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THE AGRICULTURAL SITUATION IN COMMUNIST AREAS

Review of 1969 and Outlook for 1970

**U.S. DEPARTMENT OF AGRICULTURE
ECONOMIC RESEARCH SERVICE**

Washington, D.C.

ABSTRACT

The agricultural situation developed unevenly in the Communist areas during 1969. China's progress was most significant, particularly in grain output. The Soviet Union reported declines in all major crops and experienced a 5 percent drop in net agricultural output. Drought in Czechoslovakia, East Germany, and Poland sharply lowered feed supplies. Higher corn production than the previous drought year in Bulgaria, Hungary, Romania, and Yugoslavia improved exports. North Korea, North Vietnam, and Mongolia showed no substantial change from previous years, and Cuba's major effort in 1969/70 is tied to the planned 10 million-ton sugarcane harvest. U.S. exports to Eastern Europe and the Soviet Union declined about 20 percent from the 1968 levels.

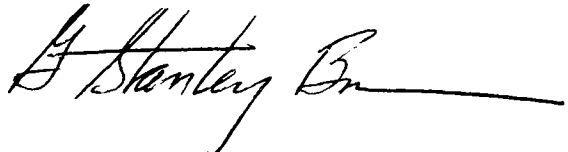
Key Words: Communist areas 1969 agricultural report. Production, consumption, trade, and outlook for 1970.

FOREWORD

The Agricultural Situation in Communist Areas: Review of 1969 and Outlook for 1970 presents a comprehensive review of agricultural developments in the Soviet Union, Eastern Europe, and Mainland China. Significant highlights and production results for North Korea, North Vietnam, Mongolia, and Cuba are also included for the first time. The emphasis of the report is on policy, production, and trade developments that are of concern to U.S. interests.

This report was prepared by the Communist Areas Group, under the supervision of Roger E. Neetz. Members of the Group include Linda A. Bernstein, Lynn S. Bickley, Paige I. Bryan, Marion R. Larsen, Melvenia L. Peed, David M. Schoonover, and Thomas A. Vankai. Acknowledgment is extended to the Foreign Agricultural Service, especially to Agricultural Attache personnel, for assistance.

The Agricultural Situation in Communist Areas is one of five regional supplements to The World Agricultural Situation: Review of 1969 and Outlook for 1970, FAER 57. Other regional reports are published on Western Europe, Africa and West Asia, the Western Hemisphere, and the Far East and Oceania. Data in this report may vary slightly from those in The World Agricultural Situation, as this is based on information available as of March 1, 1970.



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CONVERSION EQUIVALENTS

Pounds per bushel

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

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

Metric tons to bushels

<u>One metric ton</u>	<u>Bushels</u>
Wheat and potatoes.....	36.743
Rye and corn.....	39.368
Barley.....	45.929
Oats.....	68.894

Bushels to metric tons

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

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

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

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

Wheat and potatoes.....	0.6725
Rye and corn.....	0.6277
Barley.....	0.5330
Oats.....	0.3587

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

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April 1970

Table 1.--Eastern Europe and Soviet Union: Indexes of agricultural production, total and per capita, 1963-69 ^{1/}

(1957-59 = 100)

Country	Total							Per capita						
	1963	1964	1965	1966	1967	1968	1969	1963	1964	1965	1966	1967	1968	1969
Bulgaria.....	113	128	135	156	152	135	147	108	121	127	146	141	125	134
Czechoslovakia.....	105	108	94	111	116	127	122	101	103	89	105	109	119	114
East Germany.....	100	105	112	111	122	121	107	101	107	114	113	124	123	108
Hungary.....	105	107	109	116	121	123	134	103	104	106	113	117	118	129
Poland.....	117	121	122	128	133	139	132	110	112	111	116	120	124	117
Romania.....	109	114	125	143	142	137	138	105	109	119	135	133	127	127
Yugoslavia.....	111	118	107	133	129	124	139	105	110	99	121	116	111	123
Eastern Europe.....	110	115	116	127	130	131	130	106	110	110	120	122	122	120
USSR.....	103	122	116	137	135	143	136	95	111	104	121	119	124	117
Eastern Europe and USSR.....	106	120	116	134	133	139	134	99	111	106	121	119	124	118

^{1/} These USDA indexes are based on the value of calendar year crop and livestock product output, weighted in terms of 1957-59 average West European producer or wholesale prices, in U.S. dollars. Deductions are made for the value of crops used to produce livestock output. This deduction is based on the value of the output assigned to feed in Food Balances for 8 East European Countries, 1959-61, ERS-Foreign 124, Economic Research Service, U.S. Department of Agriculture. ^{2/} Preliminary.

THE AGRICULTURAL SITUATION IN COMMUNIST AREAS

SUMMARY

Agriculture in the Communist countries showed surprisingly few major production and policy changes during the past year. The terminal year in the last decade was a disappointing one for the Soviet Union, but a step forward for China. Eastern Europe showed some slippage. Gains over the 1968 drought year were made for Bulgaria, Hungary, Romania, and Yugoslavia. Declines in 1969 developed in the northern countries--East Germany, Czechoslovakia, and Poland--because of the late summer drought.

Plans for 1970 indicate an ambitious 8.5-percent increase in output for the Soviet Union, moderate to strong increases for most East European countries, and a note of optimism for Communist Asia.

U.S. agricultural exports to Eastern Europe and the Soviet Union declined 20 percent in 1969. Poland, our major trading partner in the area, cut back its purchases of U.S. farm products by \$34.5 million. 1/ East Germany continues to show strong interest in U.S. feed grains. Soviet purchases of U.S. farm products rose from \$5.3 million in 1968 to \$11.6 million in 1969.

Crop output declined in the Soviet Union last year. Grain and sunflowerseed production each declined about 6 percent; cotton and sugar beets were off 4 and 24 percent, respectively. 2/ These four commodities represent the major agricultural exports of the Soviet Union. The livestock sector showed mixed results. Milk output decreased 1 percent, meat held at the 1968 level, eggs increased 4 percent.

To insure grain supplies for internal and external commitments, the Soviets agreed to purchase 3.5 million tons of wheat from Canada through 1971. Around 2 million tons will be shipped before the end of 1970. Because of lower production, sunflowerseed and cotton exports are expected to decline in 1970 from 1969 levels. Soviet sugar exports could remain high because of the probable increase of supplementary supplies from Cuba. USSR meat and poultry imports from Western sources moved upward sharply in the first quarter of 1970, reflecting some shortages in East European export markets and the below planned output of the livestock sector in 1969.

For Eastern Europe, the summer drought in Czechoslovakia, East Germany, and Poland caused significant production declines in potatoes (15 percent) and

1/ Values are in U.S. dollars unless indicated otherwise.

2/ Volume is in terms of metric tons.

in sugar beets (27 percent). Oilseed production, particularly rapeseed, dropped off sharply because of severe winterkill. Grain production in the northern countries held at the 1968 level.

Total grain output for all Eastern Europe increased 5 percent over 1968. Hungary, Czechoslovakia, and Yugoslavia showed the largest increases. Wheat output increased 2 percent for the area even though declines developed in Romania and East Germany.

Imports of grain by the major importers--Czechoslovakia, East Germany, and Poland--probably reached 6.2 million tons in 1969, up around 500,000 tons from a year earlier. Exports of the 1970 grain crop by the southern countries may top the 1969 level. Hungary, a net importer in recent years, reported an export potential of 700,000 tons for the 1969/70 trade year.

The livestock sector in Eastern Europe showed weakness in 1969. Animal numbers were lower in the area and meat production declined. Meeting livestock goals is still a major problem for all countries. The price-cost squeeze, feed problems, disease, and peasant attitudes are major deterrents to higher output.

China's agricultural output in 1969 showed more strength than in 1968. Grain output (including tubers) likely reached 200 million tons. Oilseeds, particularly soybeans, increased but cotton held at 1968's level. Optimistic statements suggested gains in the livestock sector in 1969. Hog numbers may have reached the pre-Cultural Revolution level.

Large commercial purchases of grain in overseas markets highlighted China's 1969 trade activities. China contracted for approximately 7.5 million tons of grain. Actual imports for 1969 were an estimated 4.5-5.0 million tons. Low world prices and the global wheat glut probably influenced last year's purchases.

North Vietnam showed signs of rebuilding in the countryside. Labor discipline increased and programs were introduced to help alleviate a deteriorating labor situation. Grain output increased moderately--primarily on the strength of a 80,000-hectare increase in the planted area of rice. But about 400,000 to 600,000 tons of grain were imported from China and the Soviet Union. North Korea claimed a 1969 harvest exceeding the 5.5 to 5.7 million tons in 1968. Mongolia's grain output of about 320,000 tons was below the 1968 level.

Cuba's agricultural program in 1969 was dominated by the planned 10-million-ton sugarcane harvest for 1969/70. By mid-March about 4.5 million tons of sugarcane had been harvested. Gains were made last year in rice and egg production. All foods, including sugar, are still rationed.

SOVIET UNION

SETBACK IN AGRICULTURE

After a record year in 1968, Soviet gross agricultural production dropped 3 percent to the 79.0-billion-ruble level in 1969. This was a disappointing 7.1 percent below planned agricultural output. The USDA production index showed a 5 percent decline from 1968. ^{3/}

The 3-percent decrease was brought about by lower production in grains, especially wheat, and most industrial crops. Livestock production failed to advance as planned. Only egg production increased. Meat showed no improvement and milk and wool were down slightly. All major economic indicators showed slower rates of growth in 1969, making it an acceptable year in terms of total output, but a setback in terms of planned progress during the period 1966-70.

The agricultural shortfall in 1969 was attributed mainly to weather. A severe winter, late spring, and a wet harvest contributed to reduced yields for all major crops. Favorable policy changes introduced since 1965--larger bonuses for quality work, higher state purchasing prices, increased inputs, and better varieties of seed--probably prevented a sharper drop in output. Through the implementation of some of these programs total output has been able to maintain the plateau reached in the late sixties, but raising output above this level will become increasingly expensive in terms of fixed and working capital needs.

CROP OUTPUT LOWER

The weakest showing in agriculture appeared in the crop sector, and weather played a major role in this downturn of production. Lags in labor productivity and capital inputs were also evident in 1969, negating in part the effects of increased usage of fertilizer, herbicides, and new wheat strains. Weather then is only one of many factors that has held crop output at a plateau since 1966.

^{3/} The USDA index of Soviet agricultural production measures the final output of major crops and livestock products using USDA estimates and weighted by 1957-59 West European producer prices. It does not measure changes in livestock numbers or changes in the weight of live animals. Seed and waste are considered constants. Net output is estimated by deducting feed inputs as a constant percentage of the value of livestock production--meat, milk, eggs, and wool. The index is more sensitive to changes in final output than would be the case with indexes valuing changes in livestock numbers and/or the weight of live animals.

Fall sowing of winter grains for the most part was carried out during the optimum periods although a little later than in the previous year. The winter grain area was down to about 27 million hectares from 33 million hectares in both 1967 and 1968. But the spring sown area reached a record 95.5 million hectares, almost 7 million higher than in 1968. The total sown area of grains increased by 1 million hectares.

Soil moisture was generally favorable in the Ukraine and European parts of the USSR. However, severe windstorms and excessive cold caused a considerable amount of winterkill. About 14 million hectares or one out of every three sown had to be resown with spring crops--spring wheat, barley, and corn. A cold spring was unfavorable to winter crops that did survive and caused a lag of about 2 weeks in planting. Precipitation varied in different parts of the country. Heavy snowfalls in Western Siberia and Northern Kazakhstan improved soil moisture reserves in these areas. However, dry weather was reported in the North Caucasus and the Volga Vyatka regions which are important grain and sunflower producing areas. Harvesting was quite late compared with previous years, and was extended through November in parts of the Russian Soviet Federated Socialist Republic and the Ukraine.

The government reported grain harvest in 1969 of 160.5 million tons was 9 million tons below the 1968 level, but still the third largest on record. USDA estimates of usable grain ^{4/} for 1968 and 1969 are 144.4 and 132.4 million tons, respectively.

Wheat, both winter and spring, suffered because of poor weather in 1969. Total production of usable wheat was estimated at 65.2 million tons. The total wheat area declined to 65 million hectares, compared with 67 million hectares in both 1967 and 1968. The winter wheat area was 4 million hectares below the 19 million in 1968. Output dropped as a result of winterkill to an estimated 21 million tons. However, a record yield of winter wheat (21 centners per hectare) was reported for the Ukraine. Lower yields were reported in the North Caucasus and parts of the Lower Volga and Ural regions, which contributed to the overall reduction in the winter wheat output. The spring wheat area was increased by 2.5 million hectares, to about 51 million hectares, with production estimated at 46 million tons compared with 47 million in 1968.

Feed grain production--barley, oats, and corn--reached an estimated 44 million tons. This represented a higher share of total grain output than in recent years. As a replacement for damaged winter grain, the corn for grain area was expanded 47 percent to about 5 million hectares, and production amounted to about 9 million tons. The winter and spring barley area (spring barley is 95 percent of total barley) rose by a little more than 2 million hectares and total barley output reached an estimated 25 million tons, making up more than half of total feed grain output. Spring barley was a major replacement crop for winter grains last year. The expanded area more than offset reduced yields in the important Lower Volga area. The 1969 output of oats was about 10.0 million tons, up 300,000 tons from 1968. Expanded area of 500,000 hectares made up for reduced yields.

^{4/} Usable grain refers to USDA estimates, accounting for Soviet inclusion of excess moisture and foreign matter in grain production figures.

Rice production on a sown area of 313,000 hectares about equaled 1968's output of 1 million tons. High yields were reported in Uzbekistan. Rice imports have fluctuated between 250,000 and 400,000 tons since 1965, but the long-term trend points to greater self-sufficiency.

The 1969 production of sunflowerseed officially declined to 6.3 million tons from 6.7 million tons in 1968. Dry weather in the important areas of the Northern Caucasus, Lower Volga, and Kazakhstan largely caused the decline. Sunflower area was estimated at 4.9 million hectares as in 1968. A reduction in net export availabilities of sun oil has occurred in the past 2 years. And the estimated lower stock position suggests that exports will probably continue to decline in 1970.

Fiber crops also suffered from the cold spring in 1969, but flax for fiber increased to 460,000 tons. Flaxseed declined slightly in 1969. Seed cotton output declined to 5.7 million tons from 6.0 million in the previous year because of late sowing and harvesting delays in Uzbekistan, the major cotton producing region in the USSR. Although the cotton area of 2.5 million hectares was 65,000 hectares greater than in 1968, the average cotton yield of 22.4 centners per hectare was down 7.8 percent from last year and at the lowest level since 1964.

Sugar beet output for factory use in 1969 totaled 71 million tons, about 23 million tons below the record 1968 level. Sown area was reported as 3.4 million hectares compared with 3.6 million in 1968. Yields averaged about 209 centners per hectare, down 21.4 percent from 1968. The Ukraine, which usually produces about 60 percent of the Soviet Union's sugar beets, reported yields of 250 centners per hectare, or approximately 25 percent lower than the year before.

Sugar content of the 1969 beets was not expected to be any higher than in 1968 due to the cool weather the past summer. The USDA estimated the raw sugar output from the 1969 crop at about 7.6 million tons, well below the planned level of 9.7 million tons.

Gross output of potatoes, fruit, and vegetables was lower than in 1968. The late spring in parts of the southern Ukraine and the RSFSR contributed to this general downturn. Vegetable production was about 18 million tons, a slight decline from last year's 19 million tons. Potato production was 82.5 million tons. Because of the late spring, total fruit and berry output likely declined to about 9 million tons, which equaled the 1966-69 average.

NO IMPROVEMENT IN LIVESTOCK PRODUCTION

There was some reason for concern over the lack of progress in the livestock sector during 1969. Since 1960, growth rates for the sector have been consistently lower than those for crops, pointing to long-term weaknesses in Soviet livestock programs. Moreover, the sharp fluctuations in grain output and continued expansion of grain exports could make it difficult to improve feed programs in the future.

Yearend inventories indicated a slight decrease for cattle and cows. There was a steep drop in sheep and goat numbers--due to severe winter conditions in late 1968 and early 1969--especially in Kirgizia and Kazakhstan. A sharp upturn in hog numbers after a 3-year decline reflects measures taken in recent years to rebuild herds, check foot-and-mouth disease, and meet organizational and price changes.

A lesser part of the 3-percent decline in agricultural production was attributable to the downturn in the livestock sector. Total meat production remained at the 1968 level. Cattle numbers of 95.0 million were below the 95.7 million of the previous year, although average live weight per animal did increase 18 kilograms over 1968. Sheep and goat numbers dropped 7 percent to 136.3 million, the lowest level since 1966. Average live weight reportedly increased about 2 kilograms. Hog numbers increased 7.1 million over the 1968 census of 49 million and average live weight was up 7 kilograms. In response to bonus incentives, poultry numbers increased moderately to an estimated 550 million compared with 1968's 544 million.

The reported increases in average live weights of livestock in the past year should be viewed as a small step forward in feeding efficiency. Limited data, however, still suggest that feed inputs per animal are well below the high U.S. levels. Costs of production have been increasing the past 2 years. According to Soviet reports, it cost 16 rubles to produce 1 centner of milk in 1968, up 4 percent from the 1965-68 average.

Meat production (carcass weight) was down in 1969 in some republics, but output for the country remained at the 11.6-million-ton level reached in 1968. Government purchases amounted to 7.3 million tons, down 100,000 tons from the previous year. Pork purchases increased, but mutton and beef declined. Lower commercial sales were reported in the Ukraine, RSFSR, and Kazakhstan, and total sales for the year were only 96 percent of the 1968 level. This decline suggests that increased sales at higher prices were made in collective farm markets.

Milk production declined to 80.6 million tons--reflecting the drop in cow numbers during the year. Egg output increased to 37 billion, up 4 percent over 1968. The continued uptrend in egg output since 1966 implies some improvement in feeding efficiency and larger commercial production. Wool production declined in 1969 to 390,000 tons, reflecting the heavy loss of sheep during the past winter.

AGRICULTURAL POLICY AND THE THIRD COLLECTIVE FARM CONGRESS

In Soviet agriculture great emphasis has been placed on achieving increased productivity per hectare of arable land and reducing operational costs on state farms. Cost accounting, a type of financial autonomy through farm investments from farm profits, was introduced in 1967 on a few experimental state farms. Approximately 800 of the 13,300 state farms were using the system in 1968 and profitability on half of these farms in January 1969 was from 20 to 40 percent higher than in 1966. There are still problems with the slow progress in construction and land improvement on state farms. Problems related to

profits and increased costs continue to plague management, and directors of state farms have been criticized for using farm profits for labor bonuses rather than for capital investments.

Early in 1969, significant price increases were announced for cotton and poultry. These incentives were partly responsible for the reported 3-percent increase in cotton area and the 10-percent increase in poultry numbers on collective and state farms over the midyear 1968 level. Due to delivery problems and local shortages, an upward adjustment was placed on vegetables and fruits in state markets in June to stabilize the market.

In September 1969 a new Ministry of State Purchasing was formed. This agency will set and collect payments for government purchases and determine quality standards.

In December, elected representatives of the USSR's collective farms adopted a new collective farm charter. The charter, drafted by the CPSU Central Committee in April, had been reviewed and discussed by each collective farm. Although numerous proposals were made to amend the draft, the ratified document reflects few of them and remains a conservative model for managing the country's 36,000 collective farms.

Recent agricultural reforms, such as the guaranteed minimum monthly wage, the creation of larger incentives for above-plan performance, and the introduction of a unified system of social security benefits, have been incorporated in the new charter. In addition, the 1969 charter sanctions private plot activity, inter-kolkhoz ventures, and auxiliary enterprises on collective farms. Another recent area of reform is the proposed tie-in of farm wages with labor productivity.

The private sector presently contributes about 30 percent of gross agricultural output in the USSR. The new charter basically affirms the important role of private plots in the production of livestock and livestock products on the collectives although they are dependent on grain from the socialized sector. On only 3 percent of total sown area, private farms produce roughly 40 percent of the eggs, 47 percent of the potatoes, 20 percent of the meat, and 13 percent of the vegetables in the USSR. The charter states that each private plot may be no larger than half a hectare--smaller than allowed under the 1935 charter but larger than the present size on some farms.

Private plots are located on the collective farmland and title is held by the collective. Some rent is collected in amounts determined by the management committee of each collective farm. Quantities of livestock allotted to private households are left up to individual collectives in the new charter, although the number of domestic animals such as cows, bees, rabbits, and poultry have been reduced from previous levels. Like under the 1935 model, the collective farm management helps private farmers acquire feed for livestock by paying them in kind. The 1969 charter also permits the sale of feed to members. This has caused some criticism since it may raise the cost of raising livestock on private plots, depending on local farm conditions.

A major controversy developed over the type of farm labor organization to be used by the collectives. Some think the link, a small, well-equipped team of

6 to 12 men assigned to one plot or crop over a relatively long time, is superior to brigades, consisting of 40 to 60 workers headed by a leader or foreman. The management and control over large brigades has been a frequent source of complaint. Nevertheless, the charter is vague and leaves the organizational unit up to the collectives, probably because some officials consider links to be too independent and thus an ideological threat. Reformists are looking for other ways to improve labor efficiency, but no radical departures from the old work system are being made.

Ignored were moves to create a national collective union, or a large association of collective farms to oversee construction projects and manage agro-industrial enterprises. Instead, weak collective "councils" will be elected locally, offering no possible threat to the Ministry of Agriculture's authority over the collective farm structure.

The new charter then is limited in scope and construction. It allows authorities to control the pace of change which is occurring in the collective farm sector. Nevertheless, it incorporates several major policy changes made on the collectives since the last formal charter appeared in 1935.

LAGS IN INVESTMENT

Realized returns from the accelerated emphasis on agricultural capital inputs during the 1960's have been slower than originally anticipated. Recognizing this shortcoming, Soviet leaders, without reducing emphasis, have introduced more moderate goals for 1970 in areas where progress is slow.

Productive investment (excluding buildings for social purposes) in the agricultural sector has been growing at an annual rate of about 11 percent since 1960. The announced plan for total agricultural productive investment in 1970 is 14.7 billion rubles, a 10.7-percent increase over 1969's estimated 13.3 billion rubles. This implies interest in maintaining a favorable investment posture in agriculture, although no significant increases are planned for working capital inputs, except in mineral fertilizer.

Over half of productive agricultural investment is in construction, which was hampered by high costs of materials and low labor productivity in 1969. On collective farms, a capital investment fund has been made mandatory by the new charter. Although no specific amount is mentioned, the fund takes priority over the incentive fund. N. Baybakov, Chairman of the Central Planning Organization, Gosplan, announced in his December Plenum speech, "in 1970 85 percent of the overall growth in national income should be achieved through an increase in labor productivity."

The goals for deliveries of tractors, combines and other machinery to agriculture were nearly reached, just as they were in the 3 previous years of the 5-year plan. In 1969 grain combine deliveries of 92,000 amounted to 92 percent of plan; tractor deliveries of 303,000 were 99 percent of plan. The plan for the delivery of 155,000 trucks presumably was not met, and this added to the transportation bottlenecks, made the late, wet harvest more difficult. Under 1970 plans, 312,000 tractors and 157,000 trucks are to be delivered, incorporating only modest improvements over 1969 plans.

Fertilizer deliveries in 1969 were fractionally more than planned deliveries of 38.5 million tons. The plan for 1970 is expected to reach 46 million tons. This is a revision from the original 55 million tons, but represents an important increase of 20 percent over 1969. Mineral fertilizers will be applied to potatoes, vegetables, and industrial crops as well as grains. The Volga area has been specified as the major beneficiary of the proposed increase.

CONSUMPTION WEAK IN 1969

The upward trend in high-protein foods, characteristic of the Soviet diet since 1965, suffered a setback in 1969. Consumption levels were adequate, but supplies to city markets were irregular. There was a shortage of fresh meat, poultry, and meat products in major cities of the USSR. Many of these shortcomings can be attributed to weaknesses in the transportation and marketing systems, but the major problem is still one of production.

Vegetable and fruit production also declined slightly from 1968. Consumption of vegetables has declined 2 consecutive years, partly due to weather damage and partly to the decision to sell vegetables on kolkhoz markets where prices more nearly reflect effective demand rather than to state stores where prices are fixed at lower levels. Transportation from rural areas to procurement points is another reason for the weak supply position of fruits and vegetables. Potato consumption has been declining since 1965 due to better supplies of quality foods, meat, eggs, and milk, in the diet. However, cereals and starches contributed 54 percent of average caloric intake per day in 1967 and was estimated at about that level in 1969. The number of calories supplied by grains and potatoes is about 20 percent greater for collective farmers than for other workers.

Vegetable oil crops have recently reached a production level consistent with "self-sufficiency" in Soviet terms. This suggests that consumption is adequate to meet an average worker's daily caloric needs. Due to higher oil content of seeds and better extraction methods, the production of vegetable oils, especially sunflowerseed oil, has increased greatly in the past 3 years. Consumption, however, declined after 1966 due to a government policy to increase exports. Surplus butter has substituted for vegetable oils. Production of butter amounted to 1.1 million tons in 1968. Per capita consumption in 1968 probably rose to about 4.5 kilograms. A reduction in butter stocks at the end of 1969 due to increased consumption may be one cause for significant increases of butter imports in 1970. Prices during the year were stabilized slightly below the 1968 level.

Per capita Soviet meat and poultry consumption (which includes lard) reached 48 kilograms in 1968 but fell to 46 kilograms in 1969. Per capita meat consumption is still only about half that of the United States. As a result of the decline in meat availability, poultry and meat prices fluctuated in 1969. Prospects are not good in 1970 for reaching the planned meat consumption of 51 kilograms per capita.

Several factors have contributed to the present lag in livestock products consumption. Livestock and poultry holdings on the household plots, which

contribute about 40 percent of meat and milk output, declined during 2 consecutive years. Slow progress in collective and state farm feed programs (although feed supplies are generally improving), and lingering effects of foot-and-mouth disease, are also factors. Ineffective marketing and poor refrigeration for storage of meat and milk products remained important factors in distribution and consumption problems.

Table 2.--USSR: Per capita consumption of selected food products, 1960, 1965, 1966-69

Commodity	1960	1965	1966	1967	1968	1969
	Kilograms					
Meat and fat.....	40	41	44	46	48	<u>1</u> /46
Milk and milk products..	240	251	260	274	285	288
Eggs (numbers).....	118	124	132	138	144	149
Fish and fish products..	9.9	12.6	12.9	13.2	14.3	n.a.
Sugar.....	28.0	34.2	35.3	36.7	37.4	n.a.
Vegetable oil.....	5.3	7.1	6.3	6.5	6.5	n.a.
Potatoes.....	143	142	135	131	131	n.a.

1/ Estimated from N. Baybakov's Supreme Soviet Speech.

n.a. = not available.

Sources: Narodnoye khozyaystvo SSSR v, 1967, 1968.

AGRICULTURAL TRADE STILL STRONG

Agricultural trade in the 1960's became increasingly important to the Soviet Union as a source of hard currency earnings. Commodity trade not only increased, but select commodities--sunflowerseed, oil, and cotton--are now competing with U.S. products. While a substantial share of the Soviet grain trade is still directed to Eastern Europe, grain has also appeared in other commercial markets of the world in recent years. The downturn in output of most commodities in 1969 will probably depress trade levels in 1970.

Agriculture's share of total exports was 15 percent and its share of total imports about 18 percent in 1968. The USSR holds a net export position in grains, cotton, sunflower oil, and fresh-frozen meat. This position was held during 1969 largely due to record government purchases during 1968 for domestic stocks and exports. Although total exports are expected to decline in 1970, the Soviets can probably maintain a net export position in these products.

In June 1966, the Soviet Union contracted to buy 9 million tons of wheat from Canada over the next 3 years. In June 1969, about 3.5 million tons of wheat remained to be bought. After a conspicuous delay, the USSR agreed in December to purchase the remaining wheat, 2 million tons of which will be delivered by December 1970. Part of this wheat has already been assigned for

export to Cuba, and part could go to the Far Eastern regions of the USSR or to meet other export commitments in 1970.

The need to accumulate wheat stocks is probably strong at this time. In 1968, 49 million tons of wheat were purchased by the state, or 10 million tons more than the domestic wheat requirement. In 1969, an estimated 37 million tons were purchased, about equal to the domestic needs.

Wheat trade in hard currency markets will probably be reduced in 1970. Commitments to Czechoslovakia and East Germany for 1970 have already been set at about 2.5 million tons, but it is possible that feed grains could be substituted for some of this wheat.

Greatly increased government purchases of cotton, sugar, and vegetable oil since 1964 have permitted the Soviets to make impressive gains in exports of these commodities up and through 1969. Sugar was exported primarily to the Sudan, Eastern Europe, and the Middle East in 1968. Imports of raw sugar from Cuba have contributed to the Soviet export position of refined sugar. Under terms of the 6-year Soviet-Cuban agreement signed in 1964, the Soviets would purchase 5 million tons of raw sugar from Cuba during the years 1968 through 1970. Purchases have been considerably less, but if Cuba approaches the 10 million-ton goal this year, it is possible that the 5 million-ton delivery could be met. Cotton exports exceeded 500,000 tons in 1968 and 1969, but will probably drop in 1970 due to lower quality and reduced production. Principal markets are Eastern Europe, Japan, and Great Britain.

Exports of vegetable oils, 75 percent of which is sun oil, declined by about 100,000 tons in 1969. Oil exports could decrease further in 1970 due to the 6-percent drop in sunflowerseed production. Western markets for sun oil include the Netherlands, Italy, and West Germany. Sunflowerseed exports are confined mainly to East Germany, Czechoslovakia, and Japan.

Shortages of meat should cause a rise in poultry and beef imports during the first half of 1970, primarily from France, New Zealand, and Australia. The Soviets have contracted with Australia for the purchase of 30,000 tons of beef quarters and mutton for delivery in May. This reflects the weakened position of both internal and East European suppliers. Imports will probably serve as a stop-gap measure until the domestic production improves.

While the share of Eastern Europe in USSR's total agricultural trade has been increasing slowly since 1966, the increased trade with such Western markets as Great Britain, France, and Japan has been more dramatic, reflecting the desire for hard, negotiable currencies.

Agricultural trade with the less developed countries and China has been decreasing since 1966. U.S. agricultural exports to the USSR amounted to \$5.3 million in 1968--primarily hides and skins. Soviet exports to the United States were \$2.2 million--mainly cotton linters and bristles. In 1969 U.S. exports increased to \$11.6 million.

OUTLOOK

Last year's weak agricultural performance is expected to affect 1970 trade in certain critical areas. A prospective decrease in cotton exports would break the uptrend evident since 1967. The low sugar beet output in 1969 is expected to reduce refined sugar production to about 7.6 million tons, well below the planned level of 9.7 million tons. This decrease could reduce the level of exports in 1970. Raw sugar imports from Cuba will probably increase.

Vegetable oil production in 1969 was about 200,000 tons below that of 1968. Export supplies of sunflower oil in 1969 were probably lower than in 1968. Exports of sun oil in 1970 are expected to continue at a reduced level.

In 1970, the Soviet Union will complete the current 5-year plan (1966-70) and lay the groundwork for the next 5 years. The planned 1966-70 growth rates for agricultural production, though more realistic than Khrushchevian aims, did not fully take into account the rigidities of economic institutions and the vagaries of weather. Even with increased investment in agriculture, the final results of the 5-year plan showed a sluggish response. And output did not match increased consumption demands of a growing population.

Grain is still the foremost area of concern. On a total area of 125 million hectares, output in 1970 is planned to reach a record 174.5 million tons. Planned purchases of grain are not expected to exceed the 1968 level of about 70 million tons, but should be enough to insure adequate stocks, and to at least maintain the past level of exports.

Procurement plans for 1970, except grain, sugar beets, and wool, are at record levels. The 9.8-percent planned increase in cotton will raise procurements to 6.3 million tons and could improve the Soviet export position in 1971. Sunflowerseed procurements are planned to be slightly above the 1968 level-- 5.2 million tons. Meat production (including fats and offals) is planned to reach 12.1 million tons. Higher planned input levels of mineral fertilizer (46 million tons), representing a 20-percent increase over 1969, could improve crop performance in 1970. Plans for machinery deliveries are only marginally above those for 1969. Effects of land improvement and increased machinery inputs will probably not appear until the next 5-year period.

Sowing of 1970 winter grains started slowly. Lack of soil moisture in Moldavia, the Southwestern Ukraine, and in Krasnodar Kray slowed germination and growth in the fall months. The weather has been quite mild, however, in much of the European part of the USSR, and January snows have improved the snow cover in parts of the Ukraine.

EASTERN EUROPE

AGRICULTURAL OUTPUT DOWN IN 1969

Agricultural output in Eastern Europe last year declined about 1 percent in the USDA index--the first decline since 1962 (table 1). Summer drought on potatoes, sugar beets, and other crops in the northern countries--Czechoslovakia, East Germany, and Poland--was mainly responsible. The southern countries--Bulgaria, Hungary, Romania, and Yugoslavia--recovered in 1969 from the drought-reduced 1968 harvests, but better results in crop production there did not offset lower crops in the north. Lower livestock inventories at the start of 1969 in most countries retarded growth in livestock product output.

Despite the decline in aggregate production in 1969, output remained on the generally higher plateau achieved since 1965 and was about 18 percent higher than the 1961-65 average in the USDA index. Yugoslavia and Hungary achieved record levels of production, growing faster than planned. Bulgaria and Romania partially recovered from the reduced 1968 level, but did not achieve planned growth and remained below 1966 and 1967 levels. Output declined moderately in Czechoslovakia and Poland and sharply in East Germany.

Commodities registering the largest increases in 1969 were fruit, corn, sunflowerseed, and barley (table 12). Slight increases were made for wheat, milk, and eggs. Rapeseed production dropped to less than half the level of the previous year. Major declines were noted for sugar beets, potatoes, tobacco, and rye; wool, vegetable, and meat output declined slightly.

DROUGHT AFFECTS FEED SUPPLIES IN NORTHERN COUNTRIES

Poland, East Germany, and Czechoslovakia experienced hot, dry weather throughout July and in the first half of August. This led to widespread problems for the agricultural sector, especially animal husbandry. Reduced production of potatoes and forage crops, combined with increased livestock inventories in Poland and East Germany, created a larger gap between feed supplies and needs. The impact was less severe in Czechoslovakia, where livestock numbers were low compared with recent years, although the poor potato crop was a deterrent to herd rebuilding programs.

A major reduction in feed supplies occurred as the drought cut potato production. Output declined from 70 million tons in 1968 to an estimated 59 million tons in 1969. Yields suffered, but reduced area (table 11)--a long-term trend--accentuated the drop. Although important for human consumption, about half of the potatoes in these countries go into livestock feed, accounting for roughly one-fifth of the total feed units in some years. Various measures were taken to conserve supplies, such as restricting exports

and industrial use, and consumers were assured adequate quantities. The bulk of the loss was expected to be felt by livestock feeders.

Grain supplies were affected less severely by the drought. Total production equaled the record 1968 level of 33.4 million tons. Rye barely held the leading position, as output declined about 4 percent to 10.8 million tons. Wheat was a record 10.4 million tons. Barley production also was a record. Rye and wheat, as well as feed grains, are used extensively for livestock feeding in these countries. Roughly half of grain supplies are used for feed, accounting for more than one-fourth of total feed units in most years.

About half of livestock feed of the northern countries is derived from pasture and from hay, straw, green forage, feed roots, and other forage crops. These crops were severely affected by the drought. Pastures dried up and sowing of catch crops was hindered by lack of moisture. But improved rainfall after mid-August and a long fall enabled longer grazing of pastures and development of catch crops.

In Poland, where private farms still predominate, the government offered direct assistance to farmers to counteract the drought. Credit repayments were postponed 12 months and additional credits were offered for seeds and fertilizer. Government sales of feed concentrates were planned to increase to 4 million tons in 1969/70 compared with 3.5 million tons in 1968/69 (about three-fifths was purchased by private farmers). Planned government purchases of grain from farms were reduced by 350,000 tons and additional imports of grain, oil meal, fish meal, and soybeans were promised.

Through increased imports of grains and other feedstuffs, the northern countries expect supplies to be sufficient to maintain livestock herds at relatively constant levels. Imports of 5.7 million tons of grain in 1968 included 3.5 million tons of wheat and 1.9 million tons of feed grains (table 3). Grain imports likely declined in 1969 following the record 1968 harvest. Due to smaller feed availabilities from the 1969 crops, imports are expected to exceed 1968 purchases by as much as a half-million tons. Poland and East Germany probably will increase their imports sharply.

The Soviet Union has been the major supplier of grain to these countries, providing about 60 percent of the total and more than 80 percent of the wheat in 1968. The United States supplied about 15 percent of the total, but almost half of the feed grains. Poland, however, purchased 60 percent of its grain from western sources and only 40 percent from the USSR in 1968. France supplied about 30 percent of Polish grain imports, both barley and wheat, and continued to sell grain to Poland in 1969. In late 1969, Poland also extended its agreement with Canada to purchase 400,000 tons of wheat and barley by mid-1971. In January 1970, Czechoslovakia announced that the USSR would supply 1 million tons of grain, largely wheat, by midsummer. The USSR agreed to sell 1.5 million tons of grain to East Germany during 1970, including 1.2 million tons during the first half year. Purchases of EC (European Community) feed wheat at relatively low prices reportedly were contracted by the northern countries during 1969. During 1969, the United States sold 575,000 tons of feed grains, excluding transshipments, valued at \$30 million, to the northern countries of Eastern Europe. East Germany and Poland were the principal markets.

Table 3.--Eastern Europe: Imports of grains and selected feedstuffs by the northern countries, average 1961-65, annual 1966-68

Item	1961-65 average	1966	1967	1968 ^{1/}
	----- 1,000 tons -----			
<u>Wheat</u>				
Czechoslovakia.....	1,142	1,032	1,205	1,371
East Germany.....	1,208	1,350	1,184	1,075
Poland.....	1,701	1,567	1,353	1,068
Total.....	4,051	3,949	3,742	3,514
<u>Feed grains</u>				
Czechoslovakia.....	542	698	396	400
East Germany.....	476	529	583	661
Poland.....	752	444	694	880
Total.....	1,770	1,671	1,673	1,941
<u>Total grains ^{2/}</u>				
Czechoslovakia.....	1,865	1,876	1,847	1,827
East Germany.....	1,930	1,998	1,817	1,783
Poland.....	2,713	2,148	2,112	2,071
Total.....	6,508	6,022	5,776	5,681
<u>Oilmeal and cake</u>				
Czechoslovakia.....	114	205	250	260
East Germany.....	129	236	345	379
Poland ^{3/}	116	184	216	299
Total.....	359	625	811	938
<u>Fish meal</u>				
Czechoslovakia.....	41	67	75	65
East Germany.....	49	95	80	97
Poland.....	35	67	85	108
Total.....	125	229	240	270

^{1/} Preliminary.

^{2/} Includes wheat, feed grains, rye, and rice.

^{3/} Includes some milling byproducts.

Oil cake and meal imports by the northern countries have grown steadily, climbing from 543,000 tons in 1965 to an estimated 938,000 tons in 1968. The United States supplied 107,000 tons (primarily to Poland), valued at \$10.2 million. U.S. sales during 1969 slipped to \$8.5 million. Total imports of oil cake and meal during 1970 by the northern countries probably will continue to grow and should exceed 1 million tons.

Increased feed requirements resulting from the 1969 drought in the northern countries of Eastern Europe will have a major impact on import costs. Grain and other livestock feeds occupy a leading position in the agricultural imports of these countries. 5/

GOOD GRAIN CROPS IN SOUTHERN COUNTRIES

Total grain production in the southern countries--Bulgaria, Hungary, Romania, and Yugoslavia--in 1969 was an estimated 41.7 million tons, slightly below the 1966 record and 9 percent higher than the drought-reduced 1968 crop. Production was more than one-fourth above the 1961-65 average. Compared with 1968, wheat output increase only 2 percent, and was 10 percent less than the 1967 record; corn output increased 14 percent and equaled the 1966 record. Corn and wheat accounted for 53 and 36 percent, respectively, of the estimated 1969 output of grain in the southern countries.

Although total performance was clearly better than in 1968, the principal improvements were in Yugoslavia and Hungary. Wheat production reached record levels in both countries and corn production was a record in Hungary and near-record in Yugoslavia. Grain output was higher in Bulgaria and Romania, but well below 1966 and 1967 levels.

Grains for the 1969 harvest entered the winter in good condition and overwintered normally, except in Romania where winter damage reduced the wheat area. Total grain area remained about the same as in 1968. Spring planting was delayed by cold weather. The summer was cool and rainy except in Bulgaria, where dry weather set in after June. Rainfall was unusually heavy in Romania.

Improved levels of grain production boosted livestock feed supplies. Grains play a more important role and potatoes a relatively minor one in the feed balances of these countries. Pasturing was delayed in the spring, but subsequent favorable precipitation, except in Bulgaria, provided additional benefits as pastures were lush and hay crops yielded well.

5/ Most East European countries do not publish value data on commodity trade. Estimated values are published by FAO in its Trade Yearbook. The most recent estimates are for 1967. In that year, total grain imports by the northern countries were valued at an estimated \$419 million. Wheat and feed grains accounted for \$279 million and \$100 million, respectively. Imports of oil cake and meal were valued at an estimated \$77 million.

Human consumption of grain in the southern countries increased through the mid-1960's, but has begun to decline. Average consumption estimated at about 180 kilograms per capita in 1967 was almost triple the U.S. level. Recent declines may offset population growth of about 0.8 percent per year, permitting future increases in domestic supplies to be used for livestock feeding. Some countries are using larger quantities of wheat for livestock feed. For example, Hungary increased feed wheat production from about 100,000 tons in 1965 to more than 600,000 tons in 1969.

The better 1969 grain harvest should extend the uptrend of grain exports and downtrend of imports in the southern countries which developed during the 1960's (table 4). During 1961-65, the southern region was an annual net importer of more than 600,000 tons of grain, primarily wheat. A net export position--reaching about 3.5 million tons in 1967--has been maintained since 1965. Net exports declined in 1968 and 1969 as a result of the poor 1968 harvest. The better 1969 crop should boost net exports to more than 2.5 million tons--about two-thirds corn and one-third wheat. Few imports are anticipated, except about 100,000 tons of rice.

Yugoslavia and Hungary made especially abrupt shifts in grain trade in 1969. Yugoslavia's wheat imports, which had been averaging almost 1 million tons during the first half of the 1960's, were discontinued in 1968 and the 1969 crop provided the first surplus since World War II. A large crop and lower internal prices were expected to boost corn exports. A corn export fund to counter the gap between world prices and government-guaranteed prices also was proposed. Hungary imported nearly 500,000 tons of grain--much of it feed wheat--during 1968, but the 1969 crop produced a surplus of about 700,000 tons, most of which has been exported. Exports by Romania and Bulgaria may be less than in recent years.

LIVESTOCK PRODUCT SHORTAGES

Livestock production in Eastern Europe in 1969 generally showed the least annual growth since the reverses of 1963. Output of most products, however, was well above the 1961-65 average. The lack of growth, nevertheless, had a substantial effect on trade and consumption patterns.

Inventories of most major categories of livestock in Eastern Europe were lower at the start of 1969 than in either of the previous 2 years (table 13). For the region, hogs were down 3.3 percent from the previous year, and sheep and cattle numbers had declined 2.0 percent and 1.2 percent, respectively. Poultry numbers increased a slight 0.7 percent. Inventories of the major categories of livestock had generally declined in all countries, except Poland and East Germany (although hog numbers increased in Romania). Sharp declines of 13 percent in Hungary and Yugoslavia left hog inventories at close to the lowest levels of the 1960's. Hog inventories declined 8 percent in Bulgaria and Czechoslovakia. The major decline in cattle numbers was experienced by Yugoslavia with an 8-percent drop. Poultry numbers also were substantially lower in Bulgaria and Hungary.

Table 4.--Eastern Europe: Grain trade of the southern countries, average 1961-65, annual 1966-68

Item	Exports				Imports			
	1961-65 average	1966	1967	1968 <u>1/</u>	1961-65 average	1966	1967	1968 <u>1/</u>
	----- <u>1,000 tons</u> -----							
<u>Wheat</u>								
Bulgaria.....	11	400	534	200	175	315	13	233
Hungary.....	55	1	170	115	278	152	217	310
Romania.....	<u>2/</u> 215	864	1,221	1,176	<u>3/</u> 83	0	0	0
Yugoslavia.....	0	0	0	0	942	1,357	409	79
Total.....	281	1,265	1,925	1,491	1,478	1,824	639	622
<u>Feed grains <u>4/</u></u>								
Bulgaria.....	114	188	310	200	171	141	27	25
Hungary.....	54	43	20	19	336	96	10	149
Romania.....	<u>2/</u> 924	413	1,086	375	0	0	0	0
Yugoslavia.....	132	445	899	424	71	1	0	3
Total.....	1,224	1,089	2,290	1,018	578	238	37	177
<u>Total grains <u>5/</u></u>								
Bulgaria.....	139	593	849	405	372	475	56	283
Hungary.....	111	52	198	134	639	289	302	477
Romania.....	1,160	1,303	2,339	1,551	113	30	32	30
Yugoslavia.....	132	445	899	424	1,037	1,385	419	110
Total.....	1,542	2,393	4,285	2,514	2,161	2,179	809	900

1/ Preliminary.

2/ Partially estimated.

3/ No sizable imports, except 401,000 tons in 1964.

4/ Exports are largely corn.

5/ Includes wheat, feed grains, rye, and rice.

Reductions in livestock inventories generally continued during 1969. Most countries have not reported the end-of-year livestock census numbers, but preliminary USDA estimates suggest that cattle inventories declined 2 percent and hog and sheep inventories declined about 1 percent. In contrast to 1968 when widespread drought played a major role in herd cutbacks, the declines in 1969 generally can be attributed to a strong demand for meat, which impeded the rebuilding of livestock herds. Insufficient profitability and lack of incentives on the small private plots also have been blamed for some liquidation of holdings. Disease problems contributed to losses in some countries.

Milk production was the brightest spot in the livestock sector in 1969. Cow numbers held more stable than other categories of livestock, and improved feed supplies in several countries boosted milk yields. Milk output increased in most countries and was up an estimated 1 percent for the region (table 14). Relatively slow growth in butter output during the second half of the 1960's suggests increasing utilization of fresh milk and other milk products.

Egg production in the region also probably increased more than 1 percent, although lower poultry numbers in Bulgaria and Hungary reduced output there. A slight improvement in the rate of lay generally was noted.

Wool production declined in 1969 as a result of smaller sheep herds at the first of the year and losses from severe winter weather in the southern countries.

Meat output declined slightly in the region (table 5). ^{6/} Poultry meat output made slight growth, primarily at the expense of pork. Substantial increases in total meat production are estimated for Poland and East Germany, and slight gains for Hungary and Romania. The sharpest declines were incurred by Bulgaria and Yugoslavia, followed by Czechoslovakia.

The failure of most countries in 1969 to significantly increase output of meat made it difficult to meet consumer demands. The shortages required increased imports by some countries and led to reduced exports by others.

Per capita consumption of meat in the region in 1967 averaged about 47 kilograms (one-half the U.S. level), ranging from 28 kilograms in Yugoslavia to 63 kilograms in Czechoslovakia (table 6). Consumption of eggs ranged from 96 in Yugoslavia to 246 in Czechoslovakia (315 in the United States) and of milk and dairy products (excluding butter), from 105 kilograms in Hungary to 258 kilograms in Poland (161 kilograms in the United States). Consumption of livestock products generally increased and consumption of potatoes decreased in the 1960's. Grain consumption declined after the mid-1960's.

^{6/} Because of definitive differences in meat carcass weights among the various countries, the live weight data are shown in table 5 to provide greater comparability. The reported data on live weight usually include live animal exports in recognition of the importance of production for export in these countries.

Table 5.--Eastern Europe: Production of meat (live weight at slaughter),
average 1961-65, annual 1966-69 1/

Item	Czecho- slovakia	East Germany	Poland	Northern countries	Bulgaria	Hungary	Romania	Yugo- slavia	Southern countries	Eastern Europe
	----- <u>1,000 tons</u> -----									
<u>Beef and veal</u>										
1961-65 average...	425	414	809	1,648	141	258	358	425	1,182	2,830
1966.....	482	499	845	1,826	190	264	388	453	1,295	3,121
1967.....	528	539	968	2,035	196	284	427	504	1,411	3,446
1968.....	586	559	1,050	2,195	217	306	481	572	1,576	3,771
1969 <u>2/</u>	554	586	1,100	2,240	196	343	481	489	1,509	3,749
<u>Pork</u>										
1961-65 average...	607	852	1,555	3,014	219	656	406	637	1,918	4,932
1966.....	642	1,022	1,709	3,373	262	694	501	619	2,076	5,449
1967.....	647	1,052	1,687	3,386	261	655	541	642	2,099	5,485
1968.....	688	1,093	1,651	3,432	285	750	559	683	2,277	5,709
1969 <u>2/</u>	655	1,110	1,720	3,485	257	709	558	635	2,159	5,644
<u>Poultry</u>										
1961-65 average...	71	86	124	281	48	183	95	89	415	696
1966.....	79	91	159	329	60	211	107	119	497	826
1967.....	91	96	166	353	76	228	125	129	558	911
1968.....	112	102	178	392	78	231	151	143	603	995
1969 <u>2/</u>	119	108	185	412	71	250	166	147	634	1,046
<u>Total meat ^{3/}</u>										
1961-65 average...	1,148	1,410	2,568	5,126	541	1,137	982	1,268	3,928	9,054
1966.....	1,239	1,661	2,784	5,684	685	1,207	1,128	1,294	4,314	9,998
1967.....	1,302	1,731	2,891	5,924	715	1,211	1,237	1,388	4,551	10,475
1968.....	1,418	1,798	2,962	6,178	768	1,332	1,354	1,530	4,984	11,162
1969 <u>2/</u>	1,360	1,848	3,095	6,303	693	1,348	1,364	1,390	4,795	11,098

1/ Including live animal exports; does not include changes in live weight of herds. 2/ Preliminary.
3/ Including poultry.

Table 6.--Eastern Europe: Consumption of major categories of foodstuffs, annual 1960, 1965-68

Item	Northern countries			Southern countries			
	Czecho- slovakia	East Germany	Poland	Bulgaria	Hungary	Romania	Yugo- slavia
	----- Kilograms -----						
<u>Grain 1/</u>							
1960.....	123	102	147	199	136	n.a.	186
1965.....	127	100	143	203	139	n.a.	194
1966.....	124	101	139	208	135	n.a.	191
1967.....	120	99	138	196	134	n.a.	187
1968.....	119	97	135	n.a.	132	n.a.	n.a.
<u>Potatoes</u>							
1960.....	100	174	223	n.a.	98	n.a.	70
1965.....	93	156	215	n.a.	84	n.a.	63
1966.....	111	156	211	n.a.	85	n.a.	65
1967.....	120	156	207	n.a.	85	n.a.	66
1968.....	121	150	201	n.a.	80	n.a.	n.a.
<u>Vegetable oil 2/</u>							
1960.....	7.7	12.5	3.5	n.a.	1.3	n.a.	3.2
1965.....	7.8	14.6	5.7	n.a.	2.0	n.a.	6.4
1966.....	8.1	14.4	5.6	n.a.	2.0	n.a.	6.8
1967.....	8.2	14.0	5.5	n.a.	2.0	n.a.	7.1
1968.....	8.4	13.8	5.5	n.a.	2.2	n.a.	n.a.
<u>Meat 3/</u>							
1960.....	56.8	55.0	42.5	29.1	47.6	n.a.	26.4
1965.....	61.7	58.7	49.2	39.6	51.6	n.a.	26.7
1966.....	62.0	60.1	51.0	42.4	50.0	n.a.	26.1
1967.....	62.9	61.4	52.3	43.4	51.6	n.a.	28.3
1968.....	68.4	63.0	52.2	n.a.	53.8	n.a.	n.a.
<u>Milk 4/</u>							
1960.....	173	5/97	234	95	114	n.a.	5/80
1965.....	180	5/97	240	107	97	n.a.	5/70
1966.....	184	5/99	254	116	101	n.a.	5/76
1967.....	191	5/100	258	122	105	n.a.	5/79
1968.....	200	5/102	261	n.a.	111	n.a.	n.a.

1/ In terms of milled grain; converted at 75 percent when expressed in terms of whole grain in official country data; milled rice is included.

2/ Generally includes margarine and shortening at product weight.

3/ Generally includes poultry and meat products, but excludes fish and fats.

4/ Excludes butter, but includes other dairy products in terms of whole milk.

5/ Fresh milk only.

The sharpest jump in meat consumption in the latter part of the 1960's occurred in the major meat importing country--Czechoslovakia. In particular, strong income gains in 1968 and 1969 led to increased demand for livestock products. Per capita consumption of meat increased 5.5 kilograms, or 9 percent, in 1968. Despite wage controls, estimates suggest that per capita consumption could have increased more than 10 percent in 1969 if supplies permitted. Inadequate supplies, however, held consumption growth to 2 or 3 percent. Estimated demand for meat in 1969 was almost 200,000 tons greater than in 1967, but meat production had not caught up with demands in 1968 and declined in 1969. Acute shortages of eggs also were reported during 1969. At the same time that needs for meat and eggs were increased in Czechoslovakia, reduced availabilities in other Communist countries--the traditional suppliers--put a brake on their exports to Czechoslovakia. As a result, the Czechoslovak Government announced plans in 1969 to step up imports of livestock products from non-Communist countries.

Gaps between supply and demand of meat during 1969 in most East European countries exerted pressure to increase retail prices. The central price-fixing authorities apparently weathered this pressure in most countries. For example, in Czechoslovakia basic meat cuts were not affected by a round of retail price increases in May. Even a reduction in retail poultry prices was announced in Bulgaria. On the other hand, in the more market-oriented Yugoslav economy, continued increases of retail prices reportedly made purchases difficult for the average consumer.

The brunt of the meat shortages probably was felt by the consumer, since meat exports continued to be an important source of foreign exchange and the leading agricultural export of the region. ^{7/} Growth of fresh meat exports leveled off in 1968, largely due to reduced beef sales by Yugoslavia--the leading meat exporter in the region (table 7). Decreased exports largely were the result of high import duties imposed by Yugoslavia's major market--the EC. Through October 1969, exports of Yugoslav beef and live cattle continued below 1968 levels, although this decline was attributed to lower cattle numbers as well as to the EC barriers. In February 1970, Yugoslavia and the EC concluded a 3-year trade agreement, to be effective May 1, granting improved access to the EC market for Yugoslav baby beef.

Difficult access to the EC market was also faced by other countries in the region. The impact has been much less marked than in the case of Yugoslavia, reflecting the greater control over export prices, the relatively greater importance of intraregional and Soviet trade, and some success in locating new markets, particularly for poultry. For Hungary, the second leading exporter of fresh meats, and the leading exporter of slaughter cattle in the area, trade continued well in 1969. Poultry exports increased slightly and slaughter cattle exports reportedly jumped more than 40 percent. But to counter consumer

^{7/} Based on the most recent FAO estimates (with allowance for sales by East Germany to West Germany). In 1967, exports of fresh, chilled, or frozen meat by the region were valued at \$329 million (compared with \$166 million of imports). The total value of exports of meat, meat products, and live animals was almost \$700 million.

Table 7.--Eastern Europe: Trade in fresh, chilled, or frozen meat, average 1961-65, annual 1966-68

Item	Czecho- slovakia	East Germany	1/ Poland	Northern countries	Bulgaria	Hungary	Romania	Yugo- slavia	Southern countries	Eastern Europe
----- 1,000 tons -----										
<u>Total meat</u>										
<u>Exports</u>										
1961-65 average:	7.6	27.1	71.8	106.5	17.4	65.1	18.4	98.2	199.1	305.6
1966.....:	8.0	43.6	49.8	101.4	30.0	86.6	31.1	116.0	263.7	365.1
1967.....:	17.2	47.9	62.1	127.2	38.2	90.1	56.8	107.3	292.4	419.6
1968 2/.....:	15.0	50.0	60.8	125.8	40.0	95.0	60.0	97.4	292.4	418.2
<u>Imports</u>										
1961-65 average:	82.1	93.2	25.0	200.3	7.3	31.3	1.7	1.1	41.4	241.7
1966.....:	89.0	63.5	49.4	201.9	8.5	31.0	0.3	9.7	49.5	251.4
1967.....:	88.2	54.5	40.5	183.2	25.6	58.2	0.4	32.9	117.1	300.3
1968 2/.....:	88.8	50.0	75.2	214.0	5.0	18.1	---	5.6	28.7	242.7
<u>Poultry 3/</u>										
<u>Exports</u>										
1961-65 average:	1.6	n.a.	16.0	4/17.6	7.6	28.9	n.a.	2.7	4/39.2	4/56.8
1966.....:	3.3	n.a.	18.8	4/22.1	10.1	34.5	n.a.	1.0	4/45.6	4/67.7
1967.....:	3.7	n.a.	17.3	4/21.0	17.0	39.1	n.a.	1.9	4/58.0	4/79.0
1968 2/.....:	3.7	n.a.	18.0	4/21.7	20.0	47.3	n.a.	1.1	4/68.4	4/90.1
<u>Imports</u>										
1961-65 average:	8.2	n.a.	---	4/8.2	0.1	0.3	n.a.	0.1	4/0.5	4/8.7
1966.....:	8.7	n.a.	---	4/8.7	---	---	n.a.	0.5	4/0.5	4/9.2
1967.....:	7.6	n.a.	---	4/7.6	---	---	n.a.	0.2	4/0.2	4/7.8
1968 2/.....:	5.8	n.a.	---	4/5.8	---	---	n.a.	0.1	4/0.1	4/5.9

1/ Including "interzonal" trade with West Germany.

2/ Preliminary.

3/ Included in total meat.

4/ Excluding East Germany and Romania.

pressures, the government in early 1970 announced that pork imports will be increased. Poland is the leading exporter of canned meats, followed by Yugoslavia, and both rely heavily on the U.S. market for hams. Both countries showed growing sales to the United States in 1969.

Along with the emphasis to export meat, the pressures to increase domestic consumption are expected to bring even greater emphasis on the livestock sector in the plans for 1971-75. Several of the countries took steps in 1969 to boost livestock production. In Poland, price increases on hogs took effect January 1, 1970. A reduced land tax also was promised in 1970 to farmers who increase beef sales. These measures were at least partly designed to prevent drought-induced slaughter in 1969. In East Germany, the lower-priced compulsory deliveries were abolished (although farms still refund to the government a portion of receipts to be used for general agricultural development). Bonus prices for sales above the contracted level in Czechoslovakia caused excessive slaughtering of herds. Further increases in the basic prices on hogs were proposed in 1969, but, in general, a price freeze has been applied in that country. The Hungarian Government announced in December the following price increases to be effective January 1, 1970: slaughter cattle--30 percent; slaughter hogs--10 percent; slaughter sheep--20 percent (but wool down 6.5 percent); and milk--5 percent. A new set of prices on livestock in Yugoslavia, announced in July to be effective January 1, 1970, resembles the prices established in 1965, but is guaranteed only for the higher grades of animals. Bulgaria previously established higher livestock prices in 1968. Prices apparently remained unchanged in Romania.

VEGETABLE DOWNTURN, BUT FRUIT HARVEST IS A RECORD

With the onset of drought in the northern countries and continuation of the cool, rainy summer in the southern countries, concern developed in Eastern Europe about the supply of other foodstuffs. For the region, vegetable output declined slightly from 1968 output of 10.8 million tons and potatoes dropped almost 15 percent from the record 78.3 million tons in 1968. All the northern countries experienced a decline, but the sharpest was in Romania. Romanian potato output dropped 40 percent and vegetable production declined 13 percent. Despite lower production, all governments acted to secure close-to-normal supplies and assured the urban citizenry that needs would be met. In Poland, for example, exports of potatoes were reduced and vegetable imports increased.

The fruit crop also was smaller in the north, but a bumper harvest was gathered in all southern countries except Bulgaria. For Eastern Europe, production (excluding grapes) reached 7.8 million tons--about one-fifth larger than in 1968. The grape harvest increased 6 percent to a record 4.6 million tons.

In the southern countries the record fruit crop, combined with good vegetable production (except in Romania), tended to boost exports. Bulgaria and Hungary are the region's leading exporters of fruits and vegetables; these commodities contribute more than one-fourth of Hungary's agricultural export earnings. In 1969, Hungarian exports of fresh fruit jumped 60 percent to a record 350,000 tons, including 250,000 tons of apples. Results in Bulgaria

were less impressive, although production of tomatoes--the leading "vegetable" for export--grew 5 percent.

The region's wine exports also have climbed steadily, reaching 3.4 million hectoliters in 1967 and more in 1968. Bulgaria exports roughly half of the wine, followed by Hungary. Hungarian wine exports jumped one-fourth in 1969.

Despite the importance of fresh and processed fruits and vegetables in East European trade, they are largely exchanged within the Communist group and contribute little hard currency. The USSR, East Germany, and Czechoslovakia are the major buyers. Some markets have been developed in Western Europe, particularly in West Germany and the U.K.

REDUCED EXPORT AVAILABILITIES OF INDUSTRIAL CROPS

Production of oilseeds, sugar beets, and tobacco declined sharply in Eastern Europe in 1969. The declines in oilseeds and sugar beets were limited to the northern countries; output in the southern countries increased.

Total oilseed output in Eastern Europe declined 16 percent to an estimated 2.35 million tons (table 12). However, production of sunflowerseed--the major oilseed in the southern countries--jumped 11 percent to a record 1.76 million tons. The main boost came from higher yields, although area continued to expand. Exports of sunflowerseed and oil from the southern countries increased in 1968, continuing the trend since 1965. Estimated exports of 204,000 tons of sunflowerseed oil were more than four times the 1965 level, and estimated seed exports of 207,000 tons were over 40 percent above the 1965 level. Exports apparently continued to increase in 1969 and should advance in 1970. The major exporter of oil is Romania; of seed, Bulgaria. Major markets for Romanian sunflowerseed oil are the Netherlands, West Germany, and West European countries. Italy has been the main purchaser of Bulgarian sunflowerseed.

Due to heavy imports by the northern countries and Yugoslavia, Eastern Europe still is a net importer of sunflowerseed oil, despite its prominence as an exporter. Total imports of sunflowerseed oil are estimated at 267,000 tons in 1968; of seeds, 188,000 tons. And the northern countries experienced a major setback in oilseed production in 1969.

Rapeseed production declined to about 430,000 tons--40 percent of 1968 output--as a result of severe winterkill and the summer drought. The losses are expected to increase import requirements of Czechoslovakia and East Germany, which purchase primarily from the USSR. Poland had become an important exporter of rapeseed, selling 175,000 tons of seed and 52,000 tons of oil in 1968, largely to Western Europe. Sales were down substantially in 1969.

Vegetable oil consumption in most of Eastern Europe is quite low when compared with U.S. per capita consumption in 1967 of 15.9 kilograms (table 6). Consumption of animal fats generally is well above U.S. levels. A trend toward increased consumption of vegetable oils in Eastern Europe suggests that the region eventually may consume much of the expanded output.

Sugar beet production in Eastern Europe dropped 22 percent in 1969. Output fell 27 percent in the northern countries--major producers of the region--and production was lowest since 1962. A good crop in the southern countries helped cushion the fall in the region. Area declined slightly from 1968 levels--well below plantings earlier in the decade in most countries. Policies generally do not favor expansion of sugar beet area. Although the region is a major importer and exporter of sugar, foreign trade prices apparently have been sufficiently low to discourage production beyond self-sufficiency. Yields expanded sharply in the 1960's. Further area contraction is likely in surplus-producing countries.

Although the drought in the north sharply reduced sugar beet yields, a long autumn and improved weather conditions reportedly favored sugar development. Higher sugar content may offset part of the decline in sugar beet output.

Tobacco production in Eastern Europe also received a setback in 1969, falling an estimated 9 percent. Tobacco in Bulgaria--the leading producer--was seriously affected by disease on about one-fifth of the area. Bulgarian output of oriental tobacco declined 9 percent.

Tobacco is the second leading agricultural export in Eastern Europe. ^{8/} Almost all is oriental type. Bulgaria and Yugoslavia are the leading exporters. Bulgarian exports of oriental tobacco declined from 76,000 tons in 1967 to 68,000 tons in 1968, and continued downward to an estimated 60,000 tons in 1969 with a further decline likely in 1970 (table 15). Yugoslav exports also have turned down since 1965, although purchases by the United States--the major market--peaked in 1968.

CHANGES IN AGRICULTURAL TRADE

Total imports and exports of Eastern Europe continued to climb during the latter half of the 1960's, but agricultural trade patterns were irregular. The region remains a net importer of agricultural commodities, with total agricultural imports valued at an estimated \$3.5 billion and exports at \$2.8 billion in 1968. Agricultural commodities accounted for an estimated 22 percent of imports and 18 percent of exports in 1968. The total value of agricultural imports remained relatively stable from 1966 through 1968, but the share of total imports declined. The value of agricultural exports jumped from about \$2.6 billion in 1966 to a peak \$2.9 billion in 1967, but then slipped again in 1968. Total agricultural exports probably made few gains in 1969, but imports probably increased.

East Germany remained the leading importer of agricultural commodities in 1968 with imports of about \$1 billion. Czechoslovak imports stepped up 7 percent to more than \$800 million. Poland and Hungary imported roughly \$600 million and \$400 million worth, respectively. Yugoslavia had the sharpest reductions in agricultural imports--falling one-fifth to about \$250 million.

^{8/} Exports in 1967 were estimated at \$143 million; Bulgaria accounted for \$89 million.

Bulgaria held first place as an agricultural exporter with sales valued at more than \$700 million in 1968. Romanian agricultural exports slipped more than 10 percent to \$500 million; Polish sales gained slightly to nearly \$500 million. Hungarian sales held at more than \$400 million. Yugoslav exports dropped sharply to about \$275 million.

About two-thirds of Eastern Europe's total trade continued to be exchanged with Communist countries; one-third with the USSR alone. Most Yugoslav trade, however, is with non-Communist countries and Romania has stepped up trade outside the Communist region. The principal agency for coordinating trade activities in the region is the Council for Mutual Economic Assistance (CEMA or COMECON). Members of CEMA include the East European countries (except Yugoslavia, which has observer status), the USSR, and Mongolia. Members effect limited clearing in rubles through the International Bank of Economic Cooperation in Moscow, although most trade still is under bilateral agreement.

The 23rd session of CEMA, held at the summit level in Moscow in April 1969, took up questions of economic integration and coordination, with special emphasis on the 1971-75 plan period. Problems of nonconvertibility of currency, which have hindered trade evaluations, remained unresolved. The greatest progress in CEMA probably has been in the scientific-technical area. The CEMA Standing Commission on Agriculture held its 28th meeting in Bucharest in May 1969. Member countries agreed to expand programs during 1971-75 for exchange of seeds, pedigree livestock, and semen; for cooperation in plant and livestock protection; and for the exchange of technical information and experience. The Commission will continue to coordinate efforts in international testing of seeds and machinery standardization and it has sponsored some work in coordination of scientific research and long-term economic projections.

Cotton is Eastern Europe's leading agricultural import. ^{9/} Cotton imports increased from 623,000 tons in 1967 to 631,500 tons in 1968 (table 8). Cotton imports in 1968 were 8 percent above the 1961-65 average. Incomplete trade data for 1969 indicated that Yugoslav and Hungarian purchases were exceeding 1968 levels, but Polish purchases were less. Only a small amount of cotton is produced in Eastern Europe, primarily in Bulgaria. The Soviet Union is the principal supplier of cotton to Eastern Europe, accounting for 57 percent of the total in 1968. The UAR has been the second largest source, but purchases from there were reduced in 1968. The United States has sold considerable quantities of cotton to Poland and Yugoslavia and accounted for about 6 percent of East European imports in 1968. Other major sources have been Syria, Greece, and Iran.

After cotton, the leading agricultural imports are wheat, fresh meat, wool, oil cake and meal, fresh fruit, and feed grains. Wheat and meat imports were down substantially in 1968, but wool, oil meal, and feed grain imports increased. Fruit imports may have declined slightly.

^{9/} The value of imports in 1967 was estimated by FAO at \$440 million.

Table 8.--Eastern Europe: Imports of lint cotton, average 1961-65, annual 1966-68, and origin 1967 and 1968

Item	Czecho- slovakia	East Germany	Poland	Northern countries	Bulgaria	Hungary	Romania	Yugo- slavia	Southern countries	Eastern Europe
----- <u>1,000 tons</u> -----										
<u>Total imports</u>										
1961-65 average...	101.0	101.1	136.0	338.1	40.5	67.4	64.1	72.6	244.6	582.7
1966.....	113.0	90.3	156.0	359.3	54.0	78.2	76.7	87.4	296.3	655.6
1967.....	103.0	84.7	133.4	321.1	50.7	88.6	71.9	90.7	301.9	623.0
1968 <u>1/</u>	107.0	87.2	156.4	350.6	58.0	74.8	76.1	72.0	280.9	631.5
<u>Origin in 1967</u>										
USSR.....	55.0	79.0	76.2	210.2	30.6	40.4	31.2	21.2	123.4	333.6
UAR.....	24.0	5.7	10.0	39.7	5.3	6.3	10.2	10.9	32.7	72.4
U.S.....	---	---	15.2	15.2	---	---	---	29.7	29.7	44.9
Other.....	24.0	---	32.0	56.0	14.8	41.9	30.5	28.9	116.1	172.1
<u>Origin in 1968 <u>1/</u></u>										
USSR.....	69.0	77.4	80.8	227.2	36.1	44.2	29.4	23.8	133.5	360.7
UAR.....	15.0	4.8	5.6	25.4	5.0	3.6	10.0	9.8	28.4	53.8
U.S.....	---	---	26.2	26.2	---	---	---	14.8	14.8	41.0
Other.....	23.0	5.0	43.8	71.8	16.9	27.0	36.7	23.6	104.2	176.0

1/ Preliminary.

Leading agricultural exports are fresh meat, tobacco, canned meat, corn, live cattle, wheat, and wine. Corn and wheat exports dropped sharply in 1968--a result of drought conditions in that year. Other commodities declining substantially were tobacco and canned meat. Fresh meat exports remained relatively constant, but live cattle exports may have increased. Wine exports rose substantially.

Total U.S. agricultural exports to Eastern Europe in 1969 were valued at \$99.5 million, down about 26 percent from 1968. Reduced feed grain and cotton sales accounted for most of the decline. The leading exports to Eastern Europe were feed grains, \$29.7 million, and soybean meal, \$26.6 million. The United States supplies a substantial share of East European imports of these commodities. In 1968 direct U.S. sales, excluding transshipments, accounted for about 45 percent of East European feed grain imports and 20 percent of oil meal imports. Soybean meal has made the most substantial growth in recent years. U.S. agricultural exports to Eastern Europe represent about 4 percent of the region's imports of farm commodities. U.S. agricultural exports to Eastern Europe have declined since 1966, primarily as a result of the falling-off of the market in Yugoslavia--previously the major purchaser of wheat. Total sales to Yugoslavia declined from \$118.2 million in 1966 to \$18.7 million in 1968 but recovered to \$22.6 million in 1969. The leading U.S. customers in 1969 were Poland--purchases of \$37.2 million--and East Germany--purchases of \$24.6 million.

U.S. imports of agricultural commodities from Eastern Europe in 1969 were valued at \$83.5 million, about 2 percent higher than in 1968. The major imports were canned hams--\$46.9 million; other canned pork--\$8.7 million; and tobacco--\$11.2 million. The leading suppliers to the U.S. market were Poland--sales of \$56.0 million--and Yugoslavia--sales of \$27.5 million.

SLOWER RATES OF INCREASE OF AGRICULTURAL INPUTS

The countries of Eastern Europe made sharp advances in agricultural investments and the supply of productive inputs into agriculture during the 1960's. Smaller gains were apparent in 1969. The progress in the decade, however, left agriculture in a far stronger position than that of the previous decade.

One major advance in the decade was the greatly expanded use of mineral fertilizers (table 9). The apparent growth was 7 percent in 1969 compared with 15 percent in 1968 and an average annual increase of about 11 percent since 1960. In 1969 all countries but Yugoslavia and Romania exceeded 100 kilograms per hectare and East Germany attained an estimated 314 kilograms per hectare. Yugoslavia maintains a subsidy on fertilizer to encourage greater use on private farms. Fertilizer usage is mandatory for private farmers in Poland.

Government deliveries of tractors and grain combines to agriculture generally reached their highest levels in the first half of the 1960's. Subsequently, total tractor and combine numbers have continued to increase, but at slower rates. Bulgaria and Poland have diverged more from the regional pattern with sharper advances in machinery deliveries occurring in more recent years. This situation apparently continued in 1969. In most countries, a greater share

of agricultural investments has moved into farm buildings and construction, and less into machinery in recent years. Some countries took measures in 1969 to speed up farm machinery purchases or to reverse declines. For example, in Hungary credits for machinery repairs were abolished. In Yugoslavia, private farmers were given incentives to purchase more equipment with a price reduction on agricultural machinery and on tractors of up to 35 horsepower.

Table 9.--Eastern Europe: Fertilizer consumption per hectare of arable land, 1960 and 1965, annual 1967-69 1/

Country	1960	1965	1967	1968	1969 <u>2/</u>
	----- Kilograms of nutrients -----				
Czechoslovakia.....	92	152	173	178	192
East Germany.....	188	266	276	303	314
Poland.....	46	71	102	118	138
Northern countries...	82	125	150	165	183
Bulgaria.....	34	79	133	186	158
Hungary.....	29	63	91	112	127
Romania.....	7	25	42	46	50
Yugoslavia.....	34	55	62	67	71
Southern countries...	23	50	72	87	88
Eastern Europe.....	52	85	108	124	133

1/ Includes cultivated land, orchards, gardens, and vineyards.

2/ Preliminary.

Some increases in irrigated area were reported in 1969. Bulgaria, with about 1 million hectares, or 22 percent of the arable land under irrigation in 1968, announced an increase of 3.5 percent. Romania reported a major increase in agricultural investments in 1969, much of which may have been directed into an ambitious irrigation program, which is considerably behind schedule. Irrigated area in Romania reached 505,000 hectares in 1968 and an additional 140,000 hectares reportedly were brought under irrigation in 1969. A goal of 2.5 million hectares has been established for 1975.

AGRICULTURE'S ROLE IN ECONOMIC REFORM AND DEVELOPMENT

Economic reform in Eastern Europe generally has been directed more specifically to industry than agriculture, but agriculture has been affected in several instances through expanded marketing outlets and greater leeway in input purchases. 10/ Together with measures to increase farm profitability, government subsidies to farms have been reduced in some countries. Measures have been

10/ For a more detailed description of the reforms in one country, see The Agricultural Economy and Trade of Hungary, ERS-Foreign 269, May 1969.

undertaken to encourage specialization and interfarm cooperation and, in Poland, inter-agricultural circle cooperation in machinery use.

Meanwhile, several governments have adopted programs to improve income and living conditions in rural areas. In 1969, there were major developments in this sphere in Romania. Agricultural specialist wages, for example, were increased 20 percent in November and the payment system on collective farms was adjusted in December to better reflect quality of work. A 50 to 70 percent increase in collective farmer pensions also was decreed to be effective January 1, 1970. Bulgaria introduced wage increases for selected specialists ranging from 4 to 12 percent during the latter part of the year. Legislation for a voluntary program of pension and disability insurance was introduced in the Voyvodina Region of Yugoslavia. Rural housing construction was subsidized in Czechoslovakia to help reduce the outflow of young people. In Poland, credits to farmers were stepped up sharply and credit limits were raised to ease building loans.

The reforms introduced since the mid-1960's throughout Eastern Europe generally have been intended to stimulate economic growth without major restructuring. Limited changes have been effected through decentralization of planning and management and greater reliance on profits and other economic indicators. The market orientation of the Yugoslav economy--which has received wide-reaching reforms--has been introduced in very limited fashion elsewhere in the region. Among programs in other countries, the Hungarian and Czechoslovak reforms probably have attempted to go furthest in decreasing government involvement in pricing and marketing.

In early 1969, economic reforms generally were operating on a national scale in Czechoslovakia, East Germany, Hungary, and Yugoslavia, and experimentally in the other countries. Bulgaria expanded the scale of the reforms in 1969, and Romania made similar plans for 1970. Poland reorganized its banking system in 1969, a move allied with reform plans.

Czechoslovakia experienced strong inflationary pressures in connection with the slowdown in growth, income advances, and political turmoil in 1969. A change in top leadership occurred in 1969. These pressures and changes resulted in an essential curtailment of the reform program as it existed in 1968 and a reassertion of the dominant role of the government. Wage controls were instituted and prices again were fixed. A temporary ban on price increases was introduced on January 1, 1970.

East European countries reported growth in national income in 1969 ranging from 3.5 percent to at least 8 percent. The four southern countries which have the lowest levels of income attained the highest growth rates, generally exceeding 7 percent. Following a slowdown in 1968, growth in most East European countries returned to rates exceeding those prevailing during the first half of the 1960's--the period preceding the reforms. Romania, however, which had the highest growth rates of the earlier period, showed scant improvement from 1968 and continued to evidence slower growth than in previous years. Yugoslavia had the most rapidly expanding economy in the region in 1969; both agriculture and industry contributed to faster growth.

Growth of national income in the three northern countries was slower in 1969 than in 1968. Poland slumped most severely--reflecting the poor results in agriculture--falling well below growth rates of 6 to 7 percent in most recent years. Reported growth rates of 6 percent in Czechoslovakia and 5 percent in East Germany were less than in 1968, but higher than pre-reform rates. Price increases in Czechoslovakia, however, may have exaggerated real gains.

OUTLOOK

Planned rates of growth for East European agriculture in 1970 vary sharply by country, but rates in most countries, if accomplished, would raise total agricultural output well above the minimum terminal levels envisaged in the 1966-70 plans. The three northern countries have targeted annual increases of about 3 percent. These generally exceed typical growth rates of the 1960's. Attainment will depend on the ability to maintain livestock herds and to obtain major improvement in crop production in 1970.

Sharp agricultural growth rates are planned in Bulgaria (12 percent) and Romania (16 percent). Rates of this magnitude have been accomplished in only one recent year--1966--when weather was especially favorable. The reported high rates of growth in Hungary and Yugoslavia in 1969 apparently have caused planners to set modest growth targets for 1970. Hungary, for example, plans a 1-percent increase in agricultural output.

Some hints of the direction of the 1971-75 plans began to surface in 1969. Although most governments did not announce specific targets, there is an exception. Romanian General Secretary Ceausescu in his report to the 10th Romanian Communist Party Congress in August announced a planned increase in gross agricultural output during 1971-75 of 28 to 31 percent over the 1966-70 average. Grain output in Romania is scheduled to reach 17.5 to 18.5 million tons by 1975.

The outlook for the fall-sown crops in Eastern Europe was not uniformly favorable at the onset of winter. Dry weather during the fall in the southern countries delayed completion of sowing, which, in some cases, was then curtailed by early snowfalls. In Yugoslavia, wheat area reportedly is down about 10 percent from the previous year. Neighboring Hungary had better crop development. Weather remained extremely dry in Bulgaria during the fall. Dry weather also was experienced in the northern countries through October. Wheat was planted on a smaller area in Czechoslovakia. Fall-sown crops generally entered the winter in good condition in Poland and subsequent snow cover has been beneficial. Increased production of feed grains has been planned in the southern countries to offset declines in the winter wheat area and to promote livestock development.

The plans to stimulate livestock production will probably affect rebuilding of herds. The current situation does not appear to warrant substantial improvement in livestock product output in most countries before the second half of 1970. Tight feed supplies will have a dampening effect on growth of livestock product output in the northern countries and considerable time will be required to increase herds in the southern countries.

MAINLAND CHINA

AGRICULTURAL OUTPUT INCREASES

For the second time in a decade the Chinese Communist regime has reverted to crash programs for catching up economically. Prospects for success were much better in 1969 than in the early 1960's. Mainland China's economy, though still constrained by the effects of the cultural revolution in early 1969, was well along the road to recovery by the end of the year. Performance in every major sector of the economy probably exceeded that of the 2 previous years (1967-68), and output in some sectors may have exceeded the peak year of 1966.

Agricultural production in 1969 exceeded the near-average level in 1968 by a significant margin, but did not equal the 1967 level. This increase in output coincided with a more stable political situation. During 1969 the ninth people's party congress was convened, a new constitution was adopted, a new politburo was elected, and the central committee was enlarged. Accompanying the change in the political climate was a spate of low-key official pronouncements that modified many hard-line rural reforms introduced from mid- to late 1968 and reduced apprehension among peasants. These changes indicated some concern over the numerous economic and political adversities that evolved from the cultural revolution.

The Communist regime was more economically focused last year. Internationally, it broadened the scope and amount of foreign aid, reestablished diplomatic contacts, and increased foreign trade. Domestically, the regime concentrated on rebuilding party structure, strengthened the administrative structure by streamlining organizations, and consolidated functions of government agencies, such as the Ministry of Agriculture's absorption of the Ministry of Forestry and of state farms.

AGRICULTURAL PRODUCTION

Agricultural production in Mainland China in 1969 topped that of 1968 with many food and industrial crops registering gains. Livestock production also rebounded from the downturn experienced during the cultural revolution. Although weather conditions throughout the year were less favorable than in 1967, higher inputs made available in 1969 helped to raise production to a level approaching the outstanding harvest of 1967.

As far as known, little, if any, increases occurred in the total planted area. However, some changes in cropping patterns and some substitution of crops occurred, particularly in East and Central China following flooding of the Yangtze River in July and August. Production gains in 1969 thus were primarily a function of yield response to higher applications of chemical

fertilizer--and other inputs. Gains were also made in soil, irrigation, and water management and in repair of farm machinery and tools.

Grain and Food Crops

Production of food grains in 1969 (including potatoes at one-fourth grain value), which occupy approximately 80 percent of China's sown area, approached 200 million tons. Wheat, rice, and potato production was average or above average. Miscellaneous grain production increased substantially, but the heavy flooding and waterlogging of the intermediate rice crop in Central and East China limited gains in the total rice output for the year.

Although a severe winter and late spring in the North China Plain reduced the total area of winter wheat, subsequent favorable growing weather with adequate moisture in the spring contributed to higher yields of both winter and spring wheat. Other grain and pulses--barley, beans, field peas--and green manure crops and rapeseed, particularly in the Yangtze River Valley, were less favored. And a wet and unusually cold spring lowered prospects for the winter sweetpotato crop in Kwangtung Province in southern China and the early rice crop in Kwangtung, Kiangsi, and Fukien Provinces. Despite these provincial setbacks, the early rice crop for the entire country equaled or exceeded the poor crop in 1968. Overall estimates of the summer harvest of grains, which constitute almost 40 percent of total grains, showed a higher level of output than in 1968.

Except for the July-August flooding along the Yangtze River in Central and East China, which damaged the intermediate rice crop, favorable weather existed for development of late autumn harvested crops. The late rice crop on an expanded area probably equaled, or exceeded, the good crop in 1968, but the decline in the larger, intermediate rice crop held the total rice crop to the 1968 level--80 to 85 million tons.

Other late harvested crops--potatoes and miscellaneous grains--matured under favorable weather conditions. Potato output (both sweet and Irish) might have exceeded that of 1968. Production of coarse, late maturing grains (corn, kaoliang, millet, oats, and buckwheat) probably set a record in 1969. In addition to the improved weather last year, there is some evidence that new seed varieties helped raise yields. The total area planted to improved seeds is unknown, but press reports suggest that it has expanded in recent years. Mention of high-producing varieties of wheat and rice as well as corn and sorghum were more prominent in the Chinese press in 1969 than in any previous year.

Other Crops

Some damage from drought in Northwest and Southeast China affected 1969 industrial crops, primarily cotton and tobacco. Although cotton output held close to the 1968 level, tobacco production declined. Rapeseed, the major vegetable oilseed grown in southern China, was affected by the long period of wet and unusually cold weather in the early spring. Yields were less than average. Area also declined. Increases of varying magnitude, however, occurred for soybeans, peanuts, sugarcane, sugar beets, tea, silk cocoons, and other minor crops. Less is known about other oilseeds such as sesame, sunflowerseed, and tung nuts. It does not appear that increases in production of any of the industrial crops was sufficient to equal the level of those crops in 1967.

Livestock Production

Official claims indicate an increase in livestock production in 1969. Favorable weather conditions and improvements in the large pastoral areas contributed to better roughage feed supplies for horses, mules, cattle, donkeys, and sheep and goats, but there is no hard evidence of increased feed supplies to support the reported strong growth in hog numbers. Hog numbers declined considerably during the cultural revolution (1967-68). Since then officials have offered incentives to peasants to increase hog numbers, both on private plots and on collective farms. While hog numbers probably increased in 1969, numbers have still not reached the pre-cultural revolution level.

FARM INPUTS AND POLICY CHANGES

The convening of the ninth people's party congress in April 1969, the first in 13 years, highlighted the domestic scene in Mainland China. However, no significant farm policy change was announced at the congress, nor was any specific guideline outlined as to the direction or intensity of farm programs. During 1969 officials again supported programs begun during the cultural revolution. Increasing grain production was designated as the major production goal, followed by cotton and vegetable oilseeds. The threat of further collectivization--with the prospective loss of private plots and sideline pursuits--was modified, although communes and brigades were consolidated and strengthened. And the continued influx of urban dwellers into the countryside during 1969 complicated farm management and labor problems and made food distribution more difficult.

Some former agricultural programs surfaced in scattered governmental pronouncements during the year. Birth control, for example, again became a national objective, and the rural communities were encouraged to become self-supporting units. Specific complementary industries, such as transfer of packing, milling, canning, and tanning enterprises (some supported with state funds), were introduced into rural areas. These developmental programs are reminiscent of Mao Tse-tung's original "National Program for Agricultural Development" (1956-67). Evidence suggests that some of these programs were supported by state funds--particularly the construction of small factories (machine, tool, farm equipment), fertilizer factories, power plants, and pumping stations. Education and health care were assigned to local administrative levels, primarily communes and brigades. The rural credit system was modified broadening the scope of credit and increasing the use of funds in local enterprises.

The administration of farm programs remained primarily under military supervision. There was some evidence that party revolutionary committees were present at the working level, but administration and discipline were weak. The relaxing of party discipline in the rural areas worked to the advantage of peasants during the year. This relaxing of discipline manifested itself at harvesttime when government agencies encountered difficulties in procuring farm products despite higher production of most crops.

CONSUMPTION OF FARM PRODUCTS

The more equitable food distribution system developed by the Communist regime has been an important factor in countering the impact of insufficient production throughout China during the past decade. While many deficit areas still exist and unusual circumstances cause food shortages in different areas, food from surplus areas and government relief are more in evidence throughout the country than formerly. Per capita consumption of food, however, remains at a comparatively low level even for the East Asian area. The caloric intake does not appear to have regained the 2,200 to 2,300 calories estimated for the late 1950's, and the food intake is still heavily weighted with carbohydrates. Based on incomplete data, the estimated average per capita consumption of food during the 1968/69 consumption year was about 10 percent less than in 1967/68. These levels have not changed greatly since Chou En-lai announced in 1965 that China's agriculture had regained the pre-Leap Forward level.

Some shortages of food also occurred before the early harvest in 1969, particularly in Kwangtung Province. Government collectors' pleas to peasants to turn in "patriotic" grain as a "mark of loyalty to chairman Mao" is indicative of the techniques used in collecting compulsory deliveries and in government purchases of farm products in 1969. The use of the army in harvesting during 1969 not only added to the manpower force but also insured compliance to state procurement quotas. Significant to this better control was the curtailment of grain sales by individual peasants in the free market in 1969. During 1967-68, when a breakdown in government control developed, peasant private sales of grain increased even though sales of rationed commodities by individuals are prohibited in China.

The slight, but not critical, decline in the 1968/69 diet may be attributed somewhat to the overtaxing of the private sector in 1968. The question arises as to the future capability of the private plots to contribute further to peasant needs. Government action, for example, has not only reduced the size of private family plots but has also sponsored large migrations from urban to rural areas in 1968 and 1969. This action places greater demands on private plots as a source of food. Although the government recognizes the importance of these plots, there is no guarantee that this land will not be absorbed by the commune at a later date.

Consumption of other farm products, particularly fibers, reportedly increased in 1969. A reduction in availability of clothing in 1968 resulted primarily from disruptions in textile factories and not from raw material shortages. Ration coupons, a necessary credential to purchase textiles and clothing in China, appeared earlier in 1969 than the midyear distribution in 1968. Also, the amount of the ration has increased. It is doubtful whether domestic availability of clothing and other textile goods in 1969 approached the per capita level of the late 1950's when annual ration allowances for cloth amounted to 20 and 27 feet.

UPSWING IN FOREIGN TRADE IN 1969

Following a 2-year decline, China's foreign trade upturned decidedly in 1969. But, like the rest of the economy, the trade sector is adjusting to the economic turmoil created by the cultural revolution. There is little likelihood that the level of imports and exports reached that of 1966 (estimated at \$2.05 billion and \$2.25 billion, respectively), China's peak trade year. Estimated total trade turnover at the end of 1968 was 15.6 percent less than in 1966, with exports 17.4 percent and imports 14.1 percent lower. Midyear data for 1969 showed exports increasing about 10 percent and imports 9.5 percent compared with the comparable period in 1968. This rate may have increased during the second half of 1969. If so, China's trade in 1969 perhaps equaled that of 1966.

Imports and exports appeared to be more in balance than in previous years. Heavy trading by nations at the Canton fair may have contributed to this improved trade position. However, rather broad variations in balances occurred within certain countries. Mainland China's exports to Hong Kong and Singapore increased substantially over 1968, while trade with Japan, which set a record in 1969, swung heavily in favor of Japan. Increased Japanese imports of chemical fertilizer, and iron and steel accounted for most of this imbalance.

Trade with the Free World, accounting for about 80 percent of China's total trade, may have equaled or exceeded \$4 billion in 1969. Trade with East European Communist countries increased, but trade with the USSR appears to have continued to decline--from 50 percent (\$2 billion) of China's total trade in 1959 to only 2.4 percent (\$96 million) in 1968. Trade with West European countries--particularly the United Kingdom, France, and Italy--increased after declines in 1967 and 1968.

Mainland China's imports of over \$391 million from Japan in 1969 exceeded those of 1968 by 20.3 percent, while the \$234.5 million worth of exports to Japan exceeded those in 1968 by only 4.7 percent. Exports, however, were substantially below those for 1966 and 1967. This increase of imports from Japan highlights the rapid swing of China's trade to the so-called Japanese "friendly firms."

Commodity composition of China's foreign trade, especially imports, substantially reflected the effects of the cultural revolution on the production and supply of goods in 1968 and 1969. In 1968, machinery and iron-steel imports were down sharply, but imports of these items increased considerably in 1969. Imports of chemical fertilizers, food (primarily wheat), crude materials, non-ferrous metals, and basic chemicals, all of which directly or indirectly affect agriculture, also increased in 1969. Preliminary data suggest that the volume of imports in 1969 was restricted to a level below exports to build up foreign exchange reserves. Also, delivery dates of some purchases were extended well into 1970--wheat, for example--in an apparent effort to extend payments.

While exports of non-ferrous metals dropped sharply in 1968, exports of food products, crude materials, basic chemicals, and certain textiles increased somewhat. A similar pattern of exports developed in 1969. Increases in certain food products, such as livestock and livestock products, poultry and eggs,

sugar, fresh and processed fruits and vegetables, and crude animal products offset declines in exports of rice and possibly soybeans. Exports of manufactures, textiles, furs, and crude vegetable materials also increased.

China's fourth grain purchase in 1969--2.2 million tons of wheat from Australia on December 9--boosted total purchases to a record 7.5 million tons. That contrasts with less than 4 million tons in both 1967 and 1968. New delivery dates extend well into 1970. Purchases consist of 4.5 million tons from Australia, 2.2 million tons from Canada, and 800,000 tons from France.

China's total imports of wheat in 1969 were an estimated 4.5-5 million tons, up slightly from 1968. So far, almost 4 million tons are committed for delivery in 1970. Imports of wheat alone were about 3.9 million in 1967 and 4.4 million tons in 1968. Aside from the favorable prices, China's large purchases of wheat may reflect larger drainage on grain stocks than during the cultural revolution when state procurements lagged.

The two major farm products exported from China, rice and soybeans, probably declined in 1969. Rice exports exceeding a million tons annually since 1965 were somewhat less in 1969. Mainland China exported 300,000 tons to Japan in 1966 but Japan dropped out of the market entirely in 1969. Pakistan also withdrew from the market in 1969. Other traditional importers of Chinese rice appear to have maintained their usual level of purchases. Hong Kong's imports were down slightly. New markets in Africa and Latin America do not appear to have offset the declines in the traditional markets.

Incomplete data indicate that exports of soybeans, averaging slightly above one-half million tons annually since 1964, declined in 1969, due partly to the lower production in 1968. Japan usually takes about three-fourths of Mainland China's soybean exports.

Table 10.--Mainland China: Trade of selected major commodities, 1962-69

Year	Imports			Exports	
	Total grain	Wheat <u>1/</u>	Cotton (raw)	Rice <u>2/</u>	Soybeans
	----- <u>1,000 tons</u> -----				
1962.....	5,999	4,419	67	578	342
1963.....	4,557	4,394	143	640	332
1964.....	6,795	5,542	105	785	498
1965.....	5,520	5,250	168	755	576
1966.....	6,447	6,375	107	1,210	550
1967.....	4,030	3,871	88	1,225	564
1968.....	<u>3/4</u> 4,500	4,445	68	1,000	600
1969 preliminary.....	<u>3/4</u> 4,700	<u>3/4</u> 4,700	75	n.a.	n.a.

1/ Includes wheat flour in wheat equivalent.

2/ Excludes exports to Vietnam.

3/ Estimate.

OUTLOOK

The rise in economic activity throughout Mainland China in the second half of 1968 accelerated in 1969, and is expected to continue in 1970. China is a country catching up. The programs which appeared as 1969 closed suggest that a more realistic approach is gaining prominence. These programs, although still under the shadow of Mao Tse-tung's doctrine of peasant self-denial, appear to have produced some positive results.

Barring unfavorable weather and radical policy changes, agricultural production could increase substantially in 1970. Records could be set, but probably not in the proportions suggested by the slogans now appearing in many parts of the country. Having endured two economic setbacks, during two decades of Communist rule, Mainland China may have arrived at a take-off point. Substantial gains could be made in agriculture and other sectors of the economy in the decade ahead.

A number of factors support this projection. Programs for rural and agricultural development now emerging stand a much better chance of implementation than formerly. While observed progress has been slow and programs for advancing agriculture have been radical, uncoordinated, and short lived, many long-range programs are coming into fruition. These programs include expansion of irrigation and water management, fertilization, farm mechanization and improved tools, improved seeds on a small scale, and support industries for agriculture. These programs, along with decentralization of light industry to rural areas, improved credit facilities, increased state investments in projects that complement local production, and improved methods for distributing supplies, may bring the agricultural sector to a peak effort, heretofore impossible.

As more state funds go to support rural industrialization programs and to construct intermediate and possibly larger water conservancy projects, peasants will become more active in rural development and agricultural production. Also, the gradual ascendancy of a more moderate approach to agriculture following the hard-line policy toward further collectivization in 1968 and the apparent re-emergence of the production team as the accounting unit are generating greater peasant effort. Off-season farming activities which supplement farming operations have been carried out in more areas in larger volume and appear to be better organized than in recent years.

Contrasting this optimistic outlook is the heavy investment and technology needed to offset the impact of weather. Historically, China has been plagued with one to two poor years of every five. China has not had an extended drought in over 8 years. Even though some progress has been reported in water conservation programs under the "guaranteed high yield field" program, the need for continued and concentrated investments is paramount to the success of any long-term agricultural program.

Mainland China's foreign trade of agricultural products should continue to expand in 1970 and beyond. Imports of fertilizers and pesticides will remain high because they are needed to augment domestic production. Agricultural machinery, from imports and local production, is also expected to increase. Wheat and cotton imports should remain about static or trend upward slightly in

1970. The world price of wheat will be a major factor. Exports of rice may continue to decline because of little or no increase in the crop in 1969 and a seemingly shrinking market. Soybean exports and some products from the private sector, notably pork and poultry products, could increase slightly.

OTHER COMMUNIST COUNTRIES

NORTH VIETNAM

Like the rest of its economy, North Vietnam's agricultural sector took stock of shortcomings in 1969. Relatively little data on actual accomplishments for the year just ended are available, but modest gains are expected for 1970. Poor weather, continued shortages of inputs, and a weakening of party discipline in the countryside contributed to the marginal performance.

North Vietnam experienced a cold winter, spring flooding, and a fall drought during the past crop year. Both the early (fifth month) and the spring rice crops, which account for about one-third of rice output, were affected. Damage was moderate to light. The late rice crop (tenth month)--Vietnam's major crop--was more seriously affected by a fall drought that extended into October. Harvesting was delayed, forcing the most stringent harvesting schedule imposed by the regime. Estimated production has averaged between 4 and 4.5 million tons in recent years. An 80,000-hectare increase in the planted area suggests a slight increase in rice production in 1969. Supplementary imports of grain ranging from 400,000 to 700,000 tons were needed to maintain enough food to supply about 2,100 calories per person per day. It is estimated that China supplied 150,000 to 200,000 tons of rice to cover part of this deficit. Also, the USSR supplied large amounts of wheat and flour.

Probably more important to the planned production for 1970 than to the last year's accomplishments is the party's recent emphasis on livestock production. Plans for 1970 call for a 17-percent increase in hog numbers, raising total end of the year numbers to an estimated 6 million head compared with the 5.2 million in 1969.

The additional feed supplies for this proposed increase in hog numbers will be provided partly from government stocks and partly from an expansion of the feed grain area on collective farms and household plots. About half of the sweetpotato and manioc crops, for example, will be used for livestock feed. The government has indicated that 2 percent of the total paddy rice and corn production it obtains will be made available to farms and farmers participating in livestock programs.

Current policy decisions affecting agriculture are not clearly defined. Evidence suggests that a controversy between party leaders exists over the future direction of socialized agriculture--a toleration of private initiative

on the one hand, and a strong determination to impose rigid control on the other. A serious shortage of farm labor also exists, making the government's choice in this policy matter a difficult one.

The crop outlook for 1970 largely will hinge on peasant responses to government programs and on the availability of fixed and working capital now urgently needed to compensate for farm labor shortages. Weather reports indicate that the fall drought reported during the harvesting of late rice extended into the planting period for the early rice crop.

NORTH KOREA

North Korea had good weather in 1969 compared with the drought and flooding reported in 1967 and 1968. Official estimates of the 1969 grain harvest indicate an output of approximately 5.5 to 5.7 million tons. This conflicts with a recent Korean news agency statement that output of grain since 1962 had remained at the level of 5 million tons. The 1967 goal to produce 6.7 million tons of grain has been extended to 1970.

Still a food deficit area, North Korea imported about 390,000 tons of grain in 1967. Imports were continued in 1968 and 1969, but the level is unknown. Cotton also is a major import. Major farm exports include rice, fruits, tobacco, and silk. North Korea may be developing a program similar to that of Mainland China whereby expensive rice is exported and cheap wheat is imported.

North Korea has a well-developed irrigation system. Electricity is available in every rural village and reportedly is supplied to 91 percent of the households. Tractor numbers are estimated at 23,000 in terms of 15-horsepower units.

Agricultural programs for 1970 put a heavy stress on increasing livestock production--a goal being emphasized in all Asian Communist countries this year.

MONGOLIA

During 1969, Mongolia's agricultural situation moved from one of early optimism to one of contained performance. In the beginning of the crop year official reports indicated favorable soil moisture levels for the spring wheat crop. However, the yearend report stated that a prolonged drought developed throughout the country during the year and the harvest of grain was below the planned level.

Mongolia had 490,000 hectares under cultivation in 1969, 80 percent of which was planted to grains. Compared with previous years, this would indicate some shifting of the grain area to other crops--particularly vegetables. Grain production for 1969 might approach 300,000 to 320,000 tons.

Livestock numbers exceeded planned goals by about 2 percent, raising total numbers to approximately 25 million head. Sheep represent about 52 percent of

this total. New heated enclosures for 3.4 million head of livestock were completed last year.

Plans for 1970 project a 15.9 percent-increase in agricultural output over the 1969 level, and additional heated enclosures for 7.7 million animals will be built.

CUBA

Economic growth in Cuba has stagnated since 1967. Gross national product fell 5 percent to \$3.0 billion in 1968 and evidence suggests that little or no recovery occurred in 1969. The year-to-year production change in sugar has strongly influenced Cuba's planned economic development. Output of 4.5 million tons in 1969--the lowest since 1963 and the second successive decline--accounts for the reported growth lags in recent years.

While Cuba has attempted to diversify its agriculture, the re-emphasis on sugar suggests that progress in other agricultural areas has been slow. There is some evidence that the rice area increased in 1969, but the planned programs for improving pasture lands and intensifying coffee and fruit production lagged. These programs may have been pushed back in 1969 because of the high priority given to sugar.

The plan goal of 10 million tons of sugar for the 1969/70 crop year represents Cuba's most ambitious program. Attaining this goal is premised on the reported 25 percent-increase in land area under cane plantings and the more intensive planting of early maturing varieties during the 18 months prior to the current crop year. As of mid-March the announced results showed a production of 4.5 million tons of sugar--about 400,000 tons below the planned level of that date.

Concomitant with the announced increase in sugarcane plantings, Castro indicated that the rice production is increasing yearly. Production is estimated at 220,000 tons or about the same level as 1963. There was little or no change in cattle numbers during the year, estimated at 7.2 million head. Poultry numbers stabilized in 1969 and egg output approximated 100 million dozen.

Rationing continued for all major food commodities, including sugar, and no real improvement in living standards developed. Cuba's imports of rice and wheat flour probably held at the level of the past few years--150,000 tons and 290,000 tons, respectively. The Soviet Union supplied Cuba with wheat flour purchased in Canada. Most of the rice was supplied by China.

Of the 4.6 million tons of sugar exported in 1968, the Soviet Union received almost two-fifths. Under existing international sugar agreements, Cuba was granted a 2.1 million-ton annual export quota. But by allowing 1.1 million tons to pass through the USSR for re-export purposes, Cuba's quota to the free market increased to 3.25 million tons.

The outlook for Cuban agriculture continues uncertain. Overextension of a single crop could lead to further delays in agricultural diversification. And the heavy investments needed to change Cuba from an agrarian society to a growing industrial one are still lacking.

Table 11.--Eastern Europe and Soviet Union: Area of selected crops, average 1961-65, annual 1966-69 ^{1/}

Commodity and year	Bulgaria:	Czecho- slovakia:	East Germany:	Hungary:	Poland:	Romania:	Yugo- slavia:	Total Eastern Europe:	USSR:	Total Eastern Europe and USSR
----- 1,000 hectares -----										
Wheat										
1961-65 average...	1,216	739	430	1,078	1,524	2,966	2,002	9,955	66,600	76,555
1966.....	1,142	892	484	1,072	1,679	3,034	1,830	10,133	69,958	80,091
1967.....	1,064	929	533	1,160	1,758	2,913	1,880	10,237	67,026	77,263
1968.....	1,058	999	570	1,328	1,886	2,817	2,010	10,668	67,231	77,899
1969.....	1,027	1,055	590	1,321	2,010	2,600	2,019	10,622	65,000	75,622
Rye										
1961-65 average...	58	429	820	240	4,572	88	163	6,370	16,300	22,670
1966.....	42	395	771	220	4,331	91	141	5,991	13,583	19,574
1967.....	31	321	746	204	4,298	62	138	5,800	12,418	18,218
1968.....	24	338	735	190	4,300	44	132	5,763	12,269	18,032
1969.....	24	274	640	193	4,300	45	123	5,599	11,500	17,099
Barley										
1961-65 average...	336	687	438	516	706	237	369	3,289	18,300	21,589
1966.....	416	690	521	490	683	246	394	3,440	19,400	22,840
1967.....	387	712	553	448	653	257	343	3,353	19,100	22,453
1968.....	403	712	595	386	634	292	312	3,334	19,600	22,934
1969.....	416	780	610	380	765	300	300	3,551	22,100	25,651
Oats										
1961-65 average...	139	418	319	82	1,556	151	321	2,986	7,280	10,266
1966.....	113	389	261	61	1,418	138	320	2,700	7,200	9,900
1967.....	120	433	270	55	1,428	127	301	2,734	8,700	11,434
1968.....	96	409	256	54	1,395	132	285	2,627	9,000	11,627
1969.....	76	400	250	47	1,300	130	273	2,476	9,500	11,976
Corn										
1961-65 average...	632	200	2/	1,269	8	3,308	2,472	7,889	5,887	13,776
1966.....	574	151	1	1,237	6	3,288	2,500	7,757	3,229	10,986
1967.....	576	150	2/	1,237	6	3,221	2,510	7,700	3,485	11,185
1968.....	557	138	1	1,258	5	3,344	2,460	7,763	3,350	11,113
1969.....	584	127	2/	1,270	5	3,340	2,397	7,724	5,000	12,724
Total grain ^{3/}										
1961-65 average...	2,399	2,473	2,262	3,204	8,721	6,772	5,362	31,193	128,460	159,653
1966.....	2,302	2,521	2,268	3,099	8,471	6,821	5,213	30,695	124,807	155,502
1967.....	2,185	2,550	2,314	3,114	8,505	6,604	5,197	30,469	122,172	152,641
1968.....	2,151	2,601	2,345	3,238	8,576	6,657	5,223	30,791	121,500	152,291
1969.....	2,144	2,636	2,270	3,232	8,745	6,444	5,012	30,483	123,500	153,983
Potatoes										
1961-65 average...	41	492	728	219	2,840	303	311	4,934	8,643	13,577
1966.....	34	437	694	198	2,732	306	333	4,734	8,392	13,126
1967.....	33	408	686	169	2,763	315	330	4,704	8,331	13,035
1968.....	30	372	672	150	2,747	316	332	4,619	8,301	12,920
1969.....	30	325	630	140	2,750	308	320	4,503	8,300	12,803
Sugarbeets										
1961-65 average...	71	247	227	125	428	177	84	1,359	3,606	4,965
1966.....	63	225	211	108	435	194	106	1,342	3,803	5,145
1967.....	61	198	209	104	434	176	102	1,284	3,797	5,081
1968.....	54	188	204	104	414	185	79	1,228	3,560	4,788
1969.....	57	179	193	98	410	190	95	1,122	3,500	4,622
Cotton (unginned)										
1961-65 average...	52	---	---	---	---	---	10	62	2,420	2,482
1966.....	49	---	---	---	---	---	8	57	2,463	2,520
1967.....	51	---	---	---	---	---	10	61	2,442	2,503
1968.....	43	---	---	---	---	---	12	55	2,445	2,500
1969.....	47	---	---	---	---	---	11	58	2,510	2,568
Tobacco										
1961-65.....	118	5	5	20	39	37	49	273	n.a.	n.a.
1966.....	117	6	4	22	39	38	63	289	4/164	453
1967.....	97	6	3	20	42	39	59	266	4/176	442
1968.....	105	6	3	21	46	36	57	274	4/176	450
1969.....	105	6	3	22	46	36	54	272	4/177	449
Oilseeds ^{5/}										
1961-65.....	263	62	127	136	242	532	144	1,506	6,106	7,612
1966.....	255	60	125	126	306	558	169	1,599	6,590	8,189
1967.....	270	62	125	116	347	575	164	1,659	6,350	8,009
1968.....	282	64	125	113	390	664	176	1,814	6,430	8,244
1969.....	290	60	110	115	178	660	234	1,647	6,500	8,147

^{1/} 1969 data are preliminary. ^{2/} Less than 500. ^{3/} Includes buckwheat, millet, spelt, mixed grains, and rice; also pulses in the USSR. ^{4/} Includes makhorka. ^{5/} Predominantly sunflower in Bulgaria, Hungary, Romania, Yugoslavia and the USSR; predominantly rapeseed in Czechoslovakia, East Germany and Poland. Oilseeds harvested from fiber crops not included.

Table 12.--Eastern Europe and Soviet Union: Production of selected crops, average 1961-65, annual 1966-69 1/

Commodity and year	Bulgaria	Czecho- slovakia	East Germany	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe	USSR 2/	Total Eastern Europe and USSR
1,000 metric tons										
Wheat										
1961-65 average...	2,208	1,779	1,357	2,009	3,005	4,321	3,596	18,275	50,172	68,447
1966.....	3,193	2,247	1,521	2,327	3,603	5,065	4,600	22,556	85,000	107,556
1967.....	3,254	2,516	2,012	3,004	3,934	5,820	4,820	25,360	64,000	89,360
1968.....	2,527	3,153	2,377	3,352	4,670	4,848	4,360	25,287	76,600	101,887
1969.....	2,517	3,280	2,165	3,579	4,910	4,345	4,880	25,676	65,200	90,876
Rye										
1961-65 average...	58	896	1,741	260	7,484	95	169	10,703	13,590	24,293
1966.....	56	790	1,642	242	7,700	100	176	10,706	12,000	22,706
1967.....	38	689	1,986	225	7,694	71	171	10,874	11,900	22,774
1968.....	23	769	1,936	238	8,520	48	138	11,672	12,700	24,372
1969.....	30	672	1,480	249	8,640	50	135	11,256	11,900	23,156
Barley										
1961-65 average...	694	1,556	1,291	966	1,372	414	557	6,850	17,830	24,680
1966.....	1,064	1,608	1,525	916	1,409	483	713	7,718	24,000	31,718
1967.....	985	1,936	1,927	934	1,412	531	606	8,331	20,700	29,031
1968.....	810	2,113	2,121	904	1,494	590	450	8,482	24,200	31,082
1969.....	919	2,488	1,910	905	1,735	615	459	9,031	24,300	33,331
Oats										
1961-65 average...	141	792	850	96	2,654	154	343	5,030	5,300	10,330
1966.....	182	746	703	72	2,625	170	386	4,884	7,500	12,384
1967.....	169	968	845	86	2,818	163	363	5,412	9,700	15,112
1968.....	76	869	864	68	2,891	114	295	5,177	9,700	14,877
1969.....	78	967	742	79	2,810	161	308	5,145	9,960	15,105
Corn										
1961-65 average...	1,601	474	2	3,316	20	5,853	5,616	16,882	9,320	26,202
1966.....	2,207	476	2	3,907	13	8,022	7,980	22,607	6,800	29,407
1967.....	1,971	421	1	3,522	14	6,858	7,200	19,987	8,000	27,987
1968.....	1,731	453	2	3,764	13	7,105	6,810	19,878	7,500	28,706
1969.....	2,370	480	2	4,319	10	7,680	7,816	22,677	9,200	33,677
Total grain 2/										
1961-65 average...	4,744	5,498	5,846	6,682	15,054	10,887	10,337	59,048	106,200	165,248
1966.....	6,754	5,867	5,917	7,495	15,923	13,899	13,907	69,762	145,881	215,643
1967.....	6,477	6,530	7,354	7,814	16,459	13,512	13,206	71,352	124,950	196,302
1968.....	5,201	7,357	7,830	8,367	18,208	12,769	12,092	71,824	141,840	213,664
1969.....	5,962	7,887	6,745	9,179	8,745	12,923	13,648	75,089	132,400	207,489
Potatoes										
1961-65 average...	400	5,635	12,066	1,735	43,802	3/2,600	3/2,708	68,946	73,465	142,411
1966.....	421	5,846	12,823	2,433	46,144	3/3,352	3/3,230	74,249	79,068	153,317
1967.....	381	6,037	14,065	1,507	48,620	3/3,096	3/2,800	76,506	85,918	162,424
1968.....	360	6,526	12,639	1,335	50,817	3/3,706	3/2,890	78,273	91,966	170,239
1969.....	328	5,010	9,000	1,613	45,400	3/2,229	3/3,144	66,724	82,500	149,224
Sugarbeets										
1961-65 average...	1,440	6,772	5,522	3,090	11,436	2,866	2,344	33,470	73,465	106,935
1966.....	2,528	7,762	6,611	3,570	13,620	4,368	4,030	42,489	74,037	116,526
1967.....	2,032	7,663	6,948	3,356	15,521	3,830	3,680	43,030	87,111	130,141
1968.....	1,384	8,098	6,998	3,471	14,800	3,936	2,910	44,597	94,340	135,937
1969.....	1,920	6,032	4,530	3,485	11,300	3,800	3,637	34,704	71,000	105,704
Cotton (unginned)										
1961-65 average...	39	---	---	---	---	---	7	46	4,995	5,041
1966.....	69	---	---	---	---	---	6	75	5,981	6,056
1967.....	56	---	---	---	---	---	10	66	5,970	6,036
1968.....	33	---	---	---	---	---	9	42	5,948	5,990
1969.....	47	---	---	---	---	---	8	55	5,710	5,765
Tobacco										
1961-65 average...	108	7	6	22	61	32	44	280	4/171	451
1966.....	132	8	7	20	48	40	54	309	4/216	525
1967.....	118	11	n.a.	24	78	35	54	n.a.	4/247	n.a.
1968.....	112	10	n.a.	27	83	32	44	n.a.	4/261	n.a.
1969.....	102	10	n.a.	29	64	34	42	n.a.	4/258	n.a.
Oilseeds 5/										
1961-65 average...	345	67	182	124	337	565	226	1,846	5,245	7,091
1966.....	425	84	221	116	475	742	303	2,366	6,477	8,843
1967.....	482	92	280	93	683	822	271	2,723	6,845	9,568
1968.....	460	80	271	107	740	818	323	2,799	6,900	9,699
1969.....	520	53	165	116	235	850	408	2,347	6,496	8,843

1/ 1969 data are preliminary. 2/ Includes buckwheat, millet, spelt, mixed grains, rice; also pulses in the USSR. 3/ Includes intercroppings. 4/ Procurement of tobacco and makhorka. 5/ Predominantly sunflower in Bulgaria, Hungary, Romania, Yugoslavia, and USSR; predominantly rapeseed in Czechoslovakia, East Germany and Poland. Oilseeds derived from fiber crops are not included.

Table 13.--Eastern Europe and Soviet Union: Livestock numbers, average 1961-65, annual 1966-70 1/

(January of each year)

Commodity and year	Bulgaria	Czecho- slovakia	East Germany	Hungary	Poland	Romania	Yugo- slavia	Total Eastern Europe	USSR	Total Eastern Europe and USSR
----- 1,000 head -----										
Cattle total										
1961-65 average...	1,517	4,466	4,605	1,943	9,353	4,639	5,451	31,974	83,500	115,474
1966.....	1,450	4,389	4,762	1,919	9,480	4,935	5,584	32,519	93,436	125,955
1967.....	1,385	4,462	4,918	1,968	10,002	5,198	5,710	33,643	97,111	130,754
1968.....	1,363	4,437	5,018	2,049	10,123	5,332	5,693	34,015	97,167	131,182
1969.....	1,297	4,249	5,109	2,017	10,530	5,136	5,261	33,599	95,735	129,334
1970.....	1,250	4,200	5,140	1,900	10,290	5,033	5,010	32,823	95,065	127,888
Cows										
1961-65 average...	578	2,019	2,134	846	2/5,870	2,054	2,658	16,159	37,240	53,399
1966.....	581	1,948	2,169	782	5,775	2,008	2,622	15,885	40,140	56,025
1967.....	578	1,952	2,196	772	5,872	2,127	2,745	16,242	41,188	57,430
1968.....	586	1,929	2,188	785	5,801	2,218	2,855	16,362	41,567	57,929
1969.....	579	1,903	2,166	751	6,057	2,202	2,865	16,523	41,180	57,703
1970.....	584	1,872	2,155	716	6,060	2,496	2,875	16,758	40,600	57,358
Hogs										
1961-65 average...	2,331	5,948	8,654	6,551	2/13,408	4,835	5,815	47,542	57,820	105,362
1966.....	2,408	5,544	8,878	6,590	14,367	5,365	5,118	48,270	59,576	107,846
1967.....	2,276	5,305	9,312	6,123	14,704	5,400	5,525	48,645	58,028	106,673
1968.....	2,314	5,601	9,254	6,647	14,384	5,752	5,865	49,817	50,867	100,684
1969.....	2,140	5,136	9,523	5,806	14,677	5,853	5,093	48,228	49,047	97,275
1970.....	2,317	5,100	9,241	5,600	14,765	5,971	4,850	47,844	56,159	104,003
Sheep										
1961-65 average...	10,070	574	1,922	2,350	2/2,469	12,217	10,232	39,834	133,840	173,674
1966.....	10,312	614	1,963	2,460	2,572	13,125	9,868	40,914	129,764	170,678
1967.....	9,998	670	1,928	2,340	2,757	14,109	10,329	42,131	135,483	177,614
1968.....	9,905	770	1,818	2,300	2,770	14,380	10,346	42,289	138,461	180,750
1969.....	9,652	906	1,794	2,277	2,787	14,298	9,730	41,444	140,587	182,031
1970.....	9,750	906	1,794	2,300	2,630	13,836	9,725	40,941	130,950	171,891
Goats										
1961-65 average...	315	588	404	74	237	576	3/	2,194	7,520	9,714
1966.....	436	521	302	74	194	807	3/	2,334	5,552	7,886
1967.....	409	477	278	78	181	828	3/	2,251	5,559	7,810
1968.....	400	450	236	n.a.	175	732	3/	n.a.	5,580	n.a.
1969.....	398	430	204	n.a.	n.a.	632	3/	n.a.	5,554	n.a.
1970.....	392	410	170	n.a.	n.a.	540	3/	n.a.	5,400	n.a.
Horses										
1961-65 average...	279	261	373	378	2/2,562	838	1,170	5,861	8,960	14,821
1966.....	240	188	272	307	2,495	689	1,131	5,322	8,000	13,322
1967.....	229	177	250	292	2,518	705	1,134	5,305	8,000	13,305
1968.....	224	166	219	276	2,525	715	1,126	5,251	8,000	13,251
1969.....	199	156	188	249	2,649	702	1,109	5,252	8,000	13,252
1970.....	190	150	160	230	2,620	680	1,090	5,120	8,000	13,120
Poultry										
1961-65 average...	22,188	28,785	37,241	4/28,388	78,917	39,022	30,205	264,746	502,700	767,446
1966.....	20,845	27,752	37,988	4/28,589	30,288	40,084	31,685	267,231	490,500	757,731
1967.....	23,637	29,466	37,070	4/32,184	81,026	43,966	35,153	282,502	516,200	798,702
1968.....	27,726	31,208	37,976	4/31,093	80,117	47,148	35,974	291,242	528,200	819,442
1969.....	24,874	32,544	38,802	4/28,120	84,269	47,618	37,142	293,369	543,000	836,869
1970.....	24,800	32,700	38,800	28,000	84,000	47,400	37,885	293,585	540,000	833,585

1/ 1970 data are preliminary.

2/ 1963-65 average.

3/ No breakdown for goats; included in sheep numbers.

4/ March census.

n.a. = Not available.

Table 14.--Eastern Europe and Soviet Union: Production of principal livestock products, average 1961-65, annual 1966-69 1/

Commodity and year	Bulgaria <u>2/</u>	Czechoslovakia <u>3/</u>	East Germany <u>4/</u>	Hungary <u>3/</u>	Poland <u>2/</u>	Romania <u>4/</u>	Yugoslavia <u>3/ 5/</u>	Total Eastern Europe <u>6/</u>	USSR <u>7/</u>	Total Eastern Europe and USSR <u>6/</u>
----- 1,000 metric tons -----										
Beef and veal										
1961-65 average....	68	219	229	139	415	200	188	1,458	2,958	4,416
1966.....	91	252	276	144	440	242	216	1,661	3,740	5,401
1967.....	95	278	298	162	498	247	239	1,817	4,335	6,152
1968.....	105	312	309	<u>8/167</u>	542	226	269	1,930	4,590	6,520
1969.....	95	295	324	182	567	220	230	1,913	4,600	6,513
Mutton, lamb, goat- meat										
1961-65 average....	61	7	10	13	22	70	46	229	816	1,045
1966.....	84	6	10	15	20	83	46	264	720	984
1967.....	86	6	10	16	22	85	50	275	800	1,075
1968.....	88	6	10	<u>8/18</u>	25	78	55	279	800	1,079
1969.....	79	6	10	20	26	75	55	271	810	1,081
Pork										
1961-65 average....	149	391	682	294	1,226	308	294	3,344	2,835	6,179
1966.....	181	415	818	310	1,345	374	287	3,730	3,375	7,105
1967.....	178	417	842	297	1,313	422	309	3,778	3,375	7,153
1968.....	194	444	874	<u>8/335</u>	1,286	421	323	3,877	3,075	6,952
1969.....	175	423	888	312	1,340	416	290	3,844	3,060	6,904
Poultry meat										
1961-65 average....	39	51	62	131	78	75	71	477	740	1,217
1966.....	48	57	65	151	104	97	88	610	700	1,310
1967.....	62	65	69	163	107	102	95	663	800	1,463
1968.....	64	<u>8/81</u>	74	<u>8/165</u>	114	100	107	705	800	1,505
1969.....	58	87	86	178	120	119	110	758	800	1,558
Total meats										
1961-65 average....	321	683	1,001	586	1,779	653	602	6,525	7,349	12,974
1966.....	407	742	1,183	624	1,945	796	638	6,335	8,725	15,060
1967.....	421	778	1,230	642	1,974	856	694	6,595	9,412	16,012
1968.....	453	<u>8/853</u>	1,278	<u>8/687</u>	2,005	825	755	6,856	9,358	16,211
1969.....	409	801	1,320	694	2,093	830	686	6,833	9,355	16,188
Milk <u>9/</u>										
1961-65 average....	1,235	3,766	5,704	1,825	12,849	2,680	2,417	30,476	58,242	88,718
1966.....	1,501	4,169	6,728	1,851	14,235	3,092	2,696	34,272	68,393	102,665
1967.....	1,610	4,335	6,904	1,977	14,494	3,391	2,796	35,507	71,928	107,435
1968.....	1,586	4,559	7,227	1,933	14,642	3,134	2,821	35,902	73,890	109,792
1969.....	1,578	4,741	7,314	1,928	14,690	3,250	2,860	36,361	73,440	109,801
Wool										
1961-65 average....	24	2	8	10	8	24	13	89	362	451
1966.....	26	2	8	10	8	26	13	93	371	464
1967.....	27	3	8	10	9	29	14	100	394	494
1968.....	29	3	<u>8/8</u>	11	9	31	14	105	413	518
1969.....	30	4	8	11	9	28	13	103	390	493
Butter <u>10/</u>										
1961-65 average....	11	74	175	17	92	17	17	403	861	1,264
1966.....	12	84	206	19	118	28	17	484	1,042	1,526
1967.....	13	82	209	23	119	30	17	493	1,060	1,553
1968.....	12	87	220	22	124	29	<u>8/17</u>	511	1,044	1,555
1969.....	14	90	224	21	117	27	18	511	1,040	1,551
----- Millions -----										
Eggs										
1961-65 average....	1,348	2,589	3,517	2,006	6,050	2,502	1,601	19,613	28,736	48,349
1966.....	1,490	3,080	3,894	2,436	6,253	2,814	1,996	21,963	31,672	53,635
1967.....	1,683	3,218	3,995	2,714	6,348	3,011	2,126	23,095	33,921	57,016
1968.....	1,618	3,270	4,046	2,792	6,315	3,113	2,186	23,340	35,522	58,862
1969.....	1,580	3,410	4,050	2,600	6,400	3,200	2,400	23,640	37,000	60,640

1/ 1969 data are preliminary. 2/ Official meat data are in carcass weight including fats. 3/ Official meat data are in dressed carcass weight excluding fats. 4/ Meat data are estimated in carcass weight including fats; in Romania, growth in herds also is included. 5/ Meat data exclude exports of animals for slaughter. 6/ Meat weight specifications vary from country to country. Despite this fact, data are added. 7/ Meat data are estimated in dressed carcass weight excluding fat. 8/ Estimate. 9/ Cows milk only for Czechoslovakia, East Germany, Hungary, and Poland. In East Germany, milk production is given in 3.5 percent fat content equivalent. 10/ Total production in East Germany and Yugoslavia; factory production in all other countries.

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam:
Selected agricultural imports and exports, 1962-68

Country by commodity	1962	1963	1964	1965	1966	1967	1968
-----1,000 metric tons-----							
BULGARIA							
Imports:							
Meat, fresh, frozen, and chilled.....	1.5	8.1	6.7	15.1	8.5	25.6	n.a.
Wheat.....	119.9	193.1	407.8	149.0	314.6	13.0	232.8
Rice, milled.....	13.0	25.3	52.0	25.9	18.9	16.1	n.a.
Barley.....	55.5	95.4	162.9	133.4	---	---	n.a.
Corn.....	37.2	105.1	107.7	28.7	76.4	26.4	n.a.
Sugar, refined.....	124.1	117.6	131.0	154.6	158.1	194.7	285.3
Cattle hides, undressed.....	2.5	3.6	3.3	2.8	8.1	3.5	n.a.
Rubber, crude.....	17.0	18.2	22.9	21.8	24.6	25.5	32
Wool, scoured.....	1.1	1.7	2.2	1.5	2.2	2.4	3.1
Cotton, lint.....	47.5	31.8	45.1	47.8	54.0	50.7	58
Exports:							
Calves <u>1/</u>	3.4	7.9	33.6	84.9	63.0	69.9	n.a.
Hogs, for slaughter <u>1/</u>	138.6	91.5	115.2	321.6	379.4	127.6	n.a.
Pork.....	10.0	4.5	1.4	8.3	12.3	14.4	n.a.
Poultry meat.....	6.8	6.6	7.5	9.7	10.1	17.0	n.a.
Cheese.....	10.5	4.0	11.4	15.1	12.3	22.7	n.a.
Eggs <u>2/</u>	442.2	331.2	400.7	508.0	479.8	580.0	556
Wheat.....	2.0	28.2	7.0	9.5	400.2	533.8	n.a.
Corn.....	82.7	73.5	244.9	43.4	186.7	306.3	n.a.
Fruit, fresh <u>3/</u>	260.9	291.7	230.5	352.1	192.5	223.5	215
Fruit, canned.....	39.5	47.2	52.6	51.2	47.4	66.1	70
Jams and jellies.....	46.2	51.5	45.5	39.5	28.9	18.2	24
Fruit puree.....	49.9	39.8	48.9	32.3	24.9	23.9	n.a.
Vegetables, fresh <u>4/</u>	317.6	286.2	327.2	226.4	218.0	246.0	244
Vegetables, canned.....	87.3	81.0	93.6	93.5	134.5	144.3	129
Tomato puree.....	38.4	34.6	33.8	36.1	43.9	33.8	n.a.
Wine, grape <u>5/</u>	380	530	521.2	545.7	899.8	894.2	940
Tobacco, oriental.....	52.6	77.7	81.5	78.2	71.7	75.6	68
Sunflowerseed.....	92.4	32.8	111.4	91.5	155.8	99.9	n.a.
Cotton, lint.....	---	---	0.2	2.6	7.2	17.5	n.a.
Sunflowerseed oil.....	10.2	13.4	5.1	1.0	17.3	40.5	n.a.
CZECHOSLOVAKIA							
Imports:							
Meat and slaughter animals.....	89	96	62	48	75	81	83
Poultry meat.....	9.2	8.4	9.6	7.8	8.7	7.6	5.8
Butter.....	15	20	10	12	11	13	13
Eggs <u>2/</u>	32	23	61	48	64	70	68
Wheat.....	927	1,365	1,489	924	1,032	1,205	1,371
Rice, milled.....	82	88	89	73	92	60	68
Barley.....	144	156	396	595	135	162	125
Corn.....	300	289	433	155	282	138	263
Rye.....	172	62	41	32	n.a.	n.a.	---
Fruits.....	158	159	184	241	190	241	234
Nuts.....	5.1	7.8	6.5	6.6	7.7	7.8	7.2
Vegetables.....	137	119	112	144	132	149	118
Sugar, raw equivalent.....	150.0	150.0	50.1	209.5	263.2	188.0	202.2
Coffee.....	8.8	11.5	11.0	10.3	10.6	11.6	13.3
Cocoa beans.....	12.2	13.0	12.8	14.1	19.3	15.5	12.8
Tea.....	1.2	1.7	1.7	1.4	1.9	0.9	1.1
Oilseed cake and meal.....	56.0	102.8	176.6	168.4	204.7	250.3	n.a.
Wine <u>5/</u>	390	384	474	471	468	498	534

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam:
Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
	1,000 metric tons						
CZECHOSLOVAKIA--Continued							
Imports--Continued							
Tobacco.....	13	13	18	17	13	18	22
Cattle hides, raw.....	42	37	40	44	44	40	40
Peanuts.....	32	46	42	37	53	26	33
Soybeans.....	23	21	26	25	26	22	22
Sunflowerseed.....	66	33	33	17	43	59	86
Wool, scoured.....	20	20	21	23	21	17	17
Cotton, lint.....	92	105	106	100	113	103	107
Jute.....	18	20	14	14	15	15	16
Exports:							
Meat, fresh, frozen, and chilled.....	2.1	2.3	3.9	28.1	8.0	17.2	n.a.
Eggs <u>2/</u>	54	99	74	66	60	41	47
Malt.....	155	178	157	178	192	205	207
Hops.....	3.7	4.9	5.4	4.7	5.0	5.3	5.3
Sugar, refined.....	528	513	359	513	325	392	287
Beer <u>5/</u>	465	445	326	321	542	750	841
EAST GERMANY <u>6/</u>							
Imports:							
Meat and meat products.....	202.2	139.1	106.1	76.6	78.4	75.3	68.8
Butter.....	55.7	43.8	31.2	29.2	18.5	17.2	18.2
Cheese.....	18.2	16.8	16.5	14.0	14.3	12.5	10.8
Eggs and egg products <u>2/</u>	55.3	164.8	113.3	19.5	40.1	63.3	43.5
Wheat.....	1,238.0	1,023.0	1,303.0	1,225.0	1,350.0	1,184.0	1,075.0
Rice.....	30.4	30.3	26.8	40.4	62.0	49.8	46.7
Barley.....	141.0	89.0	219.0	289.0	126.0	203.0	168.0
Corn.....	412.0	287.0	309.0	183.0	295.0	352.0	394.0
Rye.....	448.0	282.0	101.0	1.0	111.0	---	---
Fruit, tropical.....	100.2	83.3	94.5	114.3	152.3	199.0	163.5
Fruit, fresh.....	110.9	153.2	178.7	169.1	137.0	139.3	130.2
Nuts.....	11.5	9.8	10.0	13.1	15.5	13.6	25.2
Fruit juice.....	11.6	13.5	14.0	9.6	13.2	11.4	16.2
Fruit, canned.....	19.6	18.5	38.5	30.7	33.3	30.3	38.3
Potatoes.....	129.1	128.2	409.8	84.4	93.2	107.6	141.0
Pulses, for food.....	7.2	8.3	22.8	5.8	10.3	11.3	10.2
Vegetables, fresh.....	94.6	130.5	148.8	88.6	104.2	90.3	92.8
Vegetables, canned.....	24.6	33.2	92.2	57.4	57.3	78.1	61.9
Sugar, raw equivalent.....	321.2	244.5	81.1	169.9	207.2	322.9	298.2
Honey.....	2.2	1.7	2.9	1.8	2.5	2.9	2.7
Coffee.....	29.0	34.4	36.5	35.8	37.4	40.2	40.2
Cocoa beans.....	13.9	14.1	14.4	15.3	18.0	16.2	19.1
Tea.....	1.8	1.4	1.4	1.9	1.1	1.2	1.5
Forage <u>7/</u>	6.9	10.0	11.8	10.3	13.2	9.1	8.8
Oilseed cake and meal.....	59.8	125.6	213.5	199.2	236.1	345.1	379.3
Wine and champagne <u>5/</u>	647.1	705.9	642.5	676.3	782.1	852.4	807.9
Beer <u>5/</u>	77.9	78.2	78.6	78.1	80.8	82.1	82.5
Spirits <u>5/</u>	18.0	6.9	10.0	6.3	51.4	35.6	35.5
Tobacco, smoking and cured....	24.2	29.2	27.2	27.8	22.5	26.1	21.3
Cattle hides and skins, salted:	8/24.3	20.1	21.0	19.2	18.4	17.2	14.6
Oilseeds.....	108.2	137.3	154.6	139.6	163.6	148.4	132.2
Wool, scoured.....	21.2	23.3	22.3	24.7	18.8	19.2	21.8
Cotton, lint.....	123.6	93.5	96.2	99.3	90.3	84.7	87.2

--Continued

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam:
Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
	1,000 metric tons						
EAST GERMANY 6/--Continued							
Imports--Continued							
Animal fats, refined and unrefined.....	10.4	3.2	2.2	---	---	0.3	---
Vegetable oils, refined and unrefined.....	148.8	136.3	119.1	106.1	120.3	110.7	112.1
Exports:							
Meat, fresh.....	0.5	10.8	33.7	21.0	18.9	22.8	n.a.
Sugar, refined.....	213.1	195.7	172.9	97.5	191.0	145.6	155.2
HUNGARY							
Imports:							
Meat, fresh.....	20.2	37.0	43.4	34.2	31.0	58.2	18.1
Meat, canned.....	0.2	1.4	1.2	3.5	2.6	1.2	1.8
Butter.....	4.5	2.9	0.9	5.7	4.5	5.4	2.5
Wheat, including feed wheat....	172.7	363.4	303.9	207.7	152.4	217.0	310.5
Rice, husked and broken.....	17.4	18.8	11.2	21.4	40.6	24.6	17.6
Barley.....	54.5	118.0	100.4	382.0	40.7	10.2	73.9
Corn.....	429.2	161.9	140.2	70.8	55.8	0.2	75.4
Rye.....	---	28.7	3.8	---	---	50.0	---
Flour and grits.....	39.6	22.4	55.2	8.8	5.7	---	---
Fruit, tropical.....	38.7	31.4	42.3	40.8	47.1	48.8	61.8
Coffee.....	5.5	6.9	11.0	12.6	13.5	17.4	20.5
Cocoa beans.....	6.3	7.2	7.0	12.5	9.8	9.8	10.9
Tea.....	0.6	0.8	0.5	2.2	0.8	0.6	0.9
Oilseed cake and meal.....	121.9	161.7	186.7	183.7	228.7	245.3	266.7
Lard, rendered.....	7.2	14.6	14.9	5.4	6.5	25.6	7.2
Tobacco.....	6.5	4.6	5.0	4.9	8.1	15.6	12.3
Hides and skins.....	19.1	18.8	21.4	24.6	24.1	24.4	25.2
Wool, scoured.....	2.7	4.0	3.7	2.8	4.0	4.8	6.7
Cotton, lint.....	65.1	63.6	68.4	72.1	78.2	88.6	74.8
Jute.....	9.3	8.0	9.1	8.8	12.1	6.5	9.8
Exports:							
Cattle, for slaughter.....	50.2	72.5	54.9	71.8	80.7	91.9	95.6
Hogs, for slaughter.....	18.1	17.9	6.1	28.8	28.3	9.7	5.9
Meat, fresh.....	41.9	37.8	32.2	41.0	49.7	48.8	47.7
Meat, canned.....	4.8	4.9	5.6	7.5	6.5	7.9	8.1
Poultry, dressed.....	26.4	27.2	34.0	35.5	33.7	38.5	47.2
Butter.....	4.7	5.4	4.4	5.9	5.1	10.6	6.0
Cheese.....	7.2	8.8	8.4	6.2	7.5	9.3	6.0
Eggs 2/.....	60.1	90.6	197.6	344.3	287.7	423.4	364.5
Wheat.....	31.9	41.6	13.9	96.2	1.0	170.5	115.3
Corn.....	34.2	25.5	63.9	92.6	42.7	19.7	18.6
Flour and grits.....	11.9	12.3	12.0	10.8	12.6	13.7	13.9
Fruit, fresh.....	87.7	183.4	177.6	182.1	180.5	243.7	207.6
Fruit, canned.....	35.9	41.9	45.0	52.4	52.2	52.9	58.3
Potatoes.....	24.3	42.6	37.9	30.8	37.2	113.8	32.4
Beans.....	4.6	15.4	11.7	28.3	6.6	8.7	1.5
Peas.....	30.5	20.8	17.1	28.8	19.5	25.6	11.6
Vegetables, fresh.....	98.7	137.9	107.4	114.0	147.4	122.9	86.4
Vegetables, canned.....	70.2	94.5	134.2	124.4	154.5	184.9	183.5
Sugar, refined.....	214.8	222.9	147.0	138.6	63.3	42.2	16.6
Honey.....	4.6	4.3	4.6	5.0	5.0	5.7	5.8
Wine 5/.....	335.2	401.8	569.4	689.0	720.0	728.2	788.4
Tobacco.....	4.0	4.0	9.7	9.5	7.2	10.7	6.6
Sunflowerseed.....	15.4	16.8	14.3	10.4	13.7	14.0	18.2

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam:
Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
	----- <u>1,000 metric tons</u> -----						
HUNGARY--Continued							
Exports--Continued							
Sunflowerseed oil, refined....	22.0	25.5	19.5	14.0	14.1	29.4	32.3
POLAND							
Imports:							
Meat and meat products.....	5.0	47.6	37.7	39.4	52.8	43.2	79.0
Butter.....	---	4.7	8.4	2.4	---	3.0	9.4
Wheat.....	1,503.8	1,673.4	2,211.4	1,378.2	1,566.7	1,353.0	1,067.7
Rice, milled.....	51.4	99.2	54.9	67.2	67.2	65.3	59.0
Barley.....	277.6	431.9	287.2	485.3	139.2	417.6	545.4
Corn.....	144.8	99.4	186.1	784.5	187.6	199.8	295.3
Rye.....	247.2	409.1	---	---	70.3	---	63.9
Oats.....	---	5.0	13.8	32.9	---	---	---
Fruit, citrus.....	35.0	33.7	38.9	60.1	85.8	75.9	84.6
Fruit, fresh.....	45.4	36.0	6.0	35.2	26.7	35.2	32.7
Fruit, dried.....	6.0	4.5	5.0	5.4	6.7	5.3	6.7
Vegetables, fresh.....	58.0	28.4	25.4	37.2	30.3	31.8	53.1
Vegetables, canned and frozen:	9.3	9.4	1.7	3.3	8.6	5.3	6.8
Coffee beans.....	7.2	8.9	10.9	15.4	19.5	20.1	27.8
Cocoa beans.....	11.5	12.2	14.0	17.3	12.3	20.0	22.6
Tea.....	4.1	4.9	4.7	5.7	7.7	7.3	6.5
Oilseed cake and meal.....	77.7	98.8	164.7	157.8	184.1	215.5	299.0
Tobacco.....	15.1	19.3	15.8	16.6	13.8	10.7	5.5
Cattle hides, green.....	37.7	31.2	32.7	34.3	47.2	52.1	41.2
Oilseeds.....	32.6	59.1	61.3	141.9	69.3	67.6	52.0
Rubber, crude.....	38.9	35.2	42.1	38.8	45.1	43.5	46.8
Wool, scoured.....	18.5	14.9	15.7	17.3	15.2	16.5	17.1
Cotton, lint.....	120.6	122.7	151.9	142.8	156.0	133.4	156.4
Vegetable oils, edible.....	51.8	12.4	68.0	31.9	24.0	50.5	45.5
Exports:							
Cattle, for slaughter ^{9/}	8.8	8.7	12.3	16.2	12.1	4.0	4.3
Hogs, for slaughter ^{9/}	45.5	8.6	9.1	9.2	2.4	1.9	0.3
Meat, frozen.....	67.9	33.2	22.4	64.0	18.6	31.7	33.7
Poultry meat.....	13.7	12.1	15.9	19.2	18.8	17.3	18.0
Bacon.....	50.6	50.8	52.2	51.9	52.4	54.9	53.8
Ham, canned.....	16.8	17.7	19.8	22.3	23.2	24.4	24.1
Meat, canned.....	20.6	23.3	24.0	25.6	27.3	27.8	29.2
Butter.....	27.5	18.6	20.0	18.3	19.3	23.4	19.6
Eggs ^{2/}	1,218.5	783.4	637.5	750.6	513.5	551.2	326.8
Barley.....	35.2	59.9	59.9	56.9	89.6	57.7	31.9
Rye.....	---	---	---	---	19.5	65.5	23.7
Potatoes.....	381.2	248.7	1,015.3	532.8	453.3	423.7	529.4
Vegetables, fresh.....	22.5	65.1	103.1	92.0	74.4	53.1	70.0
Sugar, raw.....	150.5	53.3	145.2	90.1	100.9	140.8	162.6
Sugar, refined.....	468.8	160.1	358.3	383.3	227.5	214.9	485.8
Lard.....	23.2	4.3	0.4	5.4	27.4	16.0	0.5
Beer ^{5/}	68.5	61.0	150.3	203.6	182.6	142.3	172.2
Rapeseed.....	---	4.5	---	60.4	88.1	106.2	175.4
ROMANIA							
Imports:							
Rice.....	23.1	43.1	29.2	36.7	29.5	32.0	29.7
Fruit, citrus.....	21.1	19.6	20.0	22.0	26.2	30.1	27.3

--Continued

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam:
Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
----- 1,000 metric tons -----							
ROMANIA--Continued							
Imports--Continued							
Olives.....	6.1	8.1	6.4	6.9	5.3	5.8	5.5
Sugar, refined.....	37.0	44.9	---	---	---	---	50.5
Cocoa (including powdered cocoa).....	2.5	3.8	3.7	5.4	5.1	5.4	7.1
Hides and skins.....	13.6	6.5	12.2	14.4	20.8	21.8	18.3
Rubber, crude.....	13.8	19.2	22.3	19.2	24.9	26.7	30.5
Wool, scoured.....	0.3	0.3	0.8	1.4	1.5	1.8	2.0
Cotton, lint.....	60.8	65.4	66.6	67.0	76.7	71.9	76.1
Vegetable oils, edible.....	1.5	0.8	2.0	0.8	2.9	2.1	5.4
Exports:							
Animals, for slaughter 1/.....	2.2	2.5	4.0	28.4	98.0	62.5	n.a.
Meat, fresh.....	13.5	13.8	16.6	33.2	31.1	56.8	n.a.
Meat, prepared or preserved....	1.8	1.6	2.0	2.4	4.8	7.4	n.a.
Butter.....	2.5	6.0	5.1	5.6	10.4	15.0	n.a.
Eggs 2/.....	131.6	81.2	148.3	245.8	286.2	290.0	311.8
Grain, total (excluding seed)..	1,067.9	1,408.8	1,234.2	882.2	1,303.0	2,339.4	1,561.6
Grapes.....	54.9	52.0	40.7	60.3	37.8	46.3	48.6
Fruit, fresh.....	42.8	69.0	53.6	96.5	54.6	67.0	64.6
Fruit, canned.....	75.9	107.6	93.7	86.0	97.2	109.8	83.8
Potatoes.....	20.9	38.1	8.5	11.1	21.1	31.4	27.7
Vegetables, fresh.....	71.1	82.1	105.4	136.8	127.6	127.1	193.9
Vegetables, canned.....	15.4	20.7	29.5	25.9	35.9	40.5	48.7
Sugar, refined.....	310.8	75.6	52.9	34.5	106.0	192.2	63.3
Wine.....	20.7	26.8	42.4	43.3	46.0	52.7	57.9
Sunflowerseed.....	15.0	15.0	40.0	35.0	30.9	58.6	61.9
Wool, scoured.....	0.9	1.0	0.9	1.1	1.6	1.5	2.4
Animal fats, edible.....	8.8	7.9	12.0	19.3	44.3	48.6	46.9
Vegetable oils, edible.....	47.6	39.7	37.1	33.3	76.5	110.0	115.8
YUGOSLAVIA							
Imports:							
Hogs, for slaughter.....	22.5	9.0	11.6	21.5	27.6	6.8	---
Meat, fresh.....	0.2	1.0	0.2	1.3	9.7	32.9	5.6
Milk, powdered.....	18.1	23.1	19.7	13.3	14.2	2.7	16.7
Eggs.....	3.6	3.8	3.8	4.0	10.5	9.7	1.1
Wheat.....	732.9	1,438.3	602.4	1,192.6	1,357.2	409.0	78.7
Rice, milled.....	4.1	38.9	36.9	26.4	27.3	9.7	27.9
Barley.....	13.8	69.0	61.1	1.1	0.6	---	---
Corn.....	60.4	32.7	116.0	0.7	---	---	2.5
Fruit, citrus.....	39.8	39.4	62.6	66.3	82.9	98.6	84.9
Potatoes.....	22.8	7.7	0.7	24.2	14.6	0.3	---
Sugar, refined.....	131.4	54.6	106.3	94.2	246.2	131.2	67.7
Coffee.....	10.3	17.8	15.7	17.7	24.7	30.3	29.0
Cocoa beans.....	3.6	9.6	6.7	13.8	13.9	8.9	9.7
Oilseed cake and meal.....	50.3	80.5	147.3	137.9	74.7	155.9	121.5
Lard.....	2.2	7.4	9.4	0.4	2.4	11.4	9.1
Tobacco.....	9.9	10.1	3.4	0.1	1.0	---	0.1
Hides, raw.....	20.6	22.4	27.4	25.1	26.7	35.7	21.5
Oilseeds.....	21.6	29.4	35.2	28.2	26.2	7.5	30.8
Rubber, crude.....	13.9	15.1	17.0	16.5	15.4	14.4	15.7
Wool, greasy.....	5.9	11.3	14.6	16.1	11.4	12.6	12.7
Cotton, lint.....	64.2	72.2	81.7	90.5	87.4	90.7	72.0
Jute.....	11.1	15.0	12.2	13.6	13.9	8.7	10.7

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam:
Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
----- 1,000 metric tons -----							
YUGOSLAVIA--Continued							
Imports--Continued							
Tallow.....	15.2	11.8	6.0	16.1	0.3	12.4	24.2
Vegetable oils, edible.....	41.4	30.4	54.5	19.1	21.8	92.1	46.9
Exports:							
Cattle, for slaughter.....	37.0	44.5	19.1	11.2	21.9	33.9	33.2
Sheep, for slaughter.....	8.7	7.2	0.4	1.9	3.4	5.5	9.0
Hogs, for slaughter.....	1.1	0.1	---	0.4	0.2	0.6	0.1
Horses, for slaughter.....	29.1	27.7	16.8	11.9	16.3	23.6	20.8
Meat, fresh.....	79.6	70.4	111.2	126.0	112.6	103.6	94.7
Meat, canned.....	21.1	23.8	30.4	36.9	23.8	24.2	19.8
Cheese.....	8.8	0.5	0.9	1.2	1.8	1.2	0.5
Eggs.....	6.2	5.1	3.6	2.0	4.6	2.5	0.2
Barley.....	15.1	---	14.1	36.6	85.1	101.8	21.1
Corn.....	27.8	104.3	17.7	51.4	356.9	786.7	388.8
Fruit, fresh.....	71.7	33.6	61.2	35.2	19.5	29.1	14.5
Prunes.....	14.6	33.0	17.6	13.0	4.9	7.3	14.5
Fruit pulp.....	16.2	16.0	13.7	13.2	13.2	13.6	12.5
Potatoes.....	0.2	0.7	0.3	0.3	9.6	3.4	1.2
Beans, dry.....	0.8	0.3	0.4	7.8	7.6	11.1	9.0
Hops.....	3.9	4.7	4.8	4.9	4.4	4.3	4.0
Sugar, refined.....	21.2	25.0	12.3	---	2.2	11.8	13.2
Wine.....	50.0	43.3	49.6	40.0	37.0	44.1	29.8
Tobacco.....	15.3	16.8	22.7	23.2	20.9	19.2	15.9
Oilseeds.....	1.7	3.8	7.2	13.0	4.6	9.7	19.2
Hemp, all.....	10.3	13.5	10.4	8.8	3.7	4.6	4.8
SOVIET UNION							
Imports:							
Cattle, for slaughter.....	94.3	77.3	73.2	91.5	107.4	91.8	67.4
Hogs, for slaughter.....	21.2	---	0.4	21.4	---	---	---
Horses, for slaughter.....	---	6.7	5.4	5.6	8.6	10.2	13.0
Meat and meat products.....	149.1	37.4	119.9	252.2	133.2	57.5	59.6
Eggs <u>2/</u>	66.3	76.7	532.0	706.1	609.3	749.0	672.4
Wheat.....	45.1	3,052.5	7,281.4	6,375.1	7,582.8	1,827.8	1,339.7
Rice, milled.....	337.5	193.6	363.1	237.9	275.4	397.3	260.0
Corn.....	---	---	---	---	163.5	356.8	264.2
Flour, wheat.....	22.1	277.2	972.0	289.1	322.4	211.8	263.4
Fruit, fresh.....	345.6	407.2	439.6	500.9	447.3	538.8	527.1
Fruit, dried.....	77.2	113.4	76.6	85.3	69.4	100.4	107.6
Vegetables, fresh..... <u>10/</u>	132.9	174.7	243.1	167.8	139.0	151.0	169.4
Vegetables, canned.....	89.9	108.3	158.6	127.6	203.4	239.9	210.9
Sugar, raw.....	2,233.2	996.4	1,859.3	2,330.7	1,840.9	2,479.7	1,752.2
Coffee.....	22.6	29.7	30.3	30.9	28.3	24.7	31.4
Cocoa beans.....	48.7	54.0	66.2	88.8	56.5	81.7	109.0
Tea.....	16.1	21.7	32.5	36.3	21.3	23.1	22.7
Tobacco.....	66.6	93.4	129.1	104.1	65.2	61.0	62.3
Hides and skins <u>11/</u>	19.5	26.4	28.9	22.8	26.9	30.2	24.2
Oilseeds.....	57.3	65.2	75.2	156.8	48.9	44.2	56.2
Rubber, crude.....	361.7	298.4	186.1	271.2	311.1	278.5	325.9
Wool, scoured.....	48.6	42.4	46.3	52.8	61.3	49.8	70.8
Cotton, lint.....	150.2	225.6	144.9	182.9	172.7	144.5	136.8
Vegetables oils, edible.....	15.1	37.3	43.2	68.1	47.4	27.7	41.2

--Continued

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam:
Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
----- 1,000 metric tons -----							
SOVIET UNION--Continued							
Exports:							
Meat and meat products.....	133.7	183.0	60.9	31.7	118.4	175.4	130.6
Butter.....	69.7	65.0	25.3	43.0	54.1	63.4	75.6
Wheat.....	4,765.2	4,105.6	2,030.5	1,662.6	2,805.3	5,284.0	4,355.0
Barley.....	466.8	594.2	665.8	2,067.9	290.4	452.4	614.4
Corn.....	1,256.7	723.1	638.6	551.1	174.4	164.7	209.0
Rye.....	1,300.3	815.0	150.3	36.9	275.1	336.2	221.9
Oats.....	25.3	22.0	28.3	11.8	11.5	10.7	6.1
Flour.....	251.4	276.4	320.5	266.7	305.6	376.8	564.4
Sugar, refined.....	792.4	802.4	347.8	604.1	992.8	1,032.3	1,299.6
Oilseed cake and meal.....	348.6	193.2	45.5	129.2	390.5	387.9	325.1
Tobacco.....	1.8	1.8	3.2	2.1	1.3	2.0	4.3
Oilseeds.....	112.7	101.2	113.5	88.2	147.2	341.2	404.8
Wool, scoured.....	24.2	27.6	24.4	26.4	27.8	20.1	26.0
Cotton, lint.....	343.6	321.5	393.6	457.7	507.8	534.4	554.4
Vegetable oils, edible.....	152.5	258.9	189.9	242.1	455.7	707.2	770.4
MAINLAND CHINA							
Imports:							
Wheat.....	4,419.1	4,394.0	5,542.2	5,249.8	6,375.2	3,871	4,444.3
Rice.....	4.7	97.1	76.4	112.3	51.5	22.4	n.a.
Barley.....	486.6	25.0	567.5	23.6	---	---	n.a.
Corn.....	491.2	13.4	377.2	71.8	20.2	136.5	n.a.
Rye.....	246.9	---	---	---	---	---	n.a.
Oats.....	47.4	26.9	134.6	41.9	---	---	n.a.
Cereals, unmilled, n.e.s.....	23.5	---	29.3	---	---	---	n.a.
Flour.....	223.9	0.7	54.7	16.9	---	---	n.a.
Dates.....	63.0	71.3	62.1	35.3	59.8	59.5	n.a.
Sugar, raw equivalent.....	937.9	511.9	407.6	419.1	619.7	556.1	431.8
Cotton, raw.....	67.5	143.1	105.2	168.5	107.0	88.2	68.1
Jute.....	13.0	22.9	56.7	60.6	52.2	63.6	n.a.
Sisal.....	2.7	3.8	9.6	7.2	13.1	6.3	n.a.
Fats and oils, animal.....	27.6	21.6	30.1	17.7	15.2	11.9	n.a.
Exports:							
Cattle, for slaughter <u>1</u> /.....	17.1	23.7	46.1	94.8	6.2	111.4	116.9
Sheep and goats, for slaughter <u>1</u> /.....	---	---	7.8	12.4	10.9	8.6	n.a.
Hogs, for slaughter <u>1</u> /.....	785.6	1,285.5	1,717.3	1,879.2	1,951.5	1,816.0	1,960.0
Meat, fresh.....	10.6	23.6	76.5	139.5	169.5	108.9	n.a.
Meat, dried and salted.....	2.3	2.0	3.1	4.5	4.8	10.7	n.a.
Meat, prepared or preserved....	6.0	8.3	23.9	39.3	41.8	20.7	n.a.
Eggs, in shell.....	25.8	34.8	40.0	42.4	49.4	41.2	n.a.
Eggs, not in shell <u>12</u> /.....	11.9	28.0	15.5	60.0	72.5	60.2	n.a.
Wheat, unmilled.....	89.1	109.9	110.8	---	---	---	n.a.
Rice.....	577.8	639.7	784.5	750.5	1,209.6	1,224.8	998.0
Corn.....	0.8	109.6	169.6	244.5	146.3	75.2	n.a.
Oranges and tangerines.....	29.9	37.3	38.8	39.3	42.8	55.8	n.a.
Fruit, other citrus.....	2.8	2.8	4.2	6.8	7.4	5.1	n.a.
Bananas, fresh.....	12.5	8.7	17.0	19.0	32.2	25.0	n.a.
Apples, fresh.....	62.4	71.0	81.1	88.8	89.4	90.8	n.a.
Pears, fresh.....	0.5	1.9	16.5	28.7	36.4	33.9	n.a.
Potatoes, fresh.....	7.5	11.2	25.4	34.2	53.6	41.8	n.a.
Beans and peas.....	58.1	57.8	62.5	101.9	148.0	128.6	n.a.
Onions, fresh.....	5.0	6.7	12.1	15.4	23.1	16.8	n.a.
Sugar, raw equivalent.....	284.5	217.0	361.7	419.3	522.8	388.0	n.a.

Table 15.--Eastern Europe, Soviet Union, Mainland China, North Korea, and North Vietnam:
Selected agricultural imports and exports, 1962-68--Continued

Country by commodity	1962	1963	1964	1965	1966	1967	1968
----- 1,000 metric tons -----							
MAINLAND CHINA--Continued							
Exports--Continued							
Tea.....	27.8	27.7	32.4	32.1	35.4	31.1	n.a.
Oilseed cake.....	4.5	9.2	19.4	29.3	25.8	31.6	n.a.
Peanuts.....	3.1	3.1	25.5	45.7	63.8	74.1	n.a.
Soybeans.....	342.2	332.1	498.4	576.2	550.1	564.4	620.5
Castor seed.....	1.9	5.3	10.7	14.6	56.3	79.6	n.a.
Rape and mustard seed.....	---	0.2	---	5.8	29.9	23.3	n.a.
Silk, fiber.....	1.1	1.2	1.8	3.3	6.0	5.7	n.a.
Wool, greasy.....	4.7	10.6	14.3	15.6	17.6	11.3	n.a.
Cottonseed oil.....	---	---	---	22.2	43.6	28.6	n.a.
Peanut oil.....	0.7	0.3	0.5	4.9	24.3	30.9	n.a.
Rape and mustard oil.....	---	---	---	3.8	31.8	17.1	n.a.
Tung oil.....	16.5	12.4	17.1	19.1	17.5	14.6	n.a.
NORTH KOREA							
Imports:							
Wheat, unmilled.....	84.1	96.1	43.6	101.2	339.8	358.3	n.a.
Flour and meal, wheat.....	7.8	---	---	20.5	63.1	116.8	n.a.
Sugar, raw equivalent.....	14.3	20.0	21.1	21.5	21.3	112.9	n.a.
Cotton, lint.....	10.8	10.0	9.5	10.7	10.9	11.7	n.a.
Sunflowerseed oil.....	---	---	---	---	3.5	5.7	n.a.
Exports:							
Rice.....	0.3	---	---	43.5	72.1	125.4	n.a.
Corn.....	12.7	37.0	23.5	---	18.0	6.3	n.a.
Tobacco.....	10.3	7.7	3.7	8.1	5.1	1.8	n.a.
Silk, fiber.....	0.3	0.2	0.4	0.5	0.5	0.3	n.a.
NORTH VIETNAM							
Imports:							
Flour and meal, wheat.....	9.1	17.1	6.5	1.5	10.7	39.4	n.a.
Sugar, raw equivalent.....	10.5	13.4	10.5	66.0	13.5	45.5	49.8
Exports:							
Hogs <u>1/</u>	7.1	5.0	12.5	16.9	4.7	1.6	n.a.
Rice.....	5.9	6.9	10.9	3.0	12.5	3.3	n.a.
Sugar, raw equivalent.....	3.3	4.7	3.2	6.6	2.0	3.2	n.a.

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

Sources: Official statistical handbooks published by the various countries except Mainland China, North Korea, and North Vietnam. Some data for Bulgaria, Czechoslovakia, East Germany, Romania, and Yugoslavia from Trade Yearbook, FAO, Vol. 22, 1968. Some data for Romania, and most data for Mainland China, North Korea, and North Vietnam from Supplementary Economic Statistics, Fifth Issue, FAO, October 1969. Some data for Bulgaria, Czechoslovakia, East Germany, Mainland China, and North Vietnam from Sugar Yearbook, 1968, International Sugar Council.

Table 16.--Eastern Europe and the Soviet Union: Agriculture in the economy and major agricultural inputs, by country, 1968

Item	Unit	Bulgaria	Czecho- slovakia	East Germany	Hungary	Poland	Romania	Yugoslavia	USSR
Agriculture in the economy:									
Share of national income <u>1/</u>	Percent	2/30	10	14	23	20	26	26	22
Share of exports <u>3/</u>	Do.	47	9	4/3	23	17	34	22	15
Share of imports <u>3/</u>	Do.	12	27	4/30	22	22	12	14	18
Rural population <u>5/</u>	Do.	53	n.a.	n.a.	56	49	61	50	44
Inputs in agriculture:									
Land:									
Agricultural land.....	Mil. ha.	5.9	7.1	6.3	6.9	19.8	15.0	14.7	608.3
Arable land <u>6/</u>	Do.	4.5	5.3	4.9	5.6	15.5	10.6	8.2	229.0
Labor:									
Agricultural labor force <u>7/</u>	Millions	1.8	1.4	1.2	1.5	6.2	6.4	4.5	2/42.6
Share of total labor force <u>7/</u>	Percent	42	20	15	29	38	55	49	2/35
Arable land per worker.....	Hectares	2.5	3.8	4.0	3.7	2.5	1.6	1.8	2/5.3
Tractors <u>8/</u> :									
Tractors, physical units.....	Thousand	2/47	n.a.	144	9/64	170	96	44	1,821
Tractors, 15 h.p. units.....	Do.	2/76	205	2/179	9/94	209	165	n.a.	3,776
Average h.p. tractor.....	H.p.	2/24	n.a.	2/19	22	18	26	n.a.	31
Arable land per 15 h.p. units....	Hectares	2/60	26	2/27	60	74	64	n.a.	61
Fertilizer consumption (active substance) per ha. of arable land.	Kilograms	186	178	303	112	118	46	67	36

1/ Current prices except Czechoslovakia (1967 prices) and East Germany (1950 prices). 2/ 1967 data. 3/ Definitions of agricultural trade based on categories reported in country statistical yearbooks--primarily agricultural raw material plus processed food; forestry products excluded. 4/ Estimate. 5/ U.S. Bureau of the Census data. Bulgaria, Hungary--1967 data; Poland, USSR--1968 data; Romania--1966 data; Yugoslavia--1961 census. 6/ Arable land includes cultivated land, orchards and gardens, and vineyards. 7/ U.S. Bureau of the Census data. Economically active population, including unemployed. 8/ End of year. 9/ Beginning 1968 tractors in machine tractor stations excluded.

Table 17.--Eastern Europe and the Soviet Union: The Socialist sector's share of agricultural resources and output, by country, 1968 1/

Resource or product	Bulgaria <u>2/</u>	Czecho- slovakia	Last Germany	Hungary	Poland	Romania	Yugoslavia	USSR
	----- <u>Percent</u> -----							
Land:								
Agricultural.....	84	85	85	84	16	84	30	99
Arable.....	86	89	87	81	15	86	15	97
Employment <u>3/</u>	94	88	98	80	14	90	n.a.	100
Tractors, physical units <u>4/</u>	100	100	100	96	86	100	67	100
Livestock <u>5/</u> :								
Cattle.....	70	85	73	62	16	52	6	72
of which cows.....	60	80	70	52	11	44	4	59
Hogs.....	56	76	66	48	11	54	16	74
Sheep.....	52	67	78	85	18	50	3	79
Poultry.....	29	53	27	14	n.a.	n.a.	13	n.a.
Agricultural output:								
Grains.....	85	90	<u>6/96</u>	76	<u>7/14</u>	89	26	98
Potatoes.....	43	66	<u>6/91</u>	49	8	53	3	38
Sugarbeets.....	98	99	<u>6/99</u>	100	13	100	62	100
Meat.....	50	<u>8/82</u>	n.a.	50	n.a.	46	27	62
Milk.....	71	<u>8/45</u>	n.a.	53	12	44	14	62
Eggs.....	40	<u>8/78</u>	n.a.	20	6	19	n.a.	40
Total <u>9/</u>	78	80	n.a.	<u>2/58</u>	13	n.a.	<u>2/21</u>	<u>10/70</u>

1/ Land, livestock, and agricultural output of private plots of collective and state farm workers and industrial workers are not included in the "Socialist" sector. 2/ 1967 data. 3/ U.S. Bureau of the Census data. Civilian employment--1967. 4/ End of year. Poland--includes tractors in agricultural circles. 5/ January 1. 6/ Includes production on private plots. 7/ Includes only wheat, rye, barley, and oats. 8/ 1966 data. 9/ Value of gross output in current prices, except 1959 prices in Hungary, 1950-52 prices in Poland, and 1965 prices in the Soviet Union. 10/ Estimated.

Information on agricultural conditions in Mainland China, North Korea, North Vietnam, and Cuba is limited. This report is based upon weather data and statements about crop conditions contained in Attache reports from Hong Kong, newspapers, journals, and radio reports from the respective countries. It also draws on reports by commercial, academic, and other specialists familiar with the countries. This information is evaluated by ERS specialists in light of historical and other information bearing on the agriculture of these countries.

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