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Agricultural Performance in Eastern Europe, 1988

Nancy J. Cochrane
Miles J. Lambert

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AGRICULTURAL PERFORMANCE IN EASTERN EUROPE, 1988. By Nancy J. Cochrane and Miles J. Lambert, Agriculture and Trade Analysis Division, Economic Research Service, U.S. Department of Agriculture. Staff Report No. AGES 89-38.

Abstract

Farm output in Eastern Europe was nearly stagnant in 1988 and held down national income growth. Agricultural trade balances improved in most of the countries, as feed imports leveled off, livestock product exports rose, and domestic consumption declined. Unusually high rates of inflation were registered in the countries that are reforming their economies. The sharply increased prices of basic commodities, particularly food, led to considerable social unrest, which has had political consequences.)

Keywords: Eastern Europe, agricultural production, agricultural trade, agricultural policy, economic conditions, reforms

Acknowledgments

Roger L. Spindler assisted in updating the tables and preparing them for publication.

1301 New York Avenue, NW.
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August 1989

Explanatory Notes

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

Council for Mutual Economic Assistance (CMEA): Bulgaria, Cuba, Czechoslovakia, the German Democratic Republic (GDR), Hungary, Mongolia, Poland, Romania, the Soviet Union, and Vietnam. Yugoslavia has observer status.

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

Metric units are used throughout:

One metric ton = 2,204.6 pounds

One kilogram = 2.2046 pounds

One hectare = 2.471 acres

Cattlehides: one piece = 22 kilograms

Milk: one liter = 1.031 kilograms

Statistical data in this report are taken from the yearbooks of the respective countries, CMEA yearbooks, Annual Trade Yearbooks of the Food and Agriculture Organization of the United Nations, and 1988 plan fulfillment reports as reported in the country press. Other sources are noted as appropriate. Data on Albania are so scarce that statistical coverage is not attempted here.

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Eastern Europe



Boundary representation is not necessarily authoritative.

Agricultural Performance in Eastern Europe, 1988

Nancy J. Cochrane
Miles J. Lambert

Introduction

Eastern Europe is in a period of flux, with several countries proceeding along individual paths. In 1988, Poland and Hungary made great strides toward political and economic reform. Poland has just held its first free election in its postwar history, in which opposition candidates won a resounding victory. Hungary is planning to hold a similarly free election. Hungary and Poland have also taken further steps to liberalize prices, expand the role of the private sector in the economy, abolish State monopolies, and encourage true competition among enterprises. They are also challenging traditional intra-Council for Mutual Economic Assistance (CMEA) trade practices and moving toward currency convertibility. Yugoslavia has announced similar reforms, but, owing to internal political strife, is having difficulty implementing them. Bulgaria and Czechoslovakia are taking hesitant steps toward economic restructuring. The German Democratic Republic (GDR) and Romania continue to resist all pressures for either economic or political reform. The divergence in goals among the East European countries promises an alteration in the patterns of agricultural production and trade in the region in coming years. This report reviews recent developments in the region and updates tables formerly appearing in the Eastern Europe Situation and Outlook Report, now discontinued.

General Economic Situation

National income growth slowed everywhere in the region in 1988, except in Bulgaria and Poland, and fell 2 percent in Yugoslavia. A gain in overall industrial output was registered in all of the countries except Yugoslavia and Hungary, but, in most cases, was counteracted by lower agricultural growth. Only Hungary registered a significant increase in farm output, while declines occurred in Yugoslavia, Bulgaria, and the GDR. The rate of inflation in 1988 reached nearly 18 percent in Hungary, 61 percent in Poland, and over 200 percent in Yugoslavia, reflecting the liberalization of prices underway in those countries. Fears of a loss in purchasing power fueled worker strikes and social discontent in all three countries.

Real wages in Hungary decreased by 5.6 percent in 1988, while retail trade turnover declined by 6.5 percent compared with 1987.

Export demand was a positive influence on the region's economic performance in 1988, and most of the countries saw continued improvement in their external trade balances. Most enjoyed a trade surplus, while Yugoslavia and Bulgaria reduced their deficits. Hard currency trade balances for the most part improved markedly: notably, Romania achieved a surplus of about \$4 billion, Poland \$1.1 billion, and Hungary \$538 million (compared with a \$371-million deficit in 1987). In contrast, Bulgaria's hard currency current account deficit may have risen to \$600-700 million in 1988, as a result of an apparent policy of expansion fueled by foreign borrowing, a practice long since abandoned elsewhere in the region. Bulgaria's imports from nonsocialist countries were 15 percent higher in 1988 than in 1987. At the same time, Bulgaria's nonsocialist exports fell 5 percent and its nonsocialist trade deficit more than doubled. The GDR's hard currency exports fell, apparently because consumption is being boosted at the expense of investment, which perhaps is meant to assuage the populace's frustration over lack of economic reform. All of the countries realized surpluses in ruble trade in 1988, as import values declined because of falling Soviet oil prices and a dramatic improvement in terms of trade with the Soviet Union. Ruble surpluses reached R1,150 million in Poland and R592 million in the GDR.

The region as a whole achieved a slight reduction in gross hard currency debt from 1987, but the level for 1988 remained above that of 1986 (see table 2). The decline was primarily the result of Romania's having reduced its gross debt by \$3 billion by the end of 1988. Poland managed a slight debt reduction for the first time, but its repayment obligations will continue to burden the economy for some time to come. Although a rescheduling agreement was signed with the Paris Club of government creditors in 1988, Poland has not yet signed any of the bilateral agreements with the individual creditor nations that must be concluded in order for the rescheduling to become a reality.

While the economies of the reforming countries could benefit in the long run from measures increasing the role of market forces, the short-term economic outlook is clouded by rising rates of inflation. Even Czechoslovakia, as a result of price increases taking effect January 1, 1989, in conjunction with its very tentative reform program, expects a higher inflation rate than usual this year, 6 percent. The Hungarian Government is attempting to control inflation by keeping a tight lid on wages, but the Yugoslav and Polish governments have yielded to repeated strikes and granted large wage increases, and the Polish Government was forced to accept a wage indexation plan in its negotiations with the Solidarity union. Yugoslavia's difficulties are compounded by internal political strife.

On the external side, most of the countries, eager to expand hard currency earnings and worried about their growing ruble surpluses, are seeking to reduce exports to the Soviet Union, or else expand the share of exports to that country for hard currency. Total East European debt is likely to decline again in 1989. The Romanian Government announced in April that it had entirely paid off its debt, and promulgated legislation prohibiting foreign borrowing.

Economic and Agricultural Policy

In East European countries where the leadership has espoused economic reform, public opinion is demanding political 'pluralism' as the price of their cooperation, as well as the first line of defense against the risks of inflation, lower real income, and unemployment that are posed by the expanded operation of market forces. Pluralism would entail the relinquishing by the Communist Party of its monopoly on decisionmaking, and make way for practical, nonideological solutions to problems.

The public mood has been most vividly reflected in governmental changes that have taken place in Poland since late 1988. The Polish Government resigned in September amid worker strikes and widespread perception of inept handling of reform. In April of this year, the new government legalized the opposition Solidarity trade union, and in June held a free election in which the Communist Party suffered a resounding defeat. Radical change is unlikely in the near term; opposition leaders are reacting cautiously to their victory for fear of a Party backlash. However, in the longer term, a more open, pluralistic leadership could reinforce the transformation of Poland's economy which is already underway.

Other governments have undergone changes that are less dramatic, but which reflect similar trends. In Yugoslavia, officials at both the national and regional levels have been changing since October, in part because of pressure from soaring inflation, nearly incessant worker unrest, and demands for more economic reform. In November, a Western-oriented economist became Hungary's new head of government. And, in April, a cabinet shake-up got underway as a prelude to further democratization and the drafting of a new constitution that will formally establish a pluralistic polity. In line with these developments, an April poll of Czechs showed that while the preponderant number of respondents favor reform, they believe it should be carried out by a new leadership.

In spite of unsettled political situations, steps have continued to be taken toward economic reform. Among the highlights of 1988 was Yugoslavia's November adoption of a set of constitutional amendments improving conditions for a market economy. Enterprises will no longer have to reach internal consensus before acting in their interest, greater scope is given for private sector initiative, financial markets will operate, and banks will be independent. Also, a nascent stock and bond market was started in Hungary, paving the way for investment funds to be generated from the economy rather than from the State budget. A full-fledged stock market is expected to be in operation by the end of 1989. Early this year, Poland legalized private currency trading and expanded the role of hard currency auctions, thereby improving prospects for convertibility of the national currency, the zloty. A convertible zloty would bring Polish prices into line with world prices, a basic aim of reform.

In agriculture, reform progress is apparent mostly in price liberalization and private sector enhancement. The State monopoly on livestock purchasing was ended in Poland in late 1988, making way for private sector participation. In April 1989, the Polish Government freed agricultural producer prices in the wake of protests by the Rural

Solidarity union, and also guaranteed prices at 34 percent above the previous level. These measures may eventually stimulate output and generally upgrade quality in the predominant private sector. But for the time being, they are a threat to the urban standard of living, and therefore to restructuring as well, since reform in Poland cannot proceed further without worker support. Consequently, the inflationary effects are to be held off by greater consumer subsidies and stable retail prices until after June, when a newly elected Parliament will partially offset the impact with wage increases.

Hungarian farm prices, most of which are still below world levels and which enable large consumer subsidies for food, are being increased gradually. In 1989, they will rise by 12-13 percent. A particular goal of Hungarian policymakers is that world prices should guide a boost in the quality and competitiveness of high-value farm products prior to the unification of the crucial EC market in 1992. Also, higher retail prices for better quality consumer-ready farm products are expected to encourage the private sector to become more involved in small-scale food processing. A new law on agriculture due later this summer is expected to improve landholding possibilities for the private sector, and also provide for a market in land, thereby improving cost accounting and production efficiency. In a similar vein, one of Yugoslavia's constitutional amendments increased the maximum size of private farms from 10 to 30 hectares.

The Government of Czechoslovakia, which has been a reluctant supporter of reform, imposed tough self-financing requirements on the agricultural sector beginning on January 1, 1989. Farms now face a 50-percent levy on wages and profits, and a uniform profit rate of 4.5 percent relative to production assets. A stated goal is to put agriculture on the same footing as other sectors by reducing reliance on the State budget. But agricultural experts fear that until the same taxes are imposed on other sectors, farms will be taxed for the benefit of the rest of the economy. However, producer and wholesale prices have purportedly been revamped to compensate for the new taxes, and the government is expecting viable farms to take advantage of the new system through greater initiative in production, processing, and marketing. The role of central planning has been reduced through a cutback in the number of indicators assigned to farms, while prices now reflect greater quality differentiation. The assumption is that farms will be able to determine what is most profitable for them to produce. Farms in less advantageous locations can benefit from June 1988 legislation that permits the 'reprivatization' of land deemed unsuitable for large-scale production, which is the sort of land that tends to be a source of financial loss.

The leaderships of the GDR and Romania continue to resist any accommodation to the restructuring going on among their CMEA partners. Indeed, in 1988, Romania extended socialized agriculture into hilly and mountainous areas, which are the areas where private farming is concentrated. Under international pressure for cultural preservation, Romania has apparently slowed down implementation of its controversial 'systematization' program, which would eliminate thousands of villages and increase the amount of land under socialized cultivation by as much as 350,000 hectares. But, the goal has remained the same. Albania, which is not a CMEA member, has been making overtures to reform in its agricultural sector since late 1988, in spite of its rhetoric denouncing

Soviet perestroika. Reduced central direction, a greater role for farms in food processing and marketing, and partial liberalization of prices are the main features. But private farming continues to be confined to the narrowest possible role in agricultural production and food supply.

Agricultural Production

Overall, there was very little growth in farm output (see table 1). Gains in Hungary and Czechoslovakia likely were offset by negative growth in Yugoslavia, Bulgaria, and the GDR. Romania's output may have improved over 1987 results, but not nearly by so much as suspect official statements suggest. Any regional increase is probably attributable mostly to a slightly better grain crop. This rise, however, was concentrated in the south; total grain production declined by 13 percent in the GDR, making it the worst grain crop since 1981, and by 6 percent in Poland. The increase in the south occurred almost entirely in winter grains, especially wheat. Record crops in Romania and Yugoslavia, respectively 50 and 20 percent above the 1987 level, and a 20-percent larger crop in Hungary led to a 14-percent increase in regional wheat production. On the other hand, corn results were far below average in all of the southern countries because of dry seasonal conditions and inadequate irrigation. Indeed, the effect of Yugoslavia's wheat gain on its total grain output was negated by a 13-percent decline in corn, down from the already poor performance of a year earlier. Similarly, Hungarian corn production declined by 14 percent from 1987. Overall, regional production was down 9 percent. The same conditions that afflicted corn also reduced sunflower and soybean yields in the south, and consequently regional oilseed production as a whole.

As in 1987, livestock production for the most part was stagnant in Eastern Europe in 1988. Most producers have faced a discouraging combination of rising production costs and depressed domestic demand owing to rising retail prices. The general response has been to decrease cattle numbers and increase poultry numbers. Poultry meat has been more saleable on the domestic and world markets, and adjustments in poultry production, when necessary, can be made more rapidly. The Polish hog sector has been in a rare state of buoyancy during the past 2 years, with farmers encouraged to increase hog numbers because of attractive hog prices (attributable to strong exports of canned hams and shoulders) and a relatively favorable feed situation. Meat production in Romania is thought to have declined again in 1988, because of decreased feed supplies, deterioration in feed compounding, and lower slaughterweights.

All of the countries where price liberalization is in progress are liable to be marked by extreme hesitancy in livestock production during 1989, as producers wait and gauge consumer reaction. Poland's rate of increase in hog numbers had already tapered off toward the end of 1988, and the effect of the prospective freeing of retail meat prices later in the year may be a decrease in demand for pork and heavier slaughtering. It remains to be seen whether the competition in livestock purchasing, which the Polish Government has now permitted, will raise profitability sufficiently to offset a tighter feed situation and spur private producers.

In Yugoslavia, the decontrol of meat prices in November 1988, in the midst of soaring inflation and reduced corn output, has brought on a particularly complex situation. Private farmers have cut herds of most animals to the minimum because of rising costs (sheep, which can be grazed cheaply, are the exception and increasing in numbers), while producers in the socialized sector are unable to obtain sufficient corn from the private sector for feed. Although Yugoslav exports of live animals, beef, and pork showed an upward trend in 1988 that probably will continue in 1989, producers in the socialized sector, in view of the other circumstances they face, are not counting on domestic demand and are hesitating to build herds. In nonreformist Romania, animal husbandry is likely to suffer in 1989, owing to further encroachment on the private sector.

Agricultural Trade

Reduced domestic consumption resulted in improved agricultural trade balances in most of the countries in 1988. Polish farm imports, which rose 7 percent in 1987, changed little in 1988, as grain and oilseed meal imports leveled off. Although net grain trade for the region probably changed little from 1987, higher world prices and continuing hard currency shortages tended to hold down imports in spite of production shortfalls in 1987. Romania, in line with its policy of eliminating foreign debt by depriving domestic consumers, reduced its grain imports to about zero. The GDR increased its grain imports somewhat after 1987's feed production shortfall, but mostly relied on substituting nongrain forages. Yugoslavia was forced by drought and high free-market corn prices to import corn in 1988, after exporting over 1 million tons in 1987 and 1.7 million tons in 1986. But, the effect on grain trade was largely offset as that country shifted from being an importer to an exporter of wheat. Yugoslav wheat exports may reach 750,000 tons in 1988/89. Bulgaria appears to have doubled its grain imports in 1988 as a result of its drought-reduced harvest of 1987 and intentions to expand livestock and livestock product exports.

While feed imports were leveling off, the region's export volume of livestock products rose sharply in 1987 and prices were up as well. Although Yugoslavia and Poland imported larger amounts of low-grade meat than in 1987, so as to restrain domestic meat prices in line with official policy, both countries greatly expanded their hard currency exports of live animals and livestock products in 1988. Yugoslav meat and livestock exports, 80 percent of which went to hard currency markets, reached a record \$434 million, 4 percent over 1987. Poland's exports of live cattle, which go mostly to the European Community, increased from 451,000 head in 1987 to 561,000 in 1988. In contrast, Hungarian livestock exports were down for the second year in a row, while poultry exports increased just 5 percent, after a 16-percent rise in 1987.

U.S. Agricultural Trade With Eastern Europe

U.S. farm sales to Eastern Europe in 1988 were nearly a fourth greater than year-earlier sales and reached \$540 million. It was the second consecutive year in which an increase was registered. Poland remained the largest single market for U.S. farm goods in the region, with sales

rising by nearly a third to \$135 million. Sustained export enhancement program (EEP) wheat sales, at higher prices, figured prominently in the increase. However, exports to Bulgaria more than doubled and led the regional increase in terms of absolute dollar value. Sales there approached \$100 million and comprised nearly 18 percent of total U.S. exports to the region, compared with just 10 percent a year earlier. In addition to its EEP purchases of wheat, Bulgaria, which seeks to sustain hard currency exports of livestock products, increased purchases of corn, soybean meal, and soybeans in the wake of drought in 1987. The GDR also doubled its agricultural imports from the United States, to around \$76 million, increasing feed grain purchases after it was clear that its 1988 grain results would be disappointing.

Yugoslav imports of U.S. farm goods, which approached \$110 million in value, remained near the 1987 level, as corn imports fell by a third. The depressed corn imports resulted from hesitancy in the livestock sector. EEP wheat initiatives went unused because of good wheat crops in 1987 and 1988. Romania, in spite of being the country hardest hit by drought, scaled back imports of feedstuffs, in line with its policy of minimizing imports and eliminating foreign debt. However, the value of total U.S. farm sales in 1988 inched above the \$100-million level of 1987 because of increased unit prices and larger purchases of cattle hides for manufacturing into shoe and apparel exports.

Export sales data as of May 1988 strongly suggest that U.S. farm sales to Eastern Europe in 1989 will decline significantly from the 1988 level. Poland is sharply curtailing imports of U.S. wheat, and cannot be expected to buy more than the 500,000 tons for which an EEP initiative is outstanding. U.S. corn sales to the region, on the rise because of increased purchases by Bulgaria and the GDR, will partially compensate. U.S. soybean meal sales to Yugoslavia are substantially ahead of last year's, while soybean sales from the United States are proceeding at the same pace as in 1988. This is unlikely, however, to make up for Romania's halting of U.S. soybean imports to minimize hard currency expenditures. Generally, the effect of the volume declines on U.S. sales value to Eastern Europe will be softened by significantly higher world prices.

Trade Policy

In tandem with economic reform, trade policies in Eastern Europe are changing, generally in the direction of trade liberalization and new patterns of trade. Closer ties with the West are being sought, as evident in the mutual recognition agreement signed between CMEA and the European Community on June 25, 1988. The agreement with the EC paves the way for bilateral trade agreements between individual CMEA members and the EC. Hungary was the first country to sign an accord, which took effect December 1, 1988. The accord calls for a three-stage lifting of all EC quotas on Hungarian exports and, in turn, requires increased EC access to the Hungarian market. Other countries are negotiating similar accords with the EC, and in Yugoslavia there is even talk of applying for membership in the EC, or else in the European Free Trade Association (EFTA), since that could also result in expanded access to the EC market.

Negotiations with the EC assume added urgency now that the unification of the EC market is scheduled to take place in 1992. Current EC quotas have adversely affected the region's livestock exports, which are a significant source of hard currency. The East Europeans are concerned that their products could be totally excluded from EC markets after 1992. That threat could become less serious if the current GATT negotiations result in a reduction of EC subsidies to its producers, making East European exports more competitive on the EC market. However, EC demands for increased access to East European markets will mean greater competition for the region's own high-cost, heavily subsidized producers. While in the long term such a development will force domestic producers to become more cost conscious and profit oriented--which is central to restructuring--in the short term it will mean hardship for the less efficient producers.

At the same time that efforts are being made to expand interaction with Western economies, intra-CMEA ties appear to be weakening. Traditionally, over half the trade of the East European countries has been with other CMEA members, and most of all with the Soviet Union. The share of intra-CMEA trade is as high as 80 percent in Bulgaria and Czechoslovakia. Most of the trade takes place under 'bilateral clearing' arrangements, or barter, negotiated in long-term contracts. Although trade is reported in 'transferable rubles,' no currency is actually exchanged, since all CMEA countries are mutually inconvertible. (In recent years, a certain amount of trade with the Soviet Union has been payable in hard currency.) Since the terms of trade between the East European countries and the Soviet Union depend heavily on the price of Soviet oil, which is set according to a moving average of world oil prices, trade balances can become skewed. Thus, while Soviet oil prices were higher than world prices, as was the case until recently, the East Europeans had to deliver more machinery and raw materials, including farm products, in exchange for less oil. Conversely, now that Soviet oil prices have fallen, the East Europeans have built up considerable ruble account surpluses and several of the countries are trying to reduce exports to the Soviet Union.

Officials in both Poland and Hungary have openly criticized the rigid structure of intra-CMEA trade as an outdated impediment to both the exchange of goods and economic reform. The two countries have called for at least partial convertibility of the transferable ruble, or failing that, mutual convertibility of the individual CMEA currencies, and more flexibility in forming enterprise-to-enterprise contacts without the interference of high-ranking CMEA officials. Hungary has gone even further, calling for an increase in hard currency trade among CMEA partners, and is pushing to have its ruble surpluses paid in dollars. Bulgaria has made more tentative statements of that nature, while the other East European members, especially the GDR, prefer to keep CMEA trade structures just as they are. Substantial progress toward a more rational CMEA integration is unlikely in the near future. What is most likely to happen is that the more market-oriented economies, such as Hungary and Poland, will simply expand their ties with the West, at the expense of intra-CMEA ties.

A key to closer trade association with the West is greater freedom of action by individual enterprises in Eastern Europe. The number of production enterprises directly engaged in foreign trade has been

increasing in Poland and Hungary, and both countries plan to allow private enterprises to participate as well. Since most agricultural commodities are regarded as basic and strategic, such reforms have been slower to penetrate agricultural trade, which remains mostly under State control. However, some direct participation in foreign markets by farm enterprises exporting high-value products such as fruit, vegetables, and wine has been allowed, particularly in Hungary, and in the future a variety of other high-value categories, including processed livestock products, might also be affected. Increased possibilities of acquiring foreign exchange--including purchases at currency auctions--together with increased market access for Western countries as a result of trade liberalization, could gradually lead firms to import food products not produced domestically, but for which there might be a potential market.

Table 1. Major economic indicators, Eastern Europe, 1986-88 1/

Indicator and year	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia
Percent							
National income:							
1986 plan	4.0	3.5	4.4	2.3-2.7	3.2	10.0-12.0	3.0
1986 actual	5.5	3.4	4.3	.5	5.0	7.3	3.6
1987 plan	4.6	3.0	4.5	2.0	3.0-3.5	8.0-9.0	4.0
1987 actual	5.1	2.0	4.0	2.0-2.5	3.4	3.6	.5
1988 plan	6.1	3.5	4.1	1.0	3.2-3.8	9.0-10.0	NA
1988 actual	6.2	3.0	2.7	.5	4.5-5.0	3.2	-2.0
Agricultural production:							
1986 plan	7.4	2.5	.3	3.0-3.5	1.1-2.7	6.0-7.0	8.0
1986 actual	10.0	.5	4.3	1.0	7.5	12.8	7.0
1987 plan	3.9-4.5	NA	.4	4.5-5.5	2.2-2.5	6.0-7.0	3.0
1987 actual	-4.0	.9	NA	-.5-1.5	.9	2.3	-7.5
1988 plan	5.5	1.1	NA	5.0-5.5	2.6	5.0-5.5	4.0
1988 actual	-.7	2.2	5.0	4.5	.6	2.9	-4.0
Industrial production:							
1986 plan	4.5	2.6	4.3	2.0-2.5	3.2-3.6	7.0	3.0
1986 actual	4.3	3.1	4.3	1.8	4.4	7.7	4.2
1987 plan	4.6-5.4	2.8-3.4	4.6	2.0-2.5	3.4	6.0-7.0	4.5
1987 actual	5.6	2.3	3.7	3.7	3.7	4.5	.7
1988 plan	5.0	3.0	NA	1.0	3.4-3.7	7.0-8.0	NA
1988 actual	5.1	2.0	3.7	-0.4	5.4	3.6	-.7
Capital investment:							
1986 plan	12.0	.3	1.7	3.5-5.1	4.2	6.0-8.0	2.0
1986 actual	4.0	2.8	5.0	5.1	3.7	1.2	3.5
1987 plan	6.5-7.9	NA	-2.3	1.0	3.2-4.3	6.0-7.0	3.8
1987 actual	3.0	3.7	6.0	6.0	6.0	.9	-4.0
1988 plan	* 4.1	-2.4	NA	* 0	3.6	3.0-3.5	NA
1988 actual	NA	4.5	5.0	2.0	7.0	-1.3	NA
Per capita income:							
1986 plan	3.0	NA	4.0	1.0-1.5	0	NA	NA
1986 actual	2.8	2.9	4.3	.7	0	NA	NA
1987 plan	NA	NA	4.0	1.0-1.5	NA	NA	NA
1987 actual	3.9	NA	4.6	* 0	1.0	NA	NA
1988 plan	3.3	NA	NA	-2.5-3.0	NA	NA	NA
1988 actual	3.4	NA	NA	-2.0	NA	NA	NA

* = Estimate. NA = Not available.

1/ Reports given by government sources purport to show growth in real terms. Romanian and Bulgarian figures are questionable.

Sources: Plan fulfillment reports of respective countries; PlanEcon Report (Washington, DC) estimates for 1988 actual.

Table 2. Gross and net hard currency debt, Eastern Europe, 1971
and 1981-88

Country		1971	1981	1982	1983	1984	1985	1986	1987	1988 2/
Billion U.S. dollars 1/										
Bulgaria	G	.7	3.1	2.8	2.6	2.2	3.6	4.9	6.1	7.6
	N	NA	2.2	1.7	1.4	.8	1.5	3.6	5.1	NA
Czechoslovakia	G	.5	4.5	4.1	4.0	3.6	3.8	4.5	5.8	6.5
	N	NA	3.4	3.3	3.0	2.6	2.8	3.3	4.2	NA
GDR	G	1.4	14.9	13.0	13.0	12.3	14.0	17.0	20.4	20.0
	N	NA	12.3	10.6	9.3	7.4	7.1	9.6	11.4	NA
Hungary	G	1.1	8.7	7.7	8.3	8.8	11.8	15.1	17.7	18.0
	N	NA	7.0	6.6	6.8	6.7	8.6	12.0	15.5	14.5
Poland	G	1.1	25.4	24.8	26.4	26.8	29.3	33.5	39.2	37.9
	N	NA	24.7	23.8	25.1	25.3	28.6	31.8	36.2	NA
Romania	G	1.2	10.2	9.7	8.8	7.1	6.6	6.0	4.9	1.9
	N	NA	9.8	9.3	8.2	6.4	6.4	5.4	4.3	NA
Yugoslavia	G	3.2	19.0	18.5	19.0	18.8	19.2	19.4	20.5	19.9
	N	NA	16.3	17.7	18.1	17.7	18.1	17.9	19.8	NA
Total	G	8.0	85.8	80.6	82.1	79.6	88.3	100.4	114.6	111.8
	N	NA	75.7	73.0	71.9	66.1	73.1	83.6	96.5	NA

G = gross, N = net, NA = Not available.

1/ At end of year.

2/ Preliminary.

Sources: Directorate of Intelligence, CIA, Handbook of Economics, 1986; I. Zloch, Hard Currency Debt and the Growth of the Eastern European Economies, and estimates of various U.S. Government agencies.

Table 3. Production of grains, Eastern Europe,
1976-80 and 1981-85 averages, and 1985-88 annual 1/

Commodity and year	Bulgaria	Czecho- slovakia	GDR	Hungary 2/	Poland	Romania 3/	Yugo- slavia	Total Eastern Europe
1,000 tons								
Wheat:								
1976-80	3,513	4,949	2,998	5,186	5,089	6,104	5,306	33,140
1981-85	4,173	5,389	3,414	6,066	5,263	6,038	5,089	35,433
1985	3,067	6,023	3,936	6,578	6,461	5,662	4,839	36,566
1986	4,327	5,305	4,195	5,740	7,502	6,700	4,776	38,545
1987	4,149	6,000	4,040	5,793	7,942	6,000	5,272	39,196
1988	4,500	6,553	3,690	6,962	7,600	9,000	6,301	44,606
Rye:								
1976-80	20	578	1,748	135	6,474	* 50	87	* 9,092
1981-85	37	642	2,205	146	8,089	* 47	80	* 11,245
1985	49	620	2,505	166	7,600	* 50	77	* 11,067
1986	52	547	2,406	170	7,074	* 60	74	* 10,385
1987	49	600	2,283	186	6,816	* 50	69	* 10,053
1988	50	500	1,780	245	7,200	60	76	9,912
Barley:								
1976-80	1,532	3,386	3,715	772	3,560	1,981	664	15,610
1981-85	1,193	3,507	3,983	1,010	3,618	2,423	700	16,435
1985	800	3,538	4,366	1,046	4,086	1,850	704	16,390
1986	1,144	3,530	4,293	857	4,412	2,000	703	16,939
1987	1,091	3,500	4,198	794	4,335	1,800	504	16,222
1988	1,200	3,407	3,810	1,168	3,800	2,200	616	16,186
Oats:								
1976-80	70	423	525	90	2,434	56	298	3,896
1981-85	42	471	678	141	2,600	86	267	4,285
1985	41	474	746	133	2,682	102	252	4,430
1986	42	423	666	126	2,486	150	260	4,153
1987	41	500	637	99	2,428	100	232	4,037
1988	35	400	515	134	2,230	160	253	3,726
Corn:								
1976-80	2,652	724	2	6,374	165	11,097	9,192	30,206
1981-85	2,656	885	1	6,977	65	13,001	10,568	34,153
1985	1,350	1,114	1	6,818	69	15,238	9,896	34,486
1986	2,848	992	2	7,261	113	15,000	12,526	38,742
1987	1,858	1,000	35	7,234	146	10,500	8,863	29,636
1988	2,000	956	55	6,000	200	10,000	7,697	26,908
Rice (rough):								
1976-80	62	--	--	31	--	48	34	175
1981-85	68	--	--	41	--	85	39	233
1985	55	--	--	38	--	138	36	267
1986	62	--	--	46	--	177	48	325
1987	53	--	--	47	--	154	49	279
1988	50	--	--	40	--	160	38	290
Other grains: 4/								
1976-80	--	--	49	45	1,773	47	7	1,921
1981-85	--	--	107	40	2,589	19	4	2,760
1985	--	--	86	30	2,844	8	4	2,972
1986	--	--	102	44	3,449	20	6	3,621
1987	--	--	64	66	4,393	20	6	4,549
1988	--	--	--	90	3,400	30	6	3,526
Total grains:								
1976-80	7,849	10,043	9,037	12,633	19,495	* 19,383	15,588	* 94,039
1981-85	8,169	10,893	10,393	14,423	22,224	* 21,701	16,749	* 104,551
1985	5,362	11,769	11,653	14,809	23,742	* 23,048	15,808	* 104,953
1986	8,475	10,797	11,664	14,246	25,036	* 24,107	18,385	* 112,710
1987	7,241	11,600	11,257	14,219	26,060	* 18,624	14,971	* 103,972
1988	7,835	11,816	9,850	14,639	24,430	21,610	14,987	105,154

-- = Data not available, or amount less than 1,000 tons. * = Estimate

1/ 1988 data are preliminary.

2/ Includes grain production from private plots and gardens which averaged 83,000 tons in 1976-80 and 219,000 tons in 1981-85.

3/ The accuracy of Romania's grain production data has been increasingly questioned in the 1980's. Foreign Agricultural Service estimates for 1987 and 1988 have been used in preference to Romanian reports.

4/ Includes buckwheat, millet, spelt, mixed grains, triticale, and sorghum.

Sources: See Explanatory Notes.

Table 4. Area of grains, Eastern Europe,
1976-80 and 1981-85 averages, and 1985-88 annual 1/

Commodity and year	Bulgaria	Czecho- slovakia	GDR	Hungary 2/	Poland	Romania	Yugo- slavia	Total Eastern Europe
1,000 hectares								
Wheat:								
1976-80	938	1,229	720	1,274	1,735	2,256	1,616	9,768
1981-85	1,083	1,157	702	1,307	1,600	2,236	1,472	9,557
1985	1,067	1,221	744	1,358	1,885	2,356	1,348	9,979
1986	1,127	1,213	749	1,318	2,025	2,530	1,346	10,308
1987	1,085	1,150	748	1,301	2,132	2,400	1,455	10,271
1988	1,100	1,290	750	1,281	2,179	2,400	1,506	10,506
Rye:								
1976-80	15	186	645	81	2,997	* 40	64	* 4,028
1981-85	27	186	686	76	3,270	* 40	50	* 4,335
1985	32	182	690	85	3,083	* 40	44	* 4,156
1986	30	156	680	89	2,760	* 40	42	* 3,797
1987	29	140	655	94	2,647	* 42	41	* 3,648
1988	30	135	607	97	2,874	40	40	3,823
Barley:								
1976-80	485	919	981	237	1,288	662	298	4,869
1981-85	326	875	917	275	1,185	791	282	4,650
1985	260	799	882	279	1,242	680	264	4,406
1986	318	821	895	253	1,335	575	276	4,473
1987	295	790	891	205	1,286	560	213	4,240
1988	300	820	879	264	1,250	600	222	4,335
Oats:								
1976-80	49	162	157	36	1,067	52	215	1,738
1981-85	35	150	178	48	1,043	72	168	1,695
1985	29	126	178	44	995	72	151	1,595
1986	28	116	163	41	924	70	152	1,494
1987	28	100	149	40	856	70	140	1,383
1988	35	90	156	42	850	75	135	1,383
Corn:								
1976-80	657	202	--	1,297	41	3,295	2,256	7,748
1981-85	551	205	--	1,122	16	3,041	2,308	7,243
1985	435	224	--	1,053	16	3,090	2,400	7,218
1986	574	218	--	1,188	22	3,200	2,369	7,571
1987	497	250	7	1,144	32	3,100	2,218	7,248
1988	525	215	11	1,090	30	3,100	2,269	7,240
Rice:								
1976-80	17	--	--	23	--	21	8	69
1981-85	15	--	--	13	--	28	9	65
1985	13	--	--	11	--	38	9	71
1986	13	--	--	12	--	45	9	79
1987	14	--	--	12	--	47	10	83
1988	15	--	--	12	--	48	9	84
Other grains: 3/								
1976-80	--	--	20	* 10	740	28	6	* 804
1981-85	--	--	31	* 16	980	15	3	* 1,046
1985	--	--	25	* 12	984	9	3	* 1,033
1986	--	--	27	* 14	1,172	10	3	* 1,226
1987	--	--	19	* 14	1,430	10	4	* 1,477
1988	--	--	--	* 21	1,184	12	4	* 1,221
Total grains:								
1976-80	2,161	2,698	2,524	* 2,958	7,868	6,354	4,463	* 29,026
1981-85	2,038	2,573	2,515	* 2,856	8,094	6,223	4,292	* 28,591
1985	1,836	2,552	2,519	* 2,842	8,205	6,285	4,219	* 28,458
1986	2,090	2,524	2,514	* 2,915	8,238	6,470	4,197	* 28,948
1987	1,948	2,430	2,469	* 2,810	8,383	6,229	4,081	* 28,350
1988	2,005	2,550	2,403	* 2,807	8,367	6,275	4,179	* 28,586

-- = Data not available, or amount less than 1,000 hectares. * = Estimate.

1/ 1988 data are preliminary. 2/ Area under socialist cultivation only.

3/ Includes buckwheat, millet, spelt, mixed grains, triticale, and sorghum.

Sources: See Explanatory Notes.

Table 5. Grain imports, Eastern Europe, 1976-80
and 1981-85 averages, and 1984-87 annual

Commodity and country	1976-80	1981-85	1984	1985	1986	1987
1,000 tons						
Wheat:						
Bulgaria	124	165	54	652	235	* 270
Czechoslovakia	519	202	206	105	93	69
GDR	953	1,189	1,657	1,219	227	546
Hungary	8	26	--	28	--	52
Poland	2,729	2,634	2,047	1,703	1,662	2,343
Romania	* 652	* 455	* 100	* 300	* 20	* 20
Yugoslavia	630	319	2	58	512	517
Total	* 5,614	* 4,990	* 4,066	* 4,065	* 2,749	* 3,817
Barley:						
Bulgaria	73	154	1	766	695	2
Czechoslovakia	126	14	50	--	--	--
GDR	782	890	1,444	796	1,230	512
Hungary	130	9	1	--	102	373
Poland	1,410	368	79	383	192	316
Romania	* 84	* 160	* 350	* 150	* 741	* 102
Yugoslavia	22	11	--	16	11	3
Total	* 2,626	* 1,606	* 1,924	* 2,111	* 2,971	* 1,308
Corn:						
Bulgaria	367	379	44	328	546	584
Czechoslovakia	942	566	368	221	176	164
GDR	1,775	987	606	493	608	431
Hungary	116	23	8	85	23	102
Poland	1,985	795	437	138	140	229
Romania	* 620	* 432	* 20	* 121	* 836	--
Yugoslavia	240	77	--	--	4	198
Total	* 6,045	* 3,258	* 1,483	* 1,386	* 2,333	1,708
Other grains: 1/						
Bulgaria	5	6	2	22	1	1
Czechoslovakia	14	* 26	--	* 64	* 98	107
GDR	341	* 191	* 446	* 53	* 301	49
Hungary	14	5	--	1	--	121
Poland	675	88	4	--	--	126
Romania	303	18	--	--	--	--
Yugoslavia	4	12	2	39	9	9
Total	* 1,357	* 346	* 454	* 179	* 409	* 413
Rice:						
Bulgaria	7	10	5	22	32	35
Czechoslovakia	78	69	73	74	61	* 49
GDR	44	34	43	29	37	27
Hungary	23	35	64	18	14	* 25
Poland	87	84	104	65	62	* 90
Romania	* 56	* 55	* 44	* 50	* 20	* 75
Yugoslavia	17	23	--	21	22	5
Total	* 313	* 311	* 333	* 279	* 248	* 306
Total grains:						
Bulgaria	576	715	106	1,790	1,509	892
Czechoslovakia	1,679	* 877	* 697	* 464	* 428	* 389
GDR	3,894	* 3,291	* 4,196	* 2,590	* 2,403	* 1,565
Hungary	291	97	72	132	139	673
Poland	6,887	3,969	2,671	2,289	2,056	3,104
Romania	* 1,693	* 1,120	* 514	* 621	* 1,617	* 197
Yugoslavia	914	443	4	134	558	732
Total	* 15,955	* 10,512	* 8,261	* 8,020	* 8,710	* 7,552

-- = No information reported, or amount less than 1,000 tons. * = Estimate.
1/ Rye, oats, bran, and grain sorghum.

Sources: See Explanatory Notes.

Table 6. Grain exports, Eastern Europe, 1976-80
and 1981-85 averages, and 1984-87 annual

Commodity and country	1976-80	1981-85	1984	1985	1986	1987
1,000 tons						
Wheat:						
Bulgaria	326	570	314	677	300	272
Czechoslovakia	4	* 146	--	* 170	* 31	4
GDR	59	* 85	* 87	* 95	* 95	99
Hungary	682	1,363	1,260	2,001	1,669	1,281
Poland	--	--	--	--	--	--
Romania	* 971	* 211	* 80	* 227	* 100	* 50
Yugoslavia	18	95	258	--	--	2
Total	* 2,061	* 2,470	* 1,999	* 3,170	* 2,195	* 1,708
Barley:						
Bulgaria	18	--	--	--	--	--
Czechoslovakia	59	* 32	* 100	--	--	--
GDR	147	* 140	* 125	* 128	* 164	185
Hungary	8	18	2	17	2	1
Poland	16	--	--	--	--	13
Romania	--	7	--	--	--	--
Yugoslavia	4	7	8	4	3	1
Total	252	* 203	* 235	* 149	* 169	200
Corn:						
Bulgaria	84	19	--	--	--	--
Czechoslovakia	--	3	--	--	--	--
GDR	--	--	--	--	--	--
Hungary	330	250	198	228	478	188
Poland	--	--	--	--	--	--
Romania	* 602	* 671	* 262	* 615	* 270	* 300
Yugoslavia	249	668	685	900	1,798	1,166
Total	* 1,265	* 1,611	* 1,145	* 1,743	* 2,546	* 1,654
Other grains: 1/						
Bulgaria	--	--	--	--	--	--
Czechoslovakia	4	* 20	--	* 37	* 56	* 42
GDR	170	* 125	* 100	* 135	* 162	* 122
Hungary	15	15	19	18	25	32
Poland	18	182	397	416	53	47
Romania	* 4	--	--	--	--	--
Yugoslavia	6	3	11	2	3	2
Total	* 217	* 345	* 527	* 608	* 299	245
Rice:						
Bulgaria	1	7	8	11	13	2
Czechoslovakia	--	--	--	--	--	--
GDR	--	--	--	--	--	--
Hungary	--	--	--	--	--	--
Poland	--	--	--	--	--	--
Romania	--	5	4	3	* 3	1
Yugoslavia	--	--	--	--	--	--
Total	1	11	12	* 14	* 16	* 3
Total grains:						
Bulgaria	428	588	322	688	313	274
Czechoslovakia	67	* 201	* 100	* 207	* 87	* 46
GDR	375	* 349	* 312	* 358	* 421	* 406
Hungary	1,036	1,645	1,479	2,264	2,174	1,502
Poland	34	182	397	416	53	60
Romania	* 1,577	* 889	* 346	* 845	* 373	* 351
Yugoslavia	277	774	962	906	1,804	1,171
Total	* 3,795	* 4,640	* 3,918	* 5,684	* 5,225	* 3,810

-- = No information reported, or amount less than 1,000 tons. * = Estimate.
1/ Rye, oats, bran, and grain sorghum.

Sources: See Explanatory Notes. Data for GDR are trading partners' data.

Table 7. Production of selected crops, Eastern Europe,
1976-80 and 1981-85 averages, and 1985-88 annual 1/

Commodity and year	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe
1,000 tons								
Potatoes:								
1976-80	370	3,678	9,873	1,567	42,742	4,431	2,705	65,366
1981-85	431	3,591	10,116	1,446	36,594	5,880	2,572	60,630
1985	439	3,450	12,350	1,378	36,546	7,294	2,413	63,870
1986	491	3,512	9,997	1,264	39,037	9,106	2,652	66,059
1987	316	3,072	12,228	1,077	36,252	8,500	2,210	63,655
1988	440	3,582	11,500	1,000	34,700	7,800	1,935	60,957
Sugarbeets:								
1976-80	1,827	7,132	6,996	3,979	14,149	6,135	5,258	45,476
1981-85	1,084	7,296	7,233	4,461	15,606	6,074	6,124	47,878
1985	824	7,746	7,397	4,073	14,664	6,446	6,268	47,418
1986	870	7,108	7,747	3,760	14,217	7,082	5,599	46,383
1987	736	7,400	7,683	4,258	13,989	5,500	6,238	45,804
1988	900	5,593	4,619	4,000	14,100	7,149	4,558	40,919
Sunflowerseed:								
1976-80	392	17	--	300	--	821	433	1,963
1981-85	450	39	--	615	--	784	211	2,099
1985	365	42	--	676	--	710	233	2,026
1986	489	57	--	862	--	1,004	450	2,862
1987	410	62	--	803	--	650	486	2,411
1988	450	62	--	715	--	580	410	2,217
Rapeseed:								
1976-80	--	151	291	81	637	12	60	1,232
1981-85	--	255	307	86	693	28	99	1,469
1985	--	285	380	85	1,073	35	126	1,984
1986	--	305	446	120	1,298	55	115	2,339
1987	--	337	366	107	1,186	40	88	2,124
1988	--	380	378	80	1,035	45	68	1,986
Soybeans:								
1976-80	114	4	--	37	--	293	56	504
1981-85	82	5	--	49	--	310	180	627
1985	37	4	--	46	--	317	174	578
1986	54	3	--	51	--	472	225	805
1987	35	5	--	67	--	350	237	694
1988	40	5	--	80	--	340	179	644
Tobacco:								
1976-80	141	5	5	21	80	46	67	365
1981-85	127	6	5	22	100	30	74	364
1985	126	6	6	21	111	27	80	372
1986	126	5	6	21	125	30	96	409
1987	126	5	6	20	114	29	76	376
1988	105	5	6	16	89	27	51	299
Corn silage:								
1976-80	4,866	14,930	10,951	6,104	21,512	4,348	1,253	63,964
1981-85	5,746	16,781	11,710	6,845	14,244	5,035	2,030	62,392
1985	5,544	17,562	12,885	6,592	11,646	1,294	2,204	57,727
1986	6,227	17,812	12,924	6,226	11,390	* 850	2,538	* 57,967
1987	6,079	18,823	16,329	6,847	13,444	* 800	2,404	* 64,726
Hay: 2/								
1976-80	2,052	6,129	4,809	2,903	8,294	5,636	3,414	33,237
1981-85	2,000	7,219	6,032	2,468	9,172	6,423	3,046	36,360
1985	1,674	8,196	6,428	2,182	9,665	7,169	2,816	38,130
1986	2,275	7,598	6,013	2,353	9,496	* 7,408	3,016	* 38,159
1987	2,102	7,809	7,023	2,285	9,393	* 6,500	2,718	* 37,830
Feed roots:								
1976-80	690	870	2,401	692	9,055	3,605	749	18,062
1981-85	371	1,271	3,242	675	10,799	3,966	618	20,942
1985	275	1,616	4,204	668	10,488	3,715	522	21,488
1986	273	1,327	4,981	551	10,522	* 3,000	530	* 21,184
1987	290	1,300	4,884	361	10,358	* 3,100	629	* 20,922

-- = No information reported, or amount less than 1,000 tons. * = Estimate.

1/ 1988 data are preliminary and unavailable for corn silage, hay, and feed roots.

2/ Does not include meadow hay, and for Yugoslavia includes only lucerne, clover, and vetch.

Sources: See Explanatory Notes.

Table 8. Area of selected crops, Eastern Europe,
1976-80 and 1981-85 averages, and 1985-88 annual 1/

Commodity and year	Bulgaria	Czecho- slovakia	GDR	Hungary 2/	Poland	Romania	Yugo- slavia	Total Eastern Europe
1,000 hectares								
Potatoes:								
1976-80	35	223	566	110	2,410	291	301	3,936
1981-85	39	195	491	79	2,179	312	279	3,575
1985	40	188	475	70	2,095	321	274	3,463
1986	40	182	459	68	2,009	348	283	3,389
1987	37	170	448	67	1,934	350	271	3,277
1988	40	208	445	65	1,865	350	274	3,247
Sugarbeets:								
1976-80	66	217	260	118	505	247	125	1,538
1981-85	51	212	246	115	472	273	144	1,512
1985	50	206	233	107	436	276	150	1,458
1986	45	194	224	104	423	270	138	1,398
1987	41	190	219	117	422	271	164	1,424
1988	45	186	198	115	412	266	131	1,353
Sunflowerseed:								
1976-80	233	13	--	185	--	515	214	1,160
1981-85	259	23	--	309	--	488	121	1,199
1985	267	23	--	343	--	466	112	1,211
1986	255	25	--	391	--	470	188	1,329
1987	266	27	--	378	--	455	251	1,377
1988	265	30	--	363	--	444	209	1,311
Rapeseed:								
1976-80	--	72	124	53	327	8	28	612
1981-85	--	108	128	56	329	32	48	701
1985	--	117	144	56	467	59	63	906
1986	--	121	151	58	515	58	72	975
1987	--	128	148	54	499	62	36	927
1988	--	130	150	38	485	60	31	894
Soybeans:								
1976-80	83	3	--	25	--	239	29	379
1981-85	74	3	--	26	--	307	89	500
1985	71	3	--	24	--	319	101	518
1986	51	2	--	23	--	312	96	484
1987	36	2	--	36	--	350	105	529
1988	40	2	--	65	--	350	110	567
Tobacco:								
1976-80	116	4	3	16	51	48	62	300
1981-85	105	4	3	14	51	36	61	274
1985	102	4	4	13	52	35	68	278
1986	103	4	4	11	51	35	73	281
1987	91	4	4	10	48	35	61	253
1988	91	4	4	10	42	35	52	238
Corn silage:								
1976-80	273	439	372	319	624	172	42	2,241
1981-85	356	445	369	322	431	150	72	2,146
1985	519	440	361	276	308	75	88	2,067
1986	294	476	367	289	305	* 50	87	* 1,868
1987	413	485	382	290	332	* 50	89	* 1,868
Hay: 3/								
1976-80	453	957	540	656	1,698	942	659	5,905
1981-85	485	1,006	602	583	1,820	886	627	6,009
1985	500	1,013	600	572	1,761	888	627	5,961
1986	514	1,013	606	529	1,733	* 870	622	* 5,887
1987	540	992	632	523	1,672	* 850	617	* 5,826
Feed roots:								
1976-80	14	21	55	20	258	85	35	488
1981-85	10	28	74	18	262	96	33	521
1985	10	37	91	17	238	83	32	508
1986	8	33	113	16	229	* 70	32	* 501
1987	9	30	104	11	223	* 70	32	* 479

-- = No information reported, or amount less than 1,000 hectares. * = Estimate.

1/ 1988 data are preliminary and unavailable for corn silage, hay, and feed roots.

2/ Area under socialist cultivation only.

3/ Does not include meadow hay, and for Yugoslavia includes only lucerne, clover, and vetch.

Sources: See Explanatory Notes.

Table 9. Imports of selected agricultural commodities, Eastern Europe, 1976-80 and 1981-85 averages, and 1984-87 annual 1/

Commodity and country	1976-80	1981-85	1984	1985	1986	1987
1,000 tons						
Oilseeds:						
Bulgaria	9	20	24	50	142	116
Czechoslovakia	135	69	72	50	66	50
GDR	55	79	165	75	82	214
Hungary	8	4	--	3	22	44
Poland	143	95	45	29	5	11
Romania	* 251	* 254	* 422	* 182	* 435	* 460
Yugoslavia	163	295	382	297	251	262
Total	* 764	* 815	* 1,110	* 686	* 1,003	* 1,157
Oilseed meal:						
Bulgaria	194	313	418	482	354	561
Czechoslovakia	643	755	801	785	741	585
GDR	949	1,086	975	838	838	829
Hungary	614	679	742	654	566	630
Poland	1,160	912	910	998	1,165	1,345
Romania	297	* 225	93	126	86	70
Yugoslavia	172	171	141	133	154	141
Total	4,028	* 4,140	4,080	4,016	3,904	4,161
Vegetable oil, edible:						
Bulgaria	1	11	24	13	20	15
Czechoslovakia	44	46	44	43	* 69	* 35
GDR	113	94	83	86	* 71	* 70
Hungary	13	10	7	6	35	5
Poland	78	77	50	65	79	96
Romania	9	6	5	4	* 5	* 5
Yugoslavia	52	* 121	* 114	* 134	* 96	* 3
Total	310	* 364	* 327	* 351	* 375	* 229
Meat and meat products: 2/						
Bulgaria	9	4	5	6	11	10
Czechoslovakia	26	24	16	29	31	22
GDR	24	57	69	17	10	14
Hungary	13	14	9	4	19	13
Poland	48	104	125	55	13	16
Romania	39	26	6	13	* 15	--
Yugoslavia	38	40	35	26	59	57
Total	196	269	265	150	* 158	132
Sugar: 3/						
Bulgaria	228	348	375	445	438	448
Czechoslovakia	89	147	187	203	156	165
GDR	209	261	313	265	304	282
Hungary	84	29	--	6	8	14
Poland	58	66	--	--	44	--
Romania	112	231	277	386	* 200	* 228
Yugoslavia	85	133	296	13	11	15
Total	867	1,214	1,448	1,318	* 1,161	* 1,152
Tobacco:						
Bulgaria	7	26	42	30	41	21
Czechoslovakia	21	21	17	21	19	18
GDR	20	20	22	20	19	20
Hungary	7	6	5	5	6	8
Poland	12	14	13	10	12	7
Romania	1	* 2	* 1	* 3	* 4	* 10
Yugoslavia	4	9	9	14	6	7
Total	72	* 98	* 109	* 103	* 107	* 91
Cotton:						
Bulgaria	57	72	67	87	80	68
Czechoslovakia	109	121	126	126	115	125
GDR	90	112	149	117	115	116
Hungary	93	85	87	81	95	88
Poland	163	153	159	166	147	136
Romania	111	101	87	102	* 92	* 93
Yugoslavia	107	117	127	145	126	105
Total	731	761	802	824	* 770	* 731
Hides and skins:						
Bulgaria	6	9	11	12	12	12
Czechoslovakia 4/	* 52	* 105	* 128	* 163	* 179	--
GDR	17	12	11	10	9	11
Hungary	34	29	29	25	27	23
Poland	42	41	37	48	33	41
Romania	44	36	35	30	* 30	35
Yugoslavia	27	31	30	43	33	16
Total	* 222	* 263	* 281	* 331	* 323	138

-- = No information reported, or amount less than 1,000 tons. * = Estimate.

1/ Rapeseed, soybeans, and sunflowerseed. 2/ Includes poultry meat. 3/ Total in raw equivalent.

4/ Converted from pieces to metric tons at 22 kilograms per piece.

Sources: See Explanatory Notes; statistical yearbooks of trading partners.

Table 10. Exports of selected agricultural commodities, Eastern Europe, 1976-80 and 1981-85 averages, and 1984-87 annual 1/

Commodity and country	1976-80	1981-85	1984	1985	1986	1987
1,000 tons						
Oilseeds:						
Bulgaria	22	13	11	14	2	85
Czechoslovakia	2	1	--	--	--	--
GDR	21	16	12	4	5	2
Hungary	86	124	130	132	105	217
Poland	51	61	59	245	506	428
Romania	4	* 2	3	2	2	1
Yugoslavia	16	* 2	2	2	2	2
Total	202	* 219	217	399	622	735
Oilseed meal:						
Bulgaria	--	11	--	54	105	252
Czechoslovakia	29	1	--	2	--	--
GDR	4	5	7	--	--	--
Hungary	* 1	* 8	* 2	--	--	--
Poland	* 5	32	34	122	31	25
Romania	--	--	--	--	--	--
Yugoslavia	3	5	--	20	56	85
Total	* 42	* 62	* 43	198	192	362
Vegetable oil, edible:						
Bulgaria	16	32	70	7	16	14
Czechoslovakia	1	--	--	--	--	--
GDR	--	--	--	--	--	--
Hungary	58	169	179	168	208	212
Poland	57	18	36	38	49	49
Romania	121	86	110	34	51	68
Yugoslavia	14	5	10	1	2	12
Total	267	308	405	248	326	355
Meat and meat products: 2/						
Bulgaria	108	114	128	126	137	121
Czechoslovakia	32	55	46	* 40	* 37	* 30
GDR	133	* 134	* 144	* 137	* 128	* 150
Hungary	285	423	490	414	421	466
Poland	156	81	84	91	125	138
Romania	187	173	145	266	* 268	209
Yugoslavia	74	147	162	168	137	148
Total	974	* 1,126	* 1,199	* 1,242	* 1,253	* 1,262
Sugar: 3/						
Bulgaria	2	2	--	12	40	12
Czechoslovakia	* 196	* 199	234	279	367	* 269
GDR	82	* 131	* 111	* 222	* 345	* 244
Hungary	31	43	3	44	4	28
Poland	213	182	314	188	142	277
Romania	* 72	* 68	* 3	* 133	* 94	--
Yugoslavia	78	30	17	106	48	16
Total	* 674	* 656	* 682	* 984	* 1,040	* 846
Tobacco:						
Bulgaria	69	63	62	60	62	56
Czechoslovakia	1	--	--	--	--	--
GDR	2	1	--	1	1	1
Hungary	1	3	4	1	3	3
Poland	9	5	6	7	11	11
Romania	7	* 4	* 3	* 3	* 3	* 3
Yugoslavia	24	22	18	15	14	16
Total	115	* 98	* 93	* 87	* 94	* 90

-- = No information reported, or amount less than 1,000 tons. * = Estimate.
 1/ Rapeseed, soybeans, and sunflowerseed. 2/ Includes poultry meat.
 3/ Total in raw equivalent.

Sources: See Explanatory Notes; statistical yearbooks of trading partners.

Table 11. January livestock numbers, Eastern Europe,
1976-80 and 1981-85 averages, and 1986-89 annual 1/

Category and year	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe
1,000 head								
Cattle:								
1976-80	1,733	4,754	5,544	1,926	12,339	6,361	5,575	38,232
1981-85	1,783	5,115	5,756	1,920	11,163	6,565	5,366	37,668
1986	1,706	5,065	5,827	1,766	10,774	7,077	5,034	37,249
1987	1,678	5,073	5,804	1,725	10,522	7,225	5,030	37,057
1988	1,649	5,044	5,790	1,664	10,200	7,182	4,881	36,410
1989	1,615	5,040	5,790	1,622	10,106	7,200	4,772	36,145
Cows:								
1976-80	697	1,902	2,145	773	5,914	2,612	3,181	17,224
1981-85	699	1,896	2,112	747	5,670	2,600	3,043	16,767
1986	670	1,860	2,064	688	5,331	2,556	2,915	16,084
1987	653	1,842	2,045	676	5,021	2,680	2,893	15,810
1988	646	1,830	2,012	673	4,830	2,700	2,902	15,593
1989	648	1,815	2,030	672	4,728	2,750	2,900	15,543
Hogs:								
1976-80	3,669	7,240	11,683	7,805	20,219	9,997	7,513	68,126
1981-85	3,793	7,227	12,819	8,953	17,689	13,155	8,536	72,171
1986	3,912	6,651	12,946	8,280	19,170	14,319	7,821	73,099
1987	4,050	6,833	12,840	8,687	19,619	14,711	8,459	75,199
1988	4,034	7,235	12,375	8,216	19,373	15,224	8,323	74,780
1989	4,134	7,450	12,500	8,462	20,127	15,600	8,185	76,458
Sheep:								
1976-80	10,105	837	1,925	2,560	3,452	14,818	7,504	41,201
1981-85	10,680	994	2,258	3,068	3,816	17,432	7,474	45,722
1986	9,724	1,087	2,587	2,465	4,720	18,609	7,693	46,885
1987	9,563	1,104	2,647	2,337	4,725	18,762	7,819	46,957
1988	8,886	1,100	2,710	2,336	4,478	18,793	7,824	46,127
1989	8,593	1,102	2,700	2,310	4,500	18,800	7,869	45,874
Horses:								
1976-80	126	54	67	141	1,970	565	751	3,674
1981-85	119	45	83	111	1,641	* 605	499	* 3,103
1986	120	46	105	98	1,324	672	409	2,774
1987	121	46	105	95	1,195	* 686	684	* 2,932
1988	123	46	105	88	1,200	693	362	2,617
1989	120	46	105	85	1,200	695	344	2,595
Poultry:								
1976-80	39,989	44,871	49,102	63,002	86,259	90,858	59,752	433,833
1981-85	42,081	48,676	52,339	65,329	70,286	112,258	69,448	460,417
1986	39,227	47,278	50,680	61,570	72,300	124,770	78,281	474,106
1987	39,735	48,717	50,216	67,010	59,200	130,941	79,696	475,515
1988	41,424	49,500	50,719	65,160	52,700	135,956	78,589	474,048
1989	48,810	50,000	51,000	64,500	NA	137,000	79,800	NA

* = Estimate. NA = Not available.

1/ 1989 data are preliminary.

Sources: See Explanatory Notes.

Table 12. Production of principal livestock products, Eastern Europe, 1976-80 and 1981-85 averages, and 1985-88 annual 1/

Category and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
1,000 tons								
Beef and veal: 2/								
1976-80	143	424	447	203	869	306	362	2,754
1981-85	162	442	442	204	757	* 242	372	* 2,621
1985	167	468	460	215	866	* 245	367	* 2,788
1986	163	468	476	185	900	* 206	353	* 2,751
1987	163	467	494	185	897	* 190	332	* 2,728
1988	167	468	500	183	751	190	315	2,574
Mutton, lamb, and goat meat: 2/								
1976-80	99	6	20	15	29	76	60	305
1981-85	117	10	19	21	30	* 74	60	* 331
1985	126	12	22	23	39	* 80	63	* 365
1986	121	11	22	20	44	* 80	63	* 361
1987	116	13	24	18	48	* 80	65	* 364
1988	120	14	25	18	29	80	65	351
Pork: 2/, 3/								
1976-80	349	803	1,198	922	1,728	876	720	6,596
1981-85	387	837	1,317	1,079	1,419	* 959	798	* 6,795
1985	390	853	1,405	1,010	1,526	* 1,020	772	* 6,976
1986	434	864	1,430	1,052	1,788	* 1,090	795	* 7,453
1987	434	891	1,431	1,093	1,757	* 1,120	863	* 7,589
1988	440	925	1,432	1,095	1,748	1,130	815	7,585
Poultry meat: 2/								
1976-80	149	159	137	328	374	363	250	1,760
1981-85	157	170	154	320	279	* 462	293	* 1,835
1985	158	172	162	405	290	* 520	297	* 2,004
1986	167	176	156	445	332	* 556	329	* 2,161
1987	169	181	167	470	343	* 560	323	* 2,213
1988	173	182	170	465	420	562	336	2,308
Total meat: 2/, 4/								
1976-80	745	1,423	1,821	1,472	3,064	1,623	1,398	11,546
1981-85	826	1,501	1,954	1,726	2,587	* 1,748	1,594	* 11,935
1985	843	1,547	2,077	1,745	2,792	* 1,885	1,572	* 12,461
1986	886	1,563	2,116	1,657	3,123	* 1,950	1,600	* 12,895
1987	883	1,594	2,145	1,770	3,099	* 1,965	1,585	* 13,041
1988	900	1,630	2,155	1,765	2,960	1,975	1,531	12,916
Milk: 5/, 6/								
1976-80	1,653	5,629	8,155	2,283	16,805	4,164	4,136	42,825
1981-85	2,076	6,398	8,371	2,751	15,983	3,841	4,591	44,011
1985	2,120	6,883	9,044	2,726	16,446	4,324	4,684	46,227
1986	2,174	7,075	8,188	2,778	15,793	4,243	4,665	44,916
1987	2,180	7,100	8,080	2,770	15,546	4,249	4,741	44,666
1988	2,225	7,125	8,050	2,790	15,000	4,250	4,890	44,330
Million pieces								
Eggs:								
1976-80	2,163	4,691	5,287	4,475	8,523	6,583	4,117	35,839
1981-85	2,593	5,247	5,718	4,351	8,186	7,577	4,588	38,259
1985	2,781	5,499	5,596	4,228	8,636	8,235	4,692	39,667
1986	2,820	5,558	5,634	4,290	8,303	8,884	4,770	40,259
1987	2,846	5,544	5,680	4,237	7,966	8,999	4,922	40,194
1988	2,893	5,545	5,737	4,419	8,300	9,010	5,020	40,924

* = Estimate.

1/ 1988 data are preliminary.

2/ Data include offal and edible slaughter fat, and live animal exports for slaughter. CMEA data except for Yugoslavia.

3/ Yugoslav series revised to omit double counting of some offals.

4/ Data include horse and rabbit meat.

5/ Data include only cow milk for consumption in Romania, Yugoslavia, and Hungary. Data in the remaining countries include milk sucked by calves.

6/ The GDR began a new series for milk production in 1986, based on 4.0 percent fat content. In consequence the present series has been revised, converting earlier data by dividing by a factor of 1.1428.

Sources: See Explanatory Notes; various reports of U.S. Agricultural Counselors in Belgrade, Berlin, Budapest, and Warsaw.

Table 13. Per capita consumption of selected foods,
Eastern Europe, 1975, 1980, and 1984-88 1/

Commodity and year	Bulgaria	Czecho- slovakia	GDR	Hungary	Poland	Romania 2/	Yugo- slavia
Kilograms							
Total meat: 3/							
1975	60.6	81.1	77.8	89.9	78.4	45.7	63.6
1980	64.9	85.6	89.5	93.6	82.1	60.0	67.3
1984	74.5	84.8	94.4	101.2	63.6	4/ 57.0	66.8
1985	76.9	85.8	96.2	100.5	67.3	4/ 56.0	65.1
1986	78.6	87.3	97.0	101.2	73.7	4/ 56.0	70.2
1987	77.8	89.0	99.4	101.5	74.4	4/ 55.0	* 69.0
1988	77.0	88.0	99.5	101.0	74.0	52.0	69.0
Eggs: 5/							
1975	146	297	269	274	209	214	166
1980	204	316	289	317	223	270	190
1984	236	337	303	320	210	270	175
1985	256	344	305	325	220	280	174
1986	256	346	299	318	209	295	176
1987	263	342	303	315	199	295	* 175
Vegetable oil: 6/							
1975	14.1	9.2	10.4	2.9	6.5	--	10.6
1980	14.8	9.8	9.9	4.2	6.8	--	11.3
1984	15.0	10.4	10.2	6.8	6.8	--	11.8
1985	15.5	10.6	10.3	7.1	7.1	--	12.7
1986	15.6	11.2	9.9	6.8	6.8	--	16.2
1987	15.4	11.3	9.9	7.4	7.4	--	* 16.0
Sugar:							
1975	32.5	38.0	36.8	39.4	43.2	20.3	32.8
1980	34.7	37.5	40.6	37.9	41.4	28.2	36.6
1984	35.7	37.5	39.1	34.2	45.0	--	31.8
1985	35.1	35.4	39.6	35.3	41.3	--	35.3
1986	35.7	37.5	39.6	35.4	41.1	--	38.6
1987	35.0	37.3	40.8	39.6	46.1	--	* 38.0
Grain, in flour equivalent:							
1975	162	108	95	118	120	189	183
1980	160	107	95	115	127	172	178
1984	146	109	100	111	116	173	174
1985	144	111	99	110	118	174	173
1986	144	110	98	109	118	175	168
1987	144	112	99	112	118	175	* 168
Vegetables:							
1975	127	74	90	85	109	113	87
1980	125	66	94	80	101	140	97
1984	138	81	92	77	116	170	91
1985	127	75	104	76	105	170	81
1986	134	75	100	75	114	170	89
1987	--	--	102	79	116	170	* 85
Potatoes:							
1975	23	96	142	67	173	96	66
1980	27	76	143	61	158	71	61
1984	30	81	146	59	149	105	55
1985	33	78	143	54	143	105	51
1986	33	80	145	50	144	110	56
1987	28	73	147	50	143	105	* 57

-- = Data not available. * = Estimate.

1/ 1988 data are preliminary and available for meat only. 2/ Revista Economica, Bucharest, Dec. 29, 1978; Lumea, Oct. 30, 1981; Bucharest Domestic Service, Nov. 1, 1981; Scinteia, Nov. 29, 1981, Bucharest; unpublished official statistics; estimates. 3/ Hungarian series revised to include edible offals and fats. Vestnik statistiki #4, 1985, Moscow. 4/ Includes fish. Estimates may overstate consumption. Reports indicate a decline in meat availability in urban areas in recent years as exports have increased. 5/ Units. 6/ Numbers for Bulgaria and Hungary exclude vegetable oil used in margarine production. All numbers believed to be given in fat weight.

Sources: See Explanatory Notes and footnotes 2 and 3 above.

Table 14. Total and agricultural trade, Eastern Europe, 1982-88 1/

Category and year	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia	Total Eastern Europe
Million dollars								
Exports:								
1982	11,428	15,694	21,743	9,057	11,214	11,559	10,460	91,155
1983	12,129	16,477	23,793	8,881	11,572	11,512	9,913	94,277
1984	12,850	17,153	24,838	8,836	11,347	12,646	10,136	97,806
1985	13,341	17,474	25,268	8,935	11,489	12,167	10,622	99,296
1986	14,169	20,457	27,729	9,140	12,074	12,543	11,084	107,196
1987	14,383	23,013	29,870	9,826	11,545	14,185	11,506	114,328
1988	14,958	24,072	30,019	10,240	12,630	15,674	12,597	120,191
Imports:								
1982	11,526	15,592	20,196	8,579	10,244	9,745	12,484	88,366
1983	12,283	16,324	21,525	8,453	10,590	9,643	11,144	89,962
1984	12,714	17,078	22,940	8,024	10,547	10,334	10,925	92,562
1985	13,647	17,548	22,433	8,324	10,836	10,432	11,210	94,430
1986	15,487	21,089	27,414	9,688	11,208	10,590	11,786	107,262
1987	15,650	23,292	28,786	9,659	10,251	11,000	12,723	111,361
1988	15,368	23,941	29,074	9,667	11,143	11,011	13,154	113,358
Balance:								
1982	-98	102	1,547	478	970	1,814	-2,024	2,789
1983	-154	153	2,268	428	982	1,869	-1,231	4,315
1984	136	75	1,898	812	800	2,312	-789	5,544
1985	-306	-74	2,835	611	653	1,735	-588	4,866
1986	-1318	-632	315	-548	866	1,953	-702	-66
1987	-1268	-279	1,084	167	1,294	3,185	-1,217	2,966
1988	-411	131	945	573	1,487	4,663	-557	6,833
Agricultural exports:								
1982	1,873	586	489	2,243	663	1,003	1,252	8,109
1983	1,762	553	403	2,038	789	840	1,188	7,573
1984	1,583	542	387	1,960	907	768	1,082	7,229
1985	1,544	583	446	1,847	961	791	1,021	7,193
1986	1,613	612	531	1,887	1,087	853	940	7,523
1987	1,601	639	586	1,896	1,189	867	1,044	7,822
Agricultural imports:								
1982	629	1,783	2,027	732	1,877	844	1,309	9,201
1983	820	1,685	2,499	796	1,348	752	1,107	9,007
1984	829	1,657	2,352	760	1,495	681	1,150	8,924
1985	1,077	1,766	1,780	731	1,375	587	1,098	8,414
1986	1,050	1,854	1,833	874	1,288	752	1,285	8,936
1987	985	1,941	1,757	892	1,375	578	1,123	8,651
Agricultural trade balance:								
1982	1,244	-1,197	-1,538	1,511	-1,214	159	-57	-1,092
1983	942	-1,132	-2,096	1,242	-559	88	81	-1,434
1984	754	-1,115	-1,965	1,200	-588	87	-68	-1,695
1985	467	-1,183	-1,334	1,116	-414	204	-77	-1,221
1986	563	-1,242	-1,302	1,013	-201	101	-345	-1,413
1987	616	-1,302	-1,171	1,004	-186	289	-79	-829

1/ 1988 data are preliminary and unavailable for agricultural trade.

Sources: See Explanatory Notes; United Nations and IMF data for total imports and exports.

Table 15. U.S. total and agricultural trade with Eastern Europe,
1976-80 and 1981-85 averages, and 1986-88 annual

Category and Year	Bulgaria	Czechoslovakia	GDR	Hungary	Poland	Romania	Yugoslavia	Total Eastern Europe
Million dollars								
Total exports:								
1976-80	68.7	206.2	366.0	85.0	666.3	418.3	548.4	2,359.0
1981-85	116.8	80.4	188.2	86.5	370.3	282.3	567.7	1,692.2
1986	95.9	67.5	70.6	88.2	145.9	249.2	520.8	1,238.1
1987	88.3	46.9	56.9	94.1	241.9	192.1	459.4	1,179.6
1988	126.4	54.4	114.4	76.1	305.7	202.2	531.1	1,410.3
Total imports:								
1976-80	21.6	49.2	29.0	76.5	385.0	284.3	389.7	1,235.4
1981-85	29.6	70.1	78.6	170.5	239.2	637.9	439.6	1,665.4
1986	49.7	85.3	85.3	223.9	231.0	750.0	647.1	2,072.3
1987	40.3	77.8	84.5	277.6	295.5	714.4	793.7	2,283.8
1988	36.6	84.9	111.4	293.1	369.8	678.0	846.4	2,420.2
Balance:								
1976-80	47.2	157.0	337.0	8.5	281.2	134.0	158.7	1,123.6
1981-85	87.2	10.3	109.7	-84.0	131.1	-355.6	128.1	26.8
1986	46.2	-17.8	-14.7	-135.7	-85.1	-500.8	-126.3	-834.2
1987	48.0	-30.9	-27.6	-183.5	-53.6	-522.3	-334.3	-1,104.2
1988	89.8	-30.5	3.0	-217.0	-64.1	-475.8	-315.3	-1,009.9
Total agricultural exports: 1/								
1976-80	50.8	181.2	352.1	37.0	519.1	256.0	171.1	1,567.2
1981-85	74.5	49.5	176.9	31.2	254.0	180.7	191.8	958.6
1986	51.3	20.9	60.9	27.0	33.1	115.5	124.0	432.7
1987	46.7	16.3	35.1	19.2	103.3	98.8	116.3	435.7
1988	96.2	15.4	75.8	4.8	135.8	103.9	107.9	539.8
Direct agricultural exports: 2/								
1976-80	48.4	133.6	206.8	31.6	500.0	247.5	156.1	1,324.0
1981-85	73.3	37.9	162.6	31.2	252.9	171.7	182.4	912.0
1986	51.3	20.9	60.9	27.0	33.1	115.5	124.0	432.7
1987	46.7	16.3	35.1	19.2	103.3	98.8	116.3	435.7
1988	96.2	15.4	75.8	4.8	135.8	103.9	107.9	539.8
Total agricultural imports:								
1976-80	19.9	6.7	2.1	29.0	148.8	26.5	85.2	318.1
1981-85	23.5	10.2	1.8	42.4	96.9	19.0	64.6	258.5
1986	22.1	14.3	0.5	61.9	132.2	12.4	66.6	310.0
1987	24.0	13.2	0.5	67.8	141.1	19.4	68.8	334.8
1988	23.9	7.3	0.7	62.5	146.2	12.8	63.0	316.4
Balance:								
1976-80	30.9	174.4	350.1	8.0	370.3	229.6	85.8	1,249.1
1981-85	51.0	39.3	175.1	-11.2	157.1	161.7	127.1	700.1
1986	29.2	6.6	60.4	-34.9	-99.1	103.1	57.4	122.7
1987	22.7	3.1	34.6	-48.6	-37.8	79.4	47.5	100.9
1988	72.3	8.1	75.1	-57.7	-10.4	91.1	44.9	223.4

1/ Data from before 1984 include estimated transshipments through Belgium, Canada, the Federal Republic of Germany, and the Netherlands. Beginning in 1984, the non-Canadian transshipments are no longer being calculated, because of their decline in value and difficulty in obtaining data. Total exports are therefore assumed to be equal to direct exports.

2/ Includes estimated transshipments through Canada.

Sources: Bureau of the Census, U.S. Dept. of Commerce; U.S. Export Sales, Foreign Agricultural Service, U.S. Dept. of Agriculture.

Table 16. Volume and value of U.S. agricultural exports to Eastern Europe,
1976-80 and 1981-85 averages, and 1986-88 annual 1/

Commodity and country	Volume					Value				
	1976-80	1981-85	1986	1987	1988	1976-80	1981-85	1986	1987	1988
	1,000 tons					Million dollars				
Total grain:										
Bulgaria	230	326	194	448	836	27.8	44.9	22.3	33.3	73.2
Czechoslovakia	723	180	--	--	--	97.2	23.3	--	0.1	0.1
GDR	2,074	1,086	338	307	633	265.9	142.6	30.7	22.9	71.1
Hungary	44	5	--	--	--	5.2	0.2	--	--	--
Poland	2,769	696	62	1,118	1,367	330.5	102.4	8.9	82.5	116.3
Romania	864	394	322	--	--	107.1	57.5	30.9	--	--
Yugoslavia	522	218	366	671	139	73.0	28.9	33.2	50.2	12.2
Total	7,226	2,906	1,282	2,544	2,975	906.7	399.7	126.0	189.0	272.9
Wheat:										
Bulgaria	--	--	--	--	--	--	--	--	--	14.2
Czechoslovakia	165	--	--	--	--	28.9	--	--	--	--
GDR	294	56	--	--	35	45.7	10.2	--	--	4.0
Hungary	--	--	--	--	--	--	--	--	--	--
Poland	617	73	59	903	1,061	83.1	12.0	7.9	70.4	92.5
Romania	244	13	--	--	--	33.9	1.7	--	--	--
Yugoslavia	250	135	364	437	--	41.9	19.1	32.4	33.5	--
Total	1,570	277	423	1,340	1,096	233.5	42.9	40.3	103.9	110.7
Corn:										
Bulgaria	240	314	194	448	530	27.8	41.9	22.3	33.3	49.7
Czechoslovakia	549	180	--	--	--	67.0	23.3	--	--	--
GDR	1,650	947	336	305	566	207.0	122.4	30.0	22.4	63.5
Hungary	21	--	--	--	--	2.4	--	--	--	--
Poland	1,840	617	--	11	5	212.1	87.6	--	0.8	0.5
Romania	544	382	211	--	--	66.1	55.7	20.8	--	--
Yugoslavia	254	77	--	209	139	29.4	9.1	--	14.6	12.1
Total	5,098	2,516	741	741	741	611.8	339.9	73.1	71.1	125.8
Soybeans:										
Bulgaria	--	13	47	45	51	--	3.6	9.7	9.1	13.3
Czechoslovakia	6	5	--	--	--	4.4	1.2	--	--	--
GDR	5	3	12	--	--	1.2	0.8	3.8	--	--
Hungary	--	--	--	--	--	--	--	--	--	--
Poland	134	91	--	--	--	35.6	23.4	--	--	--
Romania	222	234	239	408	238	54.9	61.5	49.5	81.8	59.3
Yugoslavia	155	238	179	139	195	42.2	61.1	36.6	27.5	49.5
Total	522	584	477	592	477	138.3	151.7	99.6	118.4	122.1
Vegetable oil:										
Bulgaria	--	--	--	--	--	--	--	--	--	--
Czechoslovakia	--	--	--	--	--	--	--	--	--	--
GDR	1	--	--	27	--	1.0	--	--	--	--
Hungary	--	--	--	--	--	--	--	--	--	--
Poland	15	9	4	1	--	8.8	7.2	2.5	.7	--
Romania	--	--	--	--	--	--	--	--	--	--
Yugoslavia	4	31	--	--	--	2.4	13.4	--	--	--
Total	20	40	4	28	--	12.2	20.6	2.5	.7	--
Soybean meal and cake:										
Bulgaria	73	71	18	--	33	16.9	16.8	3.0	--	7.2
Czechoslovakia	281	39	--	--	--	56.7	8.5	--	--	--
GDR	345	101	116	26	--	75.7	--	22.6	6.1	--
Hungary	95	91	77	72	--	22.8	20.0	18.6	15.3	--
Poland	356	148	--	27	--	76.1	35.2	--	6.7	--
Romania	158	91	26	11	20	36.0	24.1	6.7	2.8	5.4
Yugoslavia	133	111	118	97	93	27.8	24.8	24.2	19.7	23.5
Total	1,441	653	355	355	355	312.0	154.1	75.1	50.6	36.1

See notes at end of table.

Continued--

Table 16. Volume and value of U.S. agricultural exports to Eastern Europe, Europe, 1976-80 and 1981-85 averages, and 1986-88 annual--continued 1/

Commodity and country	Volume					Value				
	1976-80	1981-85	1986	1987	1988	1976-80	1981-85	1986	1987	1988
	1,000 tons					Million dollars				
Cotton:										
Bulgaria	--	--	--	--	--	--	--	--	--	--
Czechoslovakia	--	--	--	--	--	--	--	--	--	--
GDR	--	1	--	1	--	--	.2	--	1.5	0.6
Hungary	--	--	--	--	--	--	.8	--	--	--
Poland	8	1	--	5	8	12.3	3.0	--	8.2	11.3
Romania	10	--	--	--	--	15.4	--	--	--	--
Yugoslavia	--	19	4	2	5	--	33.2	8.0	5.1	10.2
Total	18	21	4	8	13	27.7	37.2	8.0	14.8	22.1
Cattle hides: /2										
Bulgaria	41	29	10	--	10	1.1	1.3	.4	--	0.5
Czechoslovakia	589	464	524	315	245	15.2	14.3	19.0	14.1	13.4
GDR	33	--	--	--	--	.7	.1	--	--	--
Hungary	183	99	39	19	12	3.9	3.3	1.3	.6	0.4
Poland	441	402	179	39	58	12.6	12.1	6.3	1.5	3.0
Romania	1,486	1,028	689	292	624	38.8	34.5	24.4	12.9	36.2
Yugoslavia	461	379	203	80	104	9.9	15.7	12.2	4.7	7.4
Total	3,234	2,400	1,642	745	1053	82.2	81.3	63.6	33.8	60.9
Other:										
Bulgaria	--	--	--	--	--	4.9	7.9	15.9	4.3	2.0
Czechoslovakia	--	--	--	--	--	7.7	2.2	1.9	2.2	1.9
GDR	--	--	--	--	--	7.7	8.6	3.8	4.6	4.1
Hungary	--	--	--	--	--	4.7	6.9	7.1	3.3	4.4
Poland	--	--	--	--	--	42.7	70.8	15.4	3.7	5.2
Romania	--	--	--	--	--	3.9	3.1	4.0	1.3	3.0
Yugoslavia	--	--	--	--	--	17.3	14.6	9.8	9.1	5.1
Total	--	--	--	--	--	88.8	114.1	57.9	28.5	25.7
Total:										
Bulgaria	--	--	--	--	--	50.8	74.5	51.3	46.7	96.2
Czechoslovakia	--	--	--	--	--	181.2	49.5	20.9	16.3	15.4
GDR	--	--	--	--	--	352.1	176.9	60.9	35.1	75.8
Hungary	--	--	--	--	--	37.0	31.2	27.0	19.2	4.8
Poland	--	--	--	--	--	519.1	254.0	33.1	103.3	135.8
Romania	--	--	--	--	--	256.0	180.7	115.5	98.8	103.9
Yugoslavia	--	--	--	--	--	171.1	191.8	124.0	116.3	107.9
Total	--	--	--	--	--	1,567.2	958.6	432.7	435.7	539.8

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

1/ Data from before 1984 include estimated transshipments through Belgium, Canada, the Federal Republic of Germany, and the Netherlands, in addition to Canada. Beginning in 1984, the non-Canadian transshipments are not included because of their decline in value and the difficulty in obtaining data.

2/ 1,000 pieces.

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

Table 17. Volume and value of U.S. agricultural imports from Eastern Europe, 1976-80 and 1981-85 averages, and 1986-88 annual

Commodity and country	1976-80	1981-85	1986	1987	1988
1,000 tons					
Processed meat:					
Bulgaria	--	--	--	--	--
Czechoslovakia	1.1	1.2	0.9	1.0	1.1
GDR	--	--	--	--	--
Hungary	7.6	11.2	15.2	16.3	14.4
Poland	39.4	25.7	36.0	37.7	38.6
Romania	6.9	3.9	3.5	6.7	4.4
Yugoslavia	14.6	11.0	8.4	10.4	11.7
Total	69.6	52.9	64.0	72.1	70.2
Million dollars					
Processed meat:					
Bulgaria	--	--	--	--	--
Czechoslovakia	3.4	3.2	2.5	2.7	2.5
GDR	.1	--	--	--	--
Hungary	23.7	31.3	40.1	43.5	33.1
Poland	131.3	81.0	112.9	121.0	111.9
Romania	18.9	9.0	7.4	16.0	9.5
Yugoslavia	47.2	30.9	22.7	29.9	29.0
Total	224.6	155.5	185.6	213.1	186.0
Other products: 1/					
Bulgaria	19.9	23.5	22.1	24.0	23.9
Czechoslovakia	3.3	7.0	11.8	10.2	4.8
GDR	2.0	1.8	.5	0.0	0.7
Hungary	5.2	11.1	21.8	24.3	29.4
Poland	17.5	16.0	19.3	20.1	34.3
Romania	7.6	10.0	5.0	3.4	3.3
Yugoslavia	38.0	33.7	43.9	38.9	34.0
Total	93.5	103.1	124.4	121.2	130.4
Total:					
Bulgaria	19.9	23.5	22.1	24.0	23.9
Czechoslovakia	6.7	10.2	14.3	13.2	7.3
GDR	2.1	1.8	.5	.5	0.7
Hungary	28.9	42.4	61.9	67.8	62.5
Poland	148.8	96.9	132.2	141.1	146.2
Romania	26.5	19.0	12.4	19.4	12.8
Yugoslavia	85.2	64.6	66.6	68.8	63.0
Total	318.1	258.5	310.0	334.3	316.4

-- = Amount less than 1,000 tons, 1 million dollars, or not applicable.

1/ Principally tobacco and wine.

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

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