslavia	—	—	294	975	—	—
Total	4,382	2,922	3,787	6,398	8,003	6,658
Soybeans						
Bulgaria	—	1	—	—	—	21
Czechoslovakia	1	3	20	3	1	—
GDR	—	12	6	3	2	1
Hungary	—	—	—	—	—	—
Poland	56	—	151	200	263	87
Romania	220	137	244	260	248	153
Yugoslavia	1	96	186	275	218	244
Total	278	249	607	741	732	506
Vegetable oil						
Bulgaria	—	—	—	—	—	—
Czechoslovakia	—	—	—	—	—	—
GDR	6	1	—	—	—	—
Hungary	—	—	—	—	—	—
Poland	10	—	18	37	12	12
Romania	—	—	—	—	—	—
Yugoslavia	—	—	—	—	20	7
Total	16	1	18	37	32	19
Soybean meal and cake						
Bulgaria	11	—	57	103	196	214
Czechoslovakia	475	341	130	243	218	36
GDR	230	414	261	458	362	208
Hungary	71	94	147	67	95	—
Poland	392	178	518	366	324	288
Romania	98	47	38	271	334	372
Yugoslavia	182	109	112	81	182	140
Total	1,459	1,183	1,263	1,589	1,711	1,258
Cotton, excluding linters						
Bulgaria	—	—	—	—	—	—
Czechoslovakia	—	—	—	—	—	—
GDR	—	—	—	—	—	—
Hungary	—	—	—	1	—	2
Poland	7	2	11	15	5	6
Romania	—	4	9	16	21	—
Yugoslavia	—	—	—	1	1	—
Total	7	6	20	33	27	8
Cattle hides[3]						
Bulgaria	49	31	52	45	29	—
Czechoslovakia	678	680	586	685	315	334
GDR	9	43	39	33	43	—
Hungary	270	227	180	144	94	112
Poland	389	433	349	513	522	203
Romania	1,651	1,472	1,942	1,317	1,046	680
Yugoslavia	252	472	431	737	413	230
Total	3,298	3,358	3,579	3,474	2,462	1,559

— = Amount less than 1,000.

[1]Including estimated transshipments through Belgium, Canada, FRG, and Netherlands. [2]Preliminary. [3]1,000 pieces.

Sources: Census Bureau, U.S. Dept. of Commerce; U.S. Foreign Agricultural Trade Statistical Report, USDA/ERS; U.S. Export Sales, USDA/FAS.

Table 17—Volume and value of U.S. agricultural imports from Eastern Europe 1975-81

Commodity and country	1975	1976	1977	1978	1979	1980	1981
				1,000 tons			
Processed meat							
Bulgaria	0.2	—	—	—	—	—	—
Czechoslovakia	0.2	0.6	0.7	1.2	1.5	1.6	2.0
GDR	—	—	—	—	—	—	—
Hungary	4.6	6.7	7.0	8.2	8.2	7.8	7.0
Poland	38.3	38.1	34.1	39.0	43.3	42.5	26.0
Romania	3.6	5.5	6.0	7.4	8.8	6.9	6.0
Yugoslavia	12.1	13.8	15.7	19.8	14.8	8.8	10.0
Total	59.0	64.8	63.4	75.6	76.6	67.6	51.0
				Million dollars			
Processed meat							
Bulgaria	0.38	—	—	—	0.10	0.12	0.10
Czechoslovakia	0.44	1.96	2.11	3.79	4.42	4.50	4.72
GDR	0.04	0.11	0.10	0.20	0.06	0.06	0.03
Hungary	12.48	19.80	20.01	27.25	25.84	25.65	25.35
Poland	105.96	126.99	107.70	136.04	147.02	138.91	90.04
Romania	8.35	13.00	14.76	21.93	25.39	19.51	17.00
Yugoslavia	35.65	44.34	47.74	65.86	49.27	28.71	33.84
Total	163.31	206.20	192.42	255.07	252.10	217.47	171.08
Other products							
Bulgaria	3.69	10.69	23.41	24.79	23.14	17.32	21.39
Czechoslovakia	1.43	2.00	3.32	2.36	3.31	5.94	7.37
GDR	0.53	0.79	1.59	2.65	2.19	2.77	0.85
Hungary	1.20	2.77	3.47	5.03	9.93	4.93	8.33
Poland	12.55	17.23	17.67	18.53	16.94	16.83	19.08
Romania	3.80	3.08	5.78	9.67	8.20	10.96	10.95
Yugoslavia	26.79	32.70	37.95	47.55	37.17	34.92	37.84
Total	50.00	69.26	93.20	110.56	100.88	93.67	105.81
Total							
Bulgaria	4.08	10.69	23.41	24.79	23.24	17.44	21.49
Czechoslovakia	1.88	3.96	5.43	6.14	7.73	10.44	12.09
GDR	0.57	0.90	1.69	2.85	2.25	2.82	0.88
Hungary	13.67	22.57	23.48	32.28	35.76	30.59	33.68
Poland	18.52	144.22	125.38	154.57	163.97	155.74	109.12
Romania	12.15	16.08	20.54	31.60	33.59	30.47	27.95
Yugoslavia	62.44	77.04	85.69	113.40	86.44	63.63	71.68
Total	213.30	275.46	285.62	365.64	352.98	311.14	276.89

— = Amount less than 1,000 tons or $1,000.

Source: U.S. Department of Commerce, Bureau of Census.

Eastern Europe

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