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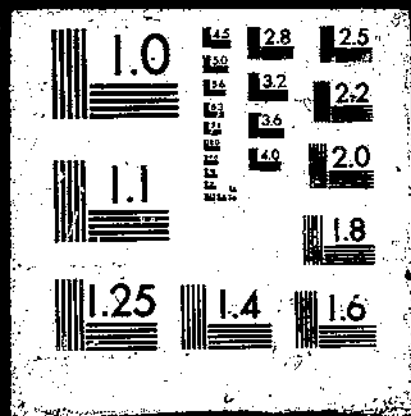
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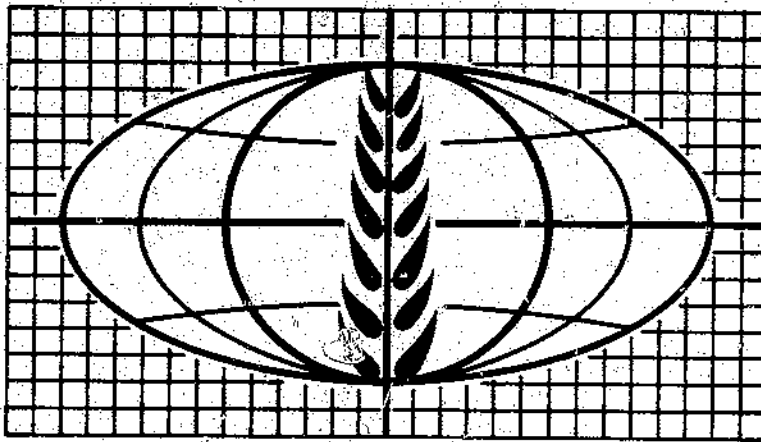
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# THE WORLD AGRICULTURAL SITUATION

**Review of 1968 and Outlook for 1969**

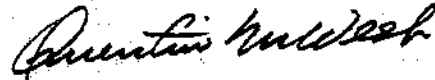
U.S. DEPARTMENT OF AGRICULTURE  
ECONOMIC RESEARCH SERVICE

Washington, D.C.

## FOREWORD

This issue of the World Agricultural Situation follows the format developed last year. Discussion has been limited to world developments of wide concern to U.S. agricultural interests instead of separate summaries for each region and commodity. More detailed statements of the situation by regions will be issued in March and April 1969. Separate reports will be presented on each of the following regions: Western Hemisphere; Far East and Oceania; Africa and West Asia; Western Europe; and Eastern Europe, Soviet Union, and Mainland China.

This report was prepared by Donald Chrisler, Situation and Outlook Specialist, in consultation with other specialists in the Economic Research Service and the Foreign Agricultural Service.



Quentin M. West, Director  
Foreign Regional Analysis Division  
Economic Research Service

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## SUMMARY

Agricultural production in 1968 increased 2 to 3 percent, an increase equivalent to the long-term trend, in both developed and less developed areas of the world. Because of differences in population growth, this trend indicates a gradual increase in output per person in the developed countries but no per capita increase in the less developed world. During the past decade, Europe, the USSR, Japan, and Australia have made the largest per capita gains in agricultural output.

World production of grain expanded by about 20 percent in the past 3 years, following a very slow rate of growth during 1961-65. In 1967/68 <sup>1/</sup>rice led the advance in grain production, but in 1968/69 (as in 1966/67) wheat made the largest gain. The bulk of the world's wheat is grown in the developed countries, while rice is a primary grain in the less developed areas. In most of the developed wheat producing countries, good weather was the major factor accounting for the 1968/69 performance; in Australia, there was a sharp increase in wheat acreage in addition to favorable weather.

In 1967/68, good weather produced a large grain crop in the less developed countries, particularly in Asia. In addition, high farm prices--caused by rice shortages in previous years--encouraged a modest increase in acreage and sharp increases in the use of fertilizer and high-yielding grain varieties in Asia. Large 1967/68 crops resulted in temporary "self-sufficiency" in some Asian countries and in "exportable surpluses" in others. This, in turn, led to a decline in producer prices in some countries. Despite lower prices, there was an increase in the area planted to new varieties for the 1968/69 crop in most Asian countries.

In any year, there is a certain amount of substitution of one commodity for another in world utilization. In recent years, for example, large quantities of wheat were exported to Asia to make up for the shortage of rice. In 1967/68 and in the current year, weather patterns and government policies have produced unusual changes in product substitution that complicate analysis and forecasting of trade levels for many commodities--feed grains and oilseeds in particular.

(Approved by the Outlook and Situation Board, February 7, 1969)

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<sup>1/</sup> Unless stated otherwise, split years mean July-June, tons are metric, and dollars are U.S. Exports are in terms of volume, not value, unless otherwise stated.

Because of wet weather, a large volume of lower quality wheat was harvested in Western Europe and Canada; in Western Europe, more wheat is being fed to livestock and poultry, and exports of feed wheat are increasing. Because of the high cost of feed grains to EEC feed manufacturers--especially of imported grain, which is subject to high variable levies--a variety of cheaper substitutes are being used in animal rations. These substitutes include such unorthodox components as sugar, cassava chips, and pulses.

Measures aimed at reducing the European dairy surplus are depressing the world market for oilseeds. These measures include heavily subsidized exports of butter and butter oil, promotion of butter consumption at the expense of margarine and other vegetable oil products, and the substitution of nonfat dry milk for oil cake and meal in livestock feeds.

Other factors complicating the trade outlook are the balance-of-payments measures taken by Britain, West Germany, and France; the current reappraisal of agricultural policy in the EEC and Japan; and the U.S. dock strike.

Pressures for import savings intensified in Britain during 1968 and proposals have been made to expand agricultural production. If implemented, these proposals could have adverse long-run implications for U.S. exports of feed grains, variety meats, and lard. In the shorter run, however, the outlook is for somewhat larger U.K. imports of food and feed because of the after-effects of the October 1967-June 1968 epidemic of foot-and-mouth disease and damage to 1968 crops caused by heavy rains and flooding.

In West Germany, border tax adjustments that favor imports and discourage exports should benefit the United States and other exporters. Opposite tax adjustments in France should make that country more competitive in world markets.

In the EEC as a whole, mounting costs of agricultural protectionism have precipitated a reappraisal of policy aimed at improving the efficiency of agriculture and disposing of agricultural surpluses. Proposed short-run measures, if implemented, would reduce imports of edible oilseeds and products, marine oils, fish meal, beef, and perhaps grain.

In Japan, an appraisal of agricultural protectionism led the Japanese Price Stabilization Council to recommend some relaxation of import restrictions to stabilize consumer prices and force improved domestic productivity. However, recent U.S.-Japanese trade negotiations show no progress on the part of Japan in relaxing import restrictions.

Anticipation of the U.S. dock strike, which began last December 20, caused heavy foreign buying of U.S. corn, rice, soybeans, and tobacco, and some pick-up in purchases of U.S. wheat. The impact on wheat would have been greater except that Japan temporarily suspended imports of U.S. wheat from mid-November to mid-January. Continuation of the U.S. dock strike has reduced prospects for exports of most U.S. farm products.

The short-term outlook for world trade in temperate-zone commodities is not too favorable. In the developed countries, demand is stagnant for most natural fibers, tobacco, dairy products, and sugar. In the export growth sectors--

grains and oilseeds--world supplies, including substitute products, are large relative to demand. World prices for most major commodities are below those a year ago.

For U.S. exports, the outlook is a little less promising than in 1967/68. Exports of wheat and cotton are expected to be substantially lower in 1968/69. A lesser decline is likely for feed grains. However, larger shipments of oilseeds, animal products, and fruits and vegetables may offset much of the decline in grain and cotton.



**THE WORLD AGRICULTURAL SITUATION**  
 by Donald Chrisler  
 Foreign Regional Analysis Division  
 Economic Research Service

World Output on Trend Line

Both agricultural production and total population increased 2 to 3 percent from 1967 to 1968, leaving output per person in the world practically unchanged. Production per capita in the less developed regions was the same as in 1967 and not significantly different from the level prevailing from 1958 to 1965. In the developed regions, on the other hand, agricultural production per person reached a new high, continuing the rising trend of the past decade.

Table 1--Indices of agricultural production, total and per capita, 1961-68

Area or country	(1957-59 = 100)							
	1961	1962	1963	1964	1965	1966	1967	1968 <sup>1/</sup>
<u>Total</u>	:	:	:	:	:	:	:	:
World (excl. Communist Asia):	108	111	114	118	118	123	127	130
Developed countries <sup>2/</sup>	107	110	112	117	117	125	127	130
Less developed countries	111	113	117	119	121	119	128	131
<u>Per capita</u>	:	:	:	:	:	:	:	:
World (excl. Communist Asia):	102	103	103	105	103	105	107	107
Developed countries	103	105	105	109	107	114	114	116
Less developed countries	103	102	103	102	102	97	102	102
United States	102	101	103	102	103	101	104	104
Canada	86	107	115	105	113	124	106	109
Latin America	101	100	101	97	105	97	98	97
Western Europe	104	109	112	110	111	111	119	120
Eastern Europe	104	101	106	110	110	120	122	117
USSR	102	102	95	111	104	122	117	121
Africa <sup>3/</sup>	98	104	102	104	101	99	99	98
West Asia <sup>4/</sup>	98	100	103	102	101	102	106	104
South Asia <sup>5/</sup>	107	101	105	104	94	89	103	104
East Asia	104	107	104	108	107	110	105	106
Japan	106	109	107	109	109	110	119	119
Australia and New Zealand	103	107	109	112	105	116	107	119

<sup>1/</sup> Preliminary.

<sup>2/</sup> United States, Canada, Europe, USSR, Republic of South Africa, Japan, Australia and New Zealand.

<sup>3/</sup> Excluding Republic of South Africa.

<sup>4/</sup> Cyprus, Iran, Iraq, Israel, Jordan, Lebanon, Syria, and Turkey.

<sup>5/</sup> Ceylon, India, and Pakistan.

## U.S. Agricultural Exports and Price Levels

In 1967/68, the total value of U.S. agricultural exports declined 7 percent following a minor increase in 1966/67. Unit values <sup>2/</sup> increased in 1966/67 and declined in 1967/68, but the volume of agricultural exports declined 3 percent in each year.

Among the major commodities, the largest absolute declines in total value in 1967/68 were in sorghum, cotton, and tobacco; changes in unit value for these commodities were insignificant (table 2). <sup>3/</sup> Corn, inedible tallow, and cattle hides suffered sharp drops in unit values in 1967/68. A 15-percent increase in the volume of corn exported canceled the effect of a much lower unit value. Lower unit value accounted for all of the decline in the value of inedible tallow exports; and both volume and unit value of cattle hides fell. Unit values of rice and nonfat dry milk trended upward in 1966/67 and 1967/68.

Table 2.--Unit value of U.S. exports of selected products, 1965/66 - 1967/68

Commodity	Unit	Unit value			Change	
		1965/66	1966/67	1967/68	1965/66 to 1966/67	1966/67 to 1967/68
		- Dollars -			- Percent -	
Wheat	bu.	1.62	1.77	1.70	9	-4
Wheat flour	cwt.	4.12	4.24	3.84	3	-9
Corn, except seed	bu.	1.38	1.47	1.30	7	-12
Grain sorghum	bu.	1.21	1.28	1.29	6	1
Rice, milled	cwt.	7.27	7.83	8.49	8	8
Soybeans	bu.	2.86	3.10	2.83	8	-9
Soybean oil meal and cake	S. ton	79.24	89.02	84.35	12	-5
Cotton, upland, 1-1 1/8"	bale	131.22	124.34	125.52	-5	1
Cotton, upland, under 1"	bale	114.86	101.79	102.51	-11	1
Tobacco, flue-cured, unstemmed	lb.	.79	.83	.83	5	0
Tobacco, flue-cured, stemmed	lb.	1.11	1.16	1.14	4	-2
Tallow, inedible	cwt.	8.76	7.74	6.25	-12	-19
Cattle hides	nos.	8.67	8.90	7.47	3	-16
Nonfat dry milk	cwt.	15.17	18.50	20.33	22	10
Average unit value					+5.7	-5.1

For the first 5 months (July-November) of 1968/69, the total value of U.S. agricultural exports was 5 percent lower than for those months a year earlier. The volume was about the same as in the earlier period but prices of most major

<sup>2/</sup> Unit value is derived by dividing the total value of exports by the volume of exports. Unless there are significant year-to-year changes in the composition or quality of a particular commodity group, changes in unit values represent changes in prices.

<sup>3/</sup> Longer staple cotton, 1 1/8 inch and over (not shown in table 2), was in very short supply and unit values increased 18 percent in 1967/68.

commodities, except cotton and rice, were lower. Sharp drops in the total value of wheat and sorghum exports were partially offset by gains for soybeans, tobacco, and dairy products.

### Another Advance in World Food Grains

World production of food grains, led by a bumper wheat harvest, advanced in 1968 for the third consecutive year.

Table 3.--World production of food grains, 1961-68

Commodity	1961	1962	1963	1964	1965	1966	1967	1968
- - Million metric tons - -								
Wheat	211	237	226	255	247	285	277	304
Rice, rough	232	233	243	258	245	242	269	265
Rye	34	32	30	32	34	30	31	32
Total	477	502	499	545	526	557	577	601
Annual change		+25	-3	+46	-19	+31	+20	+24

The high level of world wheat production in the past 3 years primarily reflects larger harvests in the Soviet Union; average annual production in the USSR was 75 million tons during 1966-68 compared with 48 million during 1963-65. Although growing conditions were not favorable in some regions in 1968, the USSR harvested its second largest crop of wheat. Government domestic procurements were about 13 million tons in excess of domestic needs and the USSR again is in a position to increase net exports (table 4).<sup>4/</sup> There will be an increase in exports to Eastern Europe and, perhaps, to the UAR and Cuba. The Soviet Union agreed to provide 1.6 million tons of grain, mostly wheat, to Czechoslovakia during November 1968-October 1969; annual shipments during 1965-68 ranged from 1.0 to 1.3 million. Poland has indicated that it will import 0.5 million tons more Soviet grain, mostly wheat, in 1968/69 than in 1967/68. For sales to convertible currency countries, the USSR faces a highly competitive situation. The total wheat supply in the five major competing countries has reached record proportions and world demand is sluggish.

As shown in table 5, the United States and the four other major exporters (Canada, Australia, Argentina, and France) have reversed positions in terms of wheat supply during the 1960's. Despite a record crop, produced on an area 3.5 million acres less than in 1967, the U.S. wheat supply is well below the

<sup>4/</sup> The USSR has an option to buy 4 million tons of Canadian wheat in 1968/69.

level of the early 1960's. U.S. wheat exports during the first half of 1968/69 were about 25 percent below the same period a year earlier and prospects are bleak for a full recovery in the latter half of the year. Although lower sales in the first quarter (July-September) may be explained by heavy foreign buying in June to avoid the higher IGA minimum prices effective July 1, lower sales in the second quarter can only be explained by lower demand and increased competition. Buying in anticipation of the U.S. longshoreman's strike in December caused some pickup in exports to Europe. Seeding of winter wheat for 1969 harvest was 6 million acres less than in the previous year.

Table 4.--Exports of wheat and flour by major exporting countries, 1960-67 <sup>1/</sup>

Country	Year beginning July 1							
	1960	1961	1962	1963	1964	1965	1966	1967 <sup>2/</sup>
	-- Million metric tons --							
United States	18.0	19.6	17.3	23.1	19.3	23.4	20.0	20.8
Canada	9.3	9.9	9.0	15.0	11.8	14.9	14.8	8.9
Australia	5.0	6.3	4.8	7.8	6.4	5.7	7.0	7.0
Argentina	1.9	2.4	1.8	2.8	4.3	7.9	3.1	1.4
France	1.6	1.8	3.0	2.7	4.6	4.7	3.1	4.3
USSR	5.0	5.0	5.3	1.5	1.2	2.2	4.1	5.5
(USSR net trade) <sup>3/</sup>	(+4.7)	(+4.8)	(+5.3)	(-8.5)	(-0.6)	(-6.5)	(+1.3)	(+3.9)
Total 5 countries	22.8	25.4	23.9	29.8	28.3	35.3	32.1	27.1
Other countries	2.1	2.8	2.6	3.6	3.1	3.6	4.0	4.9
World total	42.9	47.8	43.8	56.5	50.7	62.3	56.1	52.8

<sup>1/</sup> Wheat and wheat equivalent of flour.

<sup>2/</sup> Preliminary.

<sup>3/</sup> Plus denotes net exports; minus, net imports.

Notwithstanding a 0.7 million acre reduction in area and heavy rainfall and frosts at the beginning of harvest, Canada produced an average wheat crop and, with near-record stocks (mostly high quality Manitoba 1 and 2), Canada's supply of wheat is exceptionally large. Wet harvest weather reduced the quality of the 1968 crop, however, and most of the wheat graded Nos. 3 and 4 or less; there will be no grade problem in meeting the December 1968-July 1969 sales commitment to Mainland China of 1.6 million tons, Nos. 4 and 5. Canada's exports during 1967/68 were the lowest in many years and some recovery is expected in 1968/69. Exports for August-December 1968 were 0.8 million tons above the same period a year earlier. Nevertheless, Canadian stocks will remain high unless the USSR takes a substantial share of its 4 million ton option. Moisture reserves in Western Canada should be exceptionally good for planting the 1969 spring wheat crop.

Table 5.--Wheat supply in major exporting countries, 1960-68

Country	Year beginning 1/									
	1960	1961	1962	1963	1964	1965	1966	1967	1968	
	- - Million metric tons - -									
Canada:										
Stocks	16.3	16.5	10.6	13.3	12.5	14.0	11.4	15.7	18.2	
Production	14.1	7.7	15.4	19.7	16.3	17.7	22.5	16.1	17.7	
Supply	30.4	24.2	26.0	33.0	28.8	31.7	33.9	31.8	35.9	
Australia:										
Stocks	1.7	.8	.5	.6	.6	.7	.4	2.2	1.4	
Production	7.4	6.7	8.4	8.9	10.0	7.1	12.7	7.5	14.3	
Supply	9.1	7.5	8.9	9.5	10.6	7.8	13.1	9.7	15.7	
Argentina:										
Stocks	1.2	.8	.2	.5	2.2	3.3	.2	.2	1.4	
Production	4.0	5.7	5.7	8.9	11.3	6.1	6.2	7.3	5.9	
Supply	5.2	6.5	5.9	9.4	13.5	9.4	6.4	7.5	7.3	
France:										
Stocks 2/	1.9	2.3	1.7	3.2	2.3	2.0	2.6	1.7	1.8	
Production	11.0	9.6	14.1	10.2	13.8	14.8	11.3	14.0	14.8	
Supply	12.9	11.9	15.8	13.4	16.1	15.8	13.9	15.7	16.6	
Total, 4 countries:										
Stocks	21.1	20.4	13.0	17.6	17.6	20.0	14.6	19.8	22.8	
Production	36.5	29.7	43.6	47.7	51.4	45.7	52.7	44.9	52.7	
Supply	57.6	50.1	56.6	65.3	69.0	65.7	67.3	64.7	75.5	
United States:										
Stocks	35.7	38.4	36.0	32.5	24.5	22.2	14.6	11.6	14.6	
Production	36.9	33.5	29.7	31.2	34.9	35.8	35.7	41.4	42.7	
Supply	72.6	71.9	65.7	63.7	59.4	58.0	50.3	53.0	57.3	
Soviet Union:										
Production	46.3	52.3	54.4	40.0	57.7	46.5	85.0	64.0	75.0	

1/ Year beginning July 1 for United States and France, August 1 for Canada, and December 1 for Australia and Argentina.

2/ Beginning with 1967, stocks are August 1.

Australia planted 26 million acres to wheat compared with 23 million in 1967 and 21 million in 1966. Although the weather was dry prior to harvest, yields were excellent and the 1968 crop exceeded the previous record by 1.6 million tons. On a fiscal-year basis, Australia's 1967/68 export record was fair (table 4) but, on an Australian marketing-year basis (December-November), exports amounted to only 5 million tons compared with almost 8 million in the previous season. Much of the decline resulted from smaller sales to Mainland China and Pakistan. Although Australia recently sold 2.2 million tons to China for February 1969-March 1970 delivery, Australia will have record stocks on December 1, 1969.

The area planted to wheat in Argentina was about equal to the very large 1967 area but, because of poor weather late in the growing season, the smallest crop since 1962 was harvested. Because exports remained low in 1967/68 (December-November), stocks were above the level of the two preceding years and supplies are about equal to those of last year.

French wheat exports recovered sharply in 1967/68; outside the EEC, France's most important markets were the UAR, Mainland China, the United Kingdom, Algeria, and Poland. France's 1968 wheat crop and supply equal the 1965 record and August 1968-January 1969 exports amounted to about 1.8 million tons. France sold about 0.5 million tons of wheat to the UAR for January-July delivery. Also, the EEC has requests for more than 2 million tons of wheat under the Food-Aid Convention of the IGA against a commitment of slightly over 1 million. If some of these requests are filled shortly, French exports will be stimulated. However, some of France's traditional customers have larger wheat supplies this year and there may be a further buildup in French stocks. Furthermore, Spain has another large surplus of soft wheat, about 1 million tons, for export.

Wheat import requirements are lower for Japan, India, Pakistan, and North Africa but are higher for the United Kingdom, Italy, and Mainland China. Because of very wet harvesting conditions that lowered quality of the record EEC crop and the smaller durum crop in Italy, <sup>5/</sup> EEC imports of hard wheat may increase. However, wheat quality apparently is not as low as anticipated. For example, recent tests in West Germany indicate that, except for a high incidence of sprouting, quality matches the 1967 crop. Furthermore, the EEC has a large carryover of quality wheat from the 1967 harvest. EEC import certificates issued during August 1968-January 1969 (excluding intra-EEC trade) covered about 2.1 million tons of wheat; annual imports usually range from 4.4 to 4.8 million tons.

Following a significant rise in 1967, world rice production leveled off in 1968. A record crop was produced in the United States. Production in India, Pakistan, and Japan about matched the high 1967 level, an above-average crop was harvested in Burma, and rice production in Mainland China equaled the 1963-67 average. The early arrival of the dry season diminished the prospects for a record crop in the Philippines. The U.S. acreage allotment for the 1969 crop is 10 percent below the 1968 allotment.

<sup>5/</sup> Italy's imports of durum wheat are expected to be close to 1 million tons in 1968/69 compared with 0.4 million in the past three years.

Table 6.--Rice production (rough), 1963-68

Country	Year beginning July 1 <sup>1/</sup>					
	1963	1964	1965	1966	1967	1968
	- Million metric tons -					
Mainland China	78.4	85.0	87.0	82.2	86.4	84.0
India	55.4	58.6	46.0	45.7	61.5	60.0
Pakistan	17.7	17.8	17.7	16.4	19.0	19.0
Japan	16.0	15.7	15.5	15.9	18.1	17.9
Indonesia	12.6	13.2	13.7	14.0	15.3	n.a.
Thailand	11.8	11.2	11.0	13.5	11.2	11.0
Burma	8.2	8.2	8.1	6.6	7.7	8.3
Brazil	6.3	7.6	5.8	6.8	7.0	n.a.
Philippines	3.8	4.0	4.1	4.2	4.4	4.3
United States	3.2	3.3	3.5	3.9	4.1	4.8
South Vietnam	5.3	5.2	4.8	4.3	4.7	n.a.
South Korea	5.1	5.4	4.8	5.3	4.9	4.5

<sup>1/</sup> Crops harvested in the Northern Hemisphere during the latter part of the year, together with those harvested in Asia from November to May, are combined with crops harvested in the Southern Hemisphere during the first part of the following year.

U.S. exports of rice, which reached a record 1.9 million tons (milled) in 1968, will receive increased competition from Brazil and, perhaps, Burma and Thailand. Thailand's rice exports fell from 1.5 million tons in 1967 to 1 million in 1968. Thailand anticipated increased supplies and lowered its rice export tax in October and set an export target of 1.5 million tons; however, late-season drought has affected the size and quality of the crop. Brazil has a very large supply of rice, its wholesale rice prices have declined, the rice export tax has been reduced, and Brazil's currency was devalued in August.

Japan's 1969 import requirements for rice will be close to zero; a near-record crop plus carry-in stocks of 2.6 million tons (milled) add up to record supplies. Import requirements are down in South Vietnam but, because of drought, there should be a larger market for U.S. rice in South Korea.

#### New Technology in Asia

In Asia, high-yielding varieties of Mexican wheat have spread quite rapidly and high-yielding varieties of IR rice, developed in the Philippines, are beginning to take hold. In 1967/68, Mexican varieties were grown on about 10 percent of the wheat area in West and South Asia. This share was scheduled to increase to 15-17 percent in 1968/69. New varieties were grown on less than 5 percent of the rice land in South and Southeast Asia in 1967/68; in 1968/69, this share amounted to 5-7 percent.

Thus far, the new varieties of wheat and rice have been planted by some of the better farmers on the best land, usually irrigated land, with heavy applications of fertilizer and plant protection chemicals. When grown under such conditions they produce yields ranging from 30 to 100 percent higher than traditional varieties. The physical constraints to further adoption of the high-yielding varieties are the availability of capable farm managers and extension workers; the availability of good land, particularly irrigated land; the prevalence of plant diseases and destructive insects; and the adequacy of grain drying, milling, storage, and distribution facilities. The economic limitations are grain/input price ratios and the costs of subsidizing exports, domestic consumption, or both.

Importance of the physical limitations varies considerably by country and region, but adequate irrigation, particularly for rice, appears to be the major limiting factor. In India, for example, a very large share of the adequately irrigated land (land with reliable water control during the dry season) apparently is already planted to new varieties of grain. Only those farmers with reliable irrigation can afford the risk of the high cash costs of fertilizers and plant protection chemicals required by the new varieties. Thus, the annual increase in the spread of these varieties in India probably will depend largely upon the annual increment planned for new irrigation facilities, an increment equal to only about 2 percent of the present grain area.

In East Pakistan and Southeast Asia, the lack of water control is even more serious. In East Pakistan, where 90 percent of Pakistan's rice is grown, the frequent uncontrolled flooding of most producing areas will limit the spread of the new short-stemmed varieties; in addition, insects and diseases flourish in such an environment. In Southeast Asia, the older and most of the new irrigation systems were designed to provide a constant flow of water from the upper to the lower fields, usually during the wet season, resulting in loss of fertilizer and insecticides. Additional modern irrigation in the broad river valleys of Southeast Asia will require large investments in dams and long distribution systems.

At the other extreme, West Pakistan has a good environment for the new varieties of wheat and rice--reliable control of irrigation water, low rainfall, high solar energy, and few problems with insects and diseases. In West Pakistan, primarily a wheat-consuming area, dissemination of Mexican wheat varieties has been rapid; more than 20 percent of the wheat area was planted to these varieties in the fall of 1968. Much of the rice traditionally produced in West Pakistan is Basmati, an extra-long grain variety that is exported at premium prices. The minimum purchase price of Basmati has been raised to discourage a shift to other varieties.

In Turkey, Mexican varieties may occupy as much as 8 percent of the wheat land in the current season. These varieties are not likely to spread to more than 15 percent of the wheat area, the limits of the wheat land that is climatically adapted.

High farm prices in Asia, caused by shortages in previous years, encouraged a modest increase in grain acreage and sharp increases in the use of fertilizer and high yielding varieties in 1967/68. Good weather produced a large



grain crop which resulted in temporary "self-sufficiency" in some Asian countries and in an "exportable surplus" in others. This, in turn, placed a burden on drying, storage, and transport facilities, and led to a decline in producer prices in some countries.

In 1967/68, large purchases of rice at high prices by the Philippine Rice and Corn Production Coordinating Council used up much of the Council's price-support fund. The Council now has a surplus of rice that cannot be exported, except at a loss, and insufficient storage and funds to provide much support for the current crop. Producer prices have fallen. In Pakistan, wholesalers and millers are reluctant to buy IR rice because of poor milling and cooking characteristics, <sup>6/</sup> and paddy prices have fallen. In addition, wholesale wheat prices in Pakistan were much lower in the fall of 1968 than in the fall of 1967 because of large supplies.

### World Dairy Surplus

In Europe, beef production is closely tied to milk output. Thus, the solution of the dairy surplus problem is more complicated in Europe than in the United States. Table 7 illustrates the effects of dual-purpose (meat and milk) cows in Europe versus the effects of single-purpose cows and steers in the United States. The milk/beef production ratio in Europe is two to three times higher than in the United States and, except for year-to-year fluctuations, has not trended downward during the 1960's.

Table 7.--Ratio of milk production to beef and veal production, 1960-66

Country	1960	1961	1962	1963	1964	1965	1966
- Pounds of milk per pound of beef and veal -							
United States	7.8	7.6	7.7	7.2	6.5	6.3	5.8
USSR	18.7	21.6	19.4	16.6	17.6	18.6	17.2
EEC	19.3	18.1	17.2	17.5	18.9	19.8	18.6
United Kingdom	15.5	14.3	14.1	13.0	13.2	14.6	16.5
Denmark	22.7	23.7	20.8	18.6	23.1	23.5	20.6

Several factors favor the dual-purpose cow in Europe; the profitability of milk production relative to beef production, the small size of farms, the types of feed available, and consumer preference for lean beef. Relatively high guaranteed prices to support the small inefficient milk producer <sup>7/</sup> in the face of static domestic demand have created a very large butter surplus in Europe (table 8) and led to highly subsidized exports of dairy products. On November 1,

<sup>6/</sup> These undesirable characteristics are being eliminated by plant breeders at the International Rice Research Institute (IRRI) in the Philippines.

<sup>7/</sup> Some 4 million farmers in the EEC have dairy herds with fewer than 6 cows.

for example, the EEC export subsidy on butter, although varying by country of destination, averaged about 60 cents a pound. Despite a large increase in exports, EEC butter stocks continued to grow, increasing 55 percent in the past year.

Table 8.--Butter stocks, October 1, 1965-68 <sup>1/</sup>

Country	1965	1966	1967	1968
-- Thousand metric tons --				
USSR <sup>2/</sup>	390	520	650	n.a.
EEC <sup>3/</sup>	184	208	229	355
United States	73	31	96	89
United Kingdom	43	35	49	58
Canada	49	39	38	35
New Zealand <sup>4/</sup>	31	36	29	32
Ireland	17	17	22	24
Denmark	11	8	9	18
Australia	17	15	18	14
Sweden	15	14	12	12
Finland	4	7	7	12
Switzerland	6	7	11	8

<sup>1/</sup> Commercial and government stocks, unless otherwise specified.

<sup>2/</sup> December 31. Wholesale, industrial, and retail stocks. Wholesale and industrial stocks for 1965, 1966, and 1967 amounted to 174,000, 389,000, and 533,000 tons, respectively. Retail stocks were estimated from ruble-value figures.

<sup>3/</sup> Excluding Italy.

<sup>4/</sup> May 31. Exporters' stocks only.

During the 1960's, West Germany changed from a net importer to a net exporter of dairy products. In the early part of the decade, West Germany imported about 5 percent of its dairy requirements (in terms of milk), but in 1968 milk production exceeded domestic demand by a similar margin. Although West Germany's exports of butter and nonfat dry milk in 1968 increased 80 and 30 percent, respectively, stocks of both products also increased.

The general problem of dairy surpluses in the USSR is compounded by a lack of storage and distribution facilities for fresh milk, and most of the milk is converted into butter. Retail butter prices are pegged very high and 1967 stocks were more than double those in the EEC. Soviet exports of butter during 1956-67 ranged from 25,000 to 80,000 tons annually with no discernible trend upward or downward. During the early portion of the period, exports were almost exclusively to Eastern Europe. Shipments to Cuba began in 1960. Shipments to the EEC and other non-Communist areas, which were insignificant during 1956-65, amounted to 13,000 tons in 1966 and 22,000 tons in 1967. Some Soviet butter entering the EEC has been reprocessed and exported to third countries.

Competition from the surplus countries of continental Europe is of major concern to the dairy industries in New Zealand, Australia, the United Kingdom, and the United States. The United Kingdom, the largest importer of dairy products, has asked exporting countries to curb their cheese sales to the U.K. market. This voluntary arrangement has not solved the problem and the British Farmers Union and Milk Marketing Boards have requested Government intervention in the form of antidumping or countervailing duties. New Zealand's sales of dairy products leveled off in 1967/68, despite that country's large currency devaluation which should have made it more competitive in the United Kingdom and other markets. Australia did not devalue and the export value of Australian butter, cheese, and nonfat dry milk dropped 50, 10, and 40 percent respectively in 1967/68 because of depressed world prices and a decline in production. U.S. commercial exports of dairy products declined in 1968 for the fourth consecutive year, and the United States had to place additional curbs on dairy imports in 1968 to protect the domestic industry against heavily subsidized low-priced imports.

Mounting costs of dairy surpluses have led some continental European countries to adopt measures to reduce supplies. For example, in 1968 Switzerland reduced the producer price of milk and the consumer price of butter, subsidized the culling of dairy herds and the shifting from dairy to beef production, raised the import levy on nonfat dry milk to reduce stocks and encourage the feeding of whole milk to calves, and increased food-aid shipments of dairy products. During May-October 1968, butter consumption in Switzerland rose 34 percent above the same period in 1967, production dropped 16 percent, and butter stocks on October 1, 1968 were 25-30 percent lower than on October 1, 1967.

In the EEC, sales of surplus butter have been made at reduced prices to low income groups, institutions, and food processors, and additional food-aid shipments of dairy products have been made. As yet, these measures have not proved as successful as those of Switzerland.

#### Reappraisal of the EEC Common Agricultural Policy

In addition to dairy products, supplies of soft wheat, barley, sugar, pork, lard, poultry meat, and certain fruits and vegetables have been building up in the EEC countries despite subsidized exports of many of these commodities. Europeans are predicting year-end 1968/69 stocks of 6 million tons of wheat and 1 million tons of barley in the Community. With limited prospects for EEC exports, larger quantities of soft wheat are being denatured for use as feed, replacing imports of feed grains. Because of high costs of grain to EEC feed manufacturers--especially imported grain, which is subject to high variable levies--a variety of cheaper substitutes are being used in livestock rations. Since July 1968, domestically produced surplus sugar may be denatured for use in feed throughout the EEC. Although West German farmers appear reluctant to increase the quantity of sugar in livestock rations, farmers in France and the Netherlands are readily accepting the new formulas. In addition, cassava chips, nonfat dry milk, grain byproducts, and pulses are becoming increasingly important ingredients in compound feeds, replacing corn and other import grains. It has been estimated that Dutch feed manufacturers used 30 to 35 percent less corn during July-December 1968 than in the same months of 1967.

Past EEC policies have resulted in the loss of markets for U.S. products and an influx of subsidized dairy products to the United States. Accordingly, in the past year, the United States resumed subsidies on poultry exports to Switzerland, instituted export payments on lard shipments to the United Kingdom, and added further restrictions to imports of dairy products. Yugoslavia has threatened retaliatory tariffs against EEC imports because of limited access to the EEC for Yugoslav meat.

In 1968/69 the cost of supporting EEC dairy products, including price supports and export subsidies, is expected to approach \$800 million (including \$170 million financed directly by member countries). The cost of support for other commodities--primarily grain, sugar, and fats and oils--is likely to reach \$1.4 billion. If policies are not changed, it has been estimated that financing the Common Agricultural Policy (CAP) will approach \$3 billion in 1969/70.

Alarmed by the mounting costs of protectionism, the EEC Commission and Council currently are reappraising the CAP. In October, Commission Vice President Mansholt submitted proposals aimed at improving the efficiency of EEC agriculture and reducing dependence on price policy. Mansholt pointed out the large discrepancy between the mounting costs of support (\$2.2 billion in 1968/69) and the small EEC fund available for reducing the number of small and inefficient farms (limited to \$285 million annually). In December, the Commission submitted a plan based on Mansholt's proposals to the EEC Council for consideration.

The Commission recommended a program for structural reform to be accomplished by 1980, including large-scale diversion of land and labor from agriculture, and a substantial increase in agricultural investment. However, the specific proposals to implement this diversion suggest that only marginal land would be taken out of production and that only the most inefficient producers would be discouraged. Thus, the upward trend in production probably would not be slowed and substitution of domestic products for imports might increase.

The Commission's short-run proposals include:

1. Small reductions in the support prices for soft wheat, barley, rye, oilseeds, and sugar beets. The present price level for corn, durum, and rice would be retained. Sugar production quotas would be lowered 5 percent for 1969/70.
2. Taxation of edible vegetable and marine oils to deter margarine consumption and encourage the use of butter.
3. Taxation of oil cake and meal and payment of premiums for culling dairy herds to discourage dairy production. The current support price for milk would remain unchanged, the butter price would be reduced, and the price of nonfat dry milk would be raised. Feeding of nonfat dry milk would be subsidized to offset the price increase and improve its competitive position relative to oil cake and meal.
4. Payment of subsidies for fattening of beef cattle.

At a minimum these proposals, if implemented, would reduce imports of edible oilseeds and products, marine oils, fish meal, and beef. The effect on grain imports is not so clear-cut. The subsidy on beef production should, in itself, stimulate demand for grain, but this might be offset by a reduction in demand from the dairy sector. The proposed reductions in support prices for soft wheat, barley, and rye amount to roughly 1 percent, an insignificant amount.

### Large Supplies of Edible Oils

Measures aimed at reducing the European butter surplus include heavily subsidized exports of butter and the promotion of butter consumption at the expense of margarine and other vegetable oil products. These measures, coupled with a large world supply of oilseeds for edible oil production, have had a depressing effect on the world market for oilseeds and vegetable oils. In the European market, prices for most oilseeds and oils were lower in 1968 than in 1967.

A record world crop of soybeans was harvested in 1968. There were near-record harvests of sunflowerseed and rapeseed, a larger output of cottonseed, and a smaller peanut crop. On the basis of this performance, production of edible vegetable oils in 1969 should be close to the 1968 record.

Table 9.--World production of major types of edible vegetable oils, 1962-69 <sup>1/</sup>

Type of oil	1962	1963	1964	1965	1966	1967	1968	Forecast 1969
- Million metric tons -								
Soybean	3.73	3.89	3.96	4.16	4.58	4.84	5.05	5.09
Peanut	2.59	2.73	2.84	3.02	2.91	3.00	3.13	2.84
Sunflowerseed	2.16	2.35	2.15	2.83	2.81	3.16	3.46	3.28
Cottonseed	2.26	2.35	2.44	2.49	2.45	2.17	2.23	2.41
Rapeseed	1.19	1.08	1.12	1.52	1.40	1.58	1.67	1.63//

<sup>1/</sup> Estimates of U.S. oil production include actual oil produced plus the oil equivalent of exported oilseeds. Estimates for other countries are based upon the production of various oilseeds and the estimated normal proportions crushed for oil.

The U.S. soybean crop, produced on a slightly larger acreage with record yields, was 11 percent above the 1967 record and, with larger stocks, the supply of soybeans on September 1, 1968 was 17 percent greater than a year earlier. U.S. exports of soybeans increased in 1967/68 (September-August) for the seventh successive year (table 10). Major gains were in exports to Japan and Spain; shipments to the EEC and Canada declined. U.S. exports of soybean oil dropped about 10 percent and exports of meal increased about 10 percent in 1967/68. In Western Europe, Soviet and East European sunflower oil, at exceptionally low prices, captured a larger share of the market.

Table 10.--U.S. Exports of soybeans, 1965-67

Destination	Year beginning September 1		
	1965	1966	1967
	- Million bushels -		
Netherlands <sup>1/</sup>	33.5	36.0	36.8
West Germany	33.0	32.7	32.0
Italy	15.4	18.0	14.8
Other EEC	10.2	11.0	9.3
Total EEC	92.1	97.7	92.9
Japan	62.0	60.7	73.7
Spain	17.5	27.4	29.5
Canada <sup>1/</sup>	31.1	24.2	21.7
Denmark	12.5	14.8	15.5
Others	35.4	36.8	33.3
Total	250.6	261.6	266.6

<sup>1/</sup> Exports to Canada and the Netherlands include large transshipments to other countries, primarily European countries.

U.S. inspections of soybeans for export for the first 4 months (September-December) of the current marketing year were almost 30 percent above the same period in 1967. However, the large fall shipments were partly because of heavy foreign purchases in anticipation of the U.S. dock strike which began in December. Total exports for the season are likely to be somewhat above the high level of 1967/68, although the prolonged dock strike has weakened prospects.

In Japan, the demand for oilseeds is expected to increase during the current U.S. marketing year (September-August) but at a lower rate than in 1967/68 because crushers are experiencing difficulty in disposing of vegetable oil. West German imports of soybeans and meal may increase during 1968/69 because of reduced competition from fish meal. In the Netherlands, demand for soybeans and meal is expected to continue to grow because of expansion in the livestock sector.

For the EEC as a whole, existing and proposed measures for reducing the butter surplus, including the taxing of oils and meals, will have a very negative effect on imports of oilseeds and products. In addition, higher support prices in the EEC have stimulated the production of rapeseed, which increased 31 percent in 1967 and 12 percent in 1968. EEC plantings of winter rapeseed have increased again for the 1969 crop.

Mainland China's exports of soybeans in 1968/69 are expected to be at about the same level as in the past 4 years. Brazil's exports of soybeans, which have been down thus far in the season (September-August), may recover sharply if the forecast record spring crop materializes. There was a leveling off in Soviet and East European sunflowerseed production in 1968 and, although exportable supplies remain large, some decline in exports of seed and oil is anticipated. Canada's rapeseed crop was down about 25 percent and Canada will have to draw heavily on stocks to hold exports at the level of the previous season.

The peanut crop in India, the world's largest producer, was about 15 percent below the record 1967 level and close to the 1963-67 average. In Nigeria, the largest exporter of peanuts, production is believed to have increased about one-fifth over 1967 but to have been significantly below the record crop of 1966. Production in Senegal, the second ranking exporter, declined roughly 10 percent.

### Tobacco Production at Average Level

World output of tobacco, following a record in 1967, fell slightly to about the 1963-67 average. Production declined in all the major exporting countries except Brazil, the Philippines, and Canada. The largest declines were in the United States and Rhodesia (table 11).

Table 11.--Tobacco production by major producers, 1963-68

Country	Year beginning January 1					
	1963	1964	1965	1966	1967	1968 <sup>1/</sup>
	- Million pounds <sup>2/</sup> -					
United States	2,344	2,228	1,855	1,887	1,968	1,716
Mainland China <sup>3/</sup>	1,590	1,700	1,720	1,740	1,870	1,870
India	806	790	762	656	772	739
USSR	344	514	467	518	573	540
Japan	347	468	424	435	463	450
Pakistan	221	228	242	303	392	451
Turkey	291	428	293	362	403	355
Brazil	412	302	429	299	324	330
Bulgaria	232	330	272	292	256	243
Greece	284	299	276	217	254	229
Canada	201	153	169	234	213	219
Rhodesia	182	304	240	249	206	137

<sup>1/</sup> Preliminary.

<sup>2/</sup> Farm sales weight.

<sup>3/</sup> The production series on Mainland China is based on fragmentary information. Both the absolute level and direction of change are subject to revision.

U.S. tobacco acreage, which has decreased steadily since 1962, fell 8 percent in 1968. Dry weather in Virginia and the Carolinas reduced yields, and the crop was the smallest since 1957. Tobacco stocks have declined regularly from the very high level of 1965 and will drop again in 1969. U.S. exports of tobacco in 1968 exceeded the high level of 1967 (table 12).

Trade sanctions have caused a large buildup in Rhodesian stocks, and plantings for the 1968 harvest were reduced sharply. Widespread drought cut yields and the crop was only two-thirds the size of the 1967 crop. Drought also effected the quality of the 1968 harvest. Plantings for the 1969 crop appear to be in good condition.

The 1968 production picture was mixed in other major flue-cured and burley exporting countries. India's production was down because of reduced acreage, early drought, and heavy midseason rains. India's exports, which recovered sharply in 1968 from the 1966-67 levels, may be lower in 1969. Canada produced a slightly larger crop on a somewhat smaller acreage; exports in 1969 are expected to be close to 1968 shipments.

Several countries that were small producers of flue-cured and burley have rapidly expanded production to take advantage of the market created by sanctions against Rhodesia. Brazil is increasing its exports of Virginia-type flue-cured tobacco to Western Europe. South Korea and Thailand have doubled production of flue-cured since the early part of the decade, and South Korea and Greece have introduced the production of burley on a large scale.

Table 12.--Tobacco exports by country of origin, 1963-68

Country	Year beginning January 1					
	1963	1964	1965	1966	1967	1968 <sup>1/</sup>
	- Million pounds -					
United States	505	514	468	551	572	600
Rhodesia, Zambia, Malawi	213	253	305	<sup>2/</sup> 120	<sup>2/</sup> 120	n.a.
Turkey	98	126	152	188	202	200
Greece	137	154	161	161	194	140
Bulgaria	171	179	173	159	168	160
India	150	158	137	79	123	134
Brazil	98	133	122	101	99	99
Philippines	55	76	59	51	50	53
Yugoslavia	38	50	51	46	42	40
Canada	39	52	42	38	43	40
Dominican Republic	37	56	33	26	22	15

<sup>1/</sup> Forecast.  
<sup>2/</sup> Estimate.

Production of oriental leaf declined in Turkey, Greece, Bulgaria, and Yugoslavia primarily because of unfavorable weather. In Greece, reduced acreage also contributed to the decline. However, because of large stocks, particularly in Turkey and Greece, world supplies of oriental remain high.

In March 1968, the United Kingdom--the largest market for U.S. tobacco--increased the import duty on tobacco by 5 percent, and in November 1968 raised the duty an additional 10 percent (surcharge). These two import-savings measures will add the equivalent of about 6 cents per pack to the cost of British cigarettes, encouraging manufacturers to reduce the tobacco content by increasing the size of filters and reducing the diameter of cigarettes.



## Import Savings in the United Kingdom

The United Kingdom is the world's largest importer of agricultural commodities and is the third largest market, after Japan and West Germany, for U.S. farm products. <sup>8/</sup> It is the major foreign market for U.S. tobacco and lard, and an important market for U.S. feed grains, wheat, oilseeds, cotton, and variety meats.

In 1967/68, direct exports of U.S. agricultural commodities to the United Kingdom amounted to about \$400 million, a decline of 12 percent from the previous year. Contributing to this decline were a large high-quality grain crop in Britain, large feed grain supplies in competing countries, subsidized French feed wheat exports to the United Kingdom, devaluation of the pound sterling, and concurrent devaluations by many of Britain's trading partners.

Pressures for import savings to correct Britain's adverse balance of payments intensified during 1968. In June, the Economic Development Council for Agriculture (EDC), established to study the import-saving role of British agriculture, proposed measures to increase net agricultural output 22 percent during the next 5 years to effect annual import savings of about \$530 million by 1972/73. This expansion would include percentage increases in commodity production as follows:

	Wheat (primarily for feed)	50		
Barley	13		Fresh pork	24
Beef	21		Bacon	84

In November, the U.K. Minister of Agriculture scaled down the EDC objectives, particularly those for the expansion of grain and bacon production. He also warned that, unless the proposed beef increase resulted from expansion of beef-type herds rather than dual-purpose herds, Britain would find itself in the same dairy-surplus dilemma as the EEC. His commodity proposals were not as specific as those of the EDC, but he did cite a 1972/73 import-savings target of about \$380 million in temperate-zone food and feed supplies as opposed to the EDC target of \$530 million. (Current U.K. imports of temperate-zone food and feed commodities amount to about \$2.4 billion annually.)

The proposed measures to expand production threaten U.S. farm exports, particularly feed grains, variety meats, and lard. Although the Minister called the EDC grain objectives "somewhat too optimistic," he implied that U.K. feed grain imports are not likely to increase and may in fact decline. He was in general agreement with the EDC proposals on beef and pork production, proposals that would directly affect U.S. exports of variety meats and lard.

In the shorter run, the outlook is for somewhat larger British imports of temperate-zone food and feed. The livestock industry has not completely recovered from the effects of the October 1967-June 1968 epidemic of foot-and

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<sup>8/</sup> This ranking, based on 1962/63-1966/67 data, takes into account adjustments for transshipments of U.S. commodities via Canada and the Netherlands but does not take into account transshipments via West Germany and Belgium.

mouth disease, and British beef producers have been discouraged by the high cost of feeder calves. Heavy rains and flooding reduced the quantity and quality of grain, forage, and main-crop potatoes in 1968, and caused a significant delay in the seeding of winter grains for the 1969 harvest.

U.K. imports of milling wheat in 1968/69 may exceed those of 1967/68 by a million tons, primarily because of the poor quality of domestic supplies. On the other hand, feed grain imports will be limited by heavy feeding of domestic wheat, continued growth in imports of French feed wheat, and heavier feeding of domestic barley that is too low in quality for malting or export. Exports of British barley are expected to amount to only 150,000 tons in 1968/69, compared with 780,000 in 1967/68. Offsetting factors are the smaller U.K. feed grain crop and the poor quality of British forage crops. The U.K. Cereals Authority has estimated that 1968/69 imports of feed grains will be 0.3 million tons above those of 1967/68.

#### Feed Grain Production Remains High

World output of feed grains last year remained at the high level of 1967. Corn production reached new highs in the EEC and Mexico, and record barley crops were harvested in Canada and Denmark.

Table 13.--World production of feed grains, 1961-68 <sup>1/</sup>

Commodity	1961	1962	1963	1964	1965	1966	1967	1968
- - Million metric tons - -								
Corn	177	179	193	182	193	215	225	221
Barley	69	78	82	87	86	95	97	101
Oats	49	48	45	41	43	45	46	50
Scorghum and millet <sup>2/</sup>	31	34	35	35	35	41	44	42
Total	326	339	355	345	357	396	412	414
Annual change		+13	+16	-10	+12	+39	+16	+2

<sup>1/</sup> Excludes Communist Asia. Calendar year.

<sup>2/</sup> The United States, India, Argentina, Mexico, the UAR, Pakistan, the Republic of South Africa, Turkey, Australia, and Japan.

In the United States, which accounts for half of world corn production, the acreage planted to corn in 1968 declined to about the 1964-66 average. However, despite heavy rains and high winds in October, near-record yields were achieved and production was second only to 1967. Combined production of the four major feed grains fell but, with much larger stocks, the U.S. supply is the largest since 1963 (table 14).

Table 14.--Feed grain supply in major exporting countries, 1960-68 <sup>1/</sup>

Country	Year beginning <sup>2/</sup>								
	1960	1961	1962	1963	1964	1965	1966	1967	1968
-- Million metric tons --									
Argentina:									
Stocks	0.3	0.5	0.4	0.2	0.4	0.3	0.1	0.3	0.5
Production	6.3	7.6	7.4	7.2	8.2	6.9	10.2	10.6	9.4
Supply	6.6	8.1	7.8	7.4	8.6	7.2	10.3	10.9	9.9
France:									
Stocks <sup>3/</sup>	.8	1.3	1.1	1.2	1.8	1.0	1.3	1.1	2.2
Production	11.3	10.5	10.4	14.0	11.2	13.3	14.5	16.7	16.9
Supply	12.1	11.8	11.5	15.2	13.0	14.3	15.8	17.8	19.1
South Africa:									
Stocks	.7	.7	1.1	1.2	.9	.3	.3	.7	3.2
Production	4.7	5.8	5.9	6.5	4.7	5.1	5.5	10.7	5.6
Supply	5.4	6.5	7.0	7.7	5.6	5.4	5.8	11.4	8.8
Canada:									
Stocks	4.7	4.5	2.8	4.5	5.7	4.2	4.2	4.7	4.1
Production	11.0	7.6	12.0	12.7	10.5	12.6	14.0	12.0	14.7
Supply	15.7	12.1	14.8	17.2	16.2	16.8	18.2	16.7	18.8
Thailand:									
Production	.5	.6	.7	.9	1.0	1.1	1.3	1.2	1.4
Australia:									
Stocks	.1	.1	.2	.2	.4	.4	.4	.5	.2
Production	3.3	2.3	2.6	2.7	2.8	2.4	3.7	2.1	3.6
Supply	3.4	2.4	2.8	2.9	3.2	2.8	4.1	2.6	3.8
Total, 6 countries									
Stocks	6.6	7.1	5.6	7.3	9.2	6.2	6.3	7.3	10.2
Production	37.1	34.4	39.0	44.0	38.4	41.4	49.2	53.3	51.5
Supply	43.7	41.5	44.6	51.3	47.6	47.6	55.5	60.6	61.7
United States:									
Stocks	67.7	76.8	65.5	58.4	62.9	49.7	38.2	33.7	43.4
Production	141.2	127.6	129.6	139.5	121.7	142.8	143.0	159.6	152.5
Supply	208.9	204.4	195.1	197.9	184.6	192.5	181.2	193.3	195.9

<sup>1/</sup> Barley, oats, corn, and sorghum.

<sup>2/</sup> Marketing year beginning July 1 for France, August 1 for Canada, and December 1 for Australia. For the United States, the marketing year for corn and sorghum begins October 1, and for oats and barley, July 1. The marketing year for corn and sorghum begins April 1 in Argentina and May 1 in South Africa.

<sup>3/</sup> Beginning with 1967, stocks are August 1.

U.S. exports of feed grains leveled off in 1967/68 because of record crops in the EEC and the United Kingdom, and record supplies in the major competing countries. Supplies in the EEC and in competing countries continue at record proportions but import requirements are higher in Japan and Britain. U.S.

exports during July-December 1968 were slightly below exports during the same period in 1967, despite heavy buying in anticipation of the U.S. dock strike.

As shown in table 15, world trade in feed grains has leveled off in the past 2 years. South Africa made the greatest gain in feed grain trade in 1967/68. Although South African corn production in 1968 dropped back to the 1966 level, beginning stocks (May 1) were very high and corn exports during May 1-December 15 amounted to 2.3 million tons, about the same as the high level of sales during the same period in 1967. As of December 15, South Africa had 0.5 million tons of corn, mostly yellow corn, available for export before May 1969. Exports of white corn were interrupted in December because delayed rains reduced prospects for the 1969 harvest. The corn crop was planted about 4 weeks later than usual. Because of the spread between low world prices and domestic support prices for corn, the South African Maize Board sustained losses totaling \$28 million during May-November 1968.

Table 15.--Exports of feed grains by major exporting countries, 1960-67

Country	Year beginning July 1							
	1960	1961	1962	1963	1964	1965	1966	1967
	- - Million metric tons - -							
United States	11.5	14.7	15.4	16.3	18.1	25.8	21.4	20.3
Argentina	2.5	3.5	3.3	3.7	5.1	3.7	6.5	4.1
France	1.9	2.1	1.3	3.3	3.0	2.8	3.8	4.0
South Africa	1.0	1.7	2.3	2.6	.8	.3	.6	3.3
Canada	1.0	1.1	.7	1.3	1.0	1.0	1.1	1.1
Thailand	.5	.6	.7	.9	.9	1.2	1.3	1.3
Australia	1.3	1.2	.7	.8	.8	.5	.9	.3
Mexico	.1	---	---	---	.9	1.3	1.1	.8
Brazil	---	---	.1	.7	---	.6	.6	.6
Romania	.4	.8	.8	.9	.9	.6	.8	1.2
Yugoslavia	.5	.4	---	.1	---	.1	.4	.8
Total, 10 countries	9.2	11.4	9.9	14.3	13.4	12.1	17.1	17.5
Other exporters	2.7	4.3	5.1	4.6	5.1	4.6	3.9	3.6
World total	23.4	30.4	30.4	35.2	36.6	42.5	42.4	41.4

Argentine exports of feed grain, like those of wheat, fell sharply in 1967/68. Most of the decline was accounted for by reduced sales to the EEC, Spain, and the United Kingdom. Because of smaller crops, current supplies are below the high level of the two preceding years and exports are not expected to increase. Exports in the first half of 1968/69, particularly those to the United Kingdom, remained small. The area sown for the 1969 corn crop was the largest since World War II.

Canadian supplies of feed grains, mostly barley and oats, have reached a new high but--with large supplies of barley in many major markets and competing countries, and stronger demand for corn relative to barley--exports are not likely to increase. Canadian exports of barley during August-December 1968 were well below the 1967 rate.

Mexico has a surplus of corn and hopes to export 1.5 million tons in 1968/69. By the end of 1968, however, Mexico had sold only 0.5 million tons of corn and sorghum for delivery to Japan and Western Europe during November-January. Mexican sorghum production, insignificant a few years ago, amounted to 2 million tons in 1968. More Mexican farmers are growing sorghum instead of corn and wheat, and planting more sorghum as a second crop following wheat.

Brazil exported 1.2 million tons of corn in 1968 compared with the previous peak of 0.7 million in 1963 and 0.4 million in 1967. Large stocks, reduced export taxes, devaluations, and port improvements contributed to this record. Brazil's 1969 exports could again be larger than normal. For the coming crop, some farmers are shifting from corn to cotton or rice because of better producer prices.

In Australia, feed grain production in 1968/69 matched the 1966/67 record and exports should recover from the low 1967/68 level.

In 1968, Thailand exported 1.3 million tons of corn, primarily to Japan and Taiwan. Thailand's 1969 export target is 1.5 million tons, but the crop was not up to expectations and this target is not likely to be met.

Production of feed grains in the EEC equaled the 1967 record and carry-over stocks are larger. In addition, larger quantities of domestic wheat and non-grain feeds are being fed in EEC countries. EEC import certificates issued during August 1968-January 1969 (excluding intra-EEC trade) covered only 5.2 million tons of feed grains; annual imports usually range from 15 to 18 million. In 1967/68, France exceeded its export target of 3.8 million tons (table 15). Outside the EEC, France's most important markets were Switzerland, Poland, Japan, and Denmark. With record feed grain supplies and a record corn crop, France's exports of about 2.8 million tons of feed grains during August 1968-January 1969 were well above the rate of the previous year.

Outside the EEC, the United Kingdom and Spain are the major European markets for U.S. feed grains. The U.K. feed grain crop was down almost 1 million tons in 1968 and the quality of forage crops is poor. However, imports of feed grains are not likely to expand to cover the full amount of the shortfall in production because Britain, like the EEC, has large quantities of feed-quality wheat. Spain's feed grain production set a new record; production of corn increased sharply. A significant reduction in Spain's imports is likely.

Production of feed grains declined in Eastern Europe because of drought in the principal corn-producing countries. Exports from Romania and Yugoslavia probably will drop to about half of the 1967/68 level.

## The Japanese Market

In November, the Japanese Price Stabilization Council (established by the Prime Minister in February 1968) reported that the degree of agricultural protection in Japan had risen in the past decade and now is as high as in the highly protectionist nations of Western Europe. The Council recommended some relaxation of import restrictions to stabilize consumer prices and force improved farm productivity at home. It also recommended greater diversification of the source of imports to increase price competition among supplying countries and to aid economic development abroad. As yet, the Government has taken no steps to implement these proposals and continues to follow a restrictive policy on agricultural imports.

Japan's imports of U.S. agricultural products, valued at over \$1 billion (c.i.f.), remained relatively stable in 1968 for the second consecutive year, but the composition of the total changed radically. Japanese imports of U.S. corn and soybeans increased about 60 percent and 20 percent, respectively, while imports of U.S. sorghum declined 25 percent. Purchases of U.S. wheat in 1968 matched the high level of the previous year, although the rate declined during July-December 1968, and imports of U.S. cotton fell about 10 percent.

The outlook continues favorable for an expansion in Japan's feed grain imports. Feed consumption, stimulated by a strong demand for beef and poultry meat and lower feed prices, is expected to continue to trend upward during the remainder of 1968/69. Total 1968/69 imports of corn are expected to reach a record 5.3 million tons, including 2.6 million from the United States (in 1967/68, the United States supplied 2.1 million tons), 1 million from South Africa, 0.8 million from Thailand, and the remainder from Mexico, Mainland China, and other suppliers. Because of unfavorable prices relative to corn, the use of sorghum in mixed feeds continues to decline and Japanese imports of sorghum are forecast to drop to 2.3 million tons in 1968/69, compared with 2.4 million in 1967/68. Most of the decline probably will be accounted for by reduced imports of U.S. sorghum because of increased competition from South Africa, Argentina, and Australia. Imports of barley, for food and feed, are expected to amount to 0.7 million tons in 1968/69. France, which supplied very little barley in previous years, has dominated the barley market so far this year.

Stimulated by another increase in the support price, <sup>9/</sup> Japanese farmers again increased their plantings of rice and produced a crop almost equal to the 1967 bumper harvest. With record carry-in stocks (2.6 million tons, milled) on November 1, 1968, Japan's rice imports will drop to insignificant proportions in 1968/69 (November-October); imports amounted to 475,000 tons in 1966/67 and 250,000 tons in 1967/68. The implications of Japan's large rice supplies for future wheat imports are not clear. In November, the Japanese Federation of Agricultural Cooperatives recommended a reduction in wheat imports in order to increase consumption of domestic rice. Total wheat imports during 1968/69 are not likely to reach the 4-million-ton level of 1967/68. Because of a quality

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<sup>9/</sup> During 1960-66, the retail price of rice in Japan increased an average of 6.5 percent annually, primarily because of increases in the support price.

issue, Japan suspended imports of U.S. wheat from mid-November to mid-January and U.S. wheat lost ground to wheat from Australia. About 60 percent of Japan's wheat imports during October 1968-February 1969 came from Australia. France and Argentina are trying hard to sell wheat to Japan, and Japanese mills have already purchased trial lots from both countries. The French wheat competes with Japanese domestic wheat and U.S. Western White wheat in terms of milling characteristics. Japan resumed purchases of U.S. wheat in January.

Japan's imports of soybeans, which did not increase in 1967, grew by 10 percent in 1968 to an estimated 2.4 million tons, including 2 million from the United States and the remainder from Mainland China. (Japanese purchases of U.S. soybeans averaged only 1.2 million tons in 1961-62.) As expected, Japan's imports of rapeseed, mostly from Canada, increased significantly but, contrary to expectations, imports of Soviet sunflowerseed declined.

Following a 15-percent increase in cotton imports in 1966/67 to rebuild stocks in anticipation of higher prices, Japan's imports of cotton leveled off in 1967/68. Imports of U.S. cotton fell somewhat but remained well above the 1965/66 level. Imports from Mexico and Brazil also declined. Cotton from Syria, Turkey, Pakistan, and the USSR made the largest gains. Australia made its first trial shipments of cotton to Japan in December.

#### Cotton Production Recovers

World cotton output, following two low years, returned in 1968 to the 1963-65 level. There was a sharp recovery in the United States, a large increase in Brazil, a significant increase in Mexico, a large decline in Mainland China, and a significant decline in India.

Because of sharply reduced crops in 1966 and 1967, U.S. cotton stocks on August 1, 1968 were at the lowest level since 1953. The harvested acreage in the United States was about 25 percent larger than in 1967 and, with more favorable weather, the crop was about 45 percent larger. However, because of much smaller stocks, the U.S. supply of cotton for 1968/69 (August-July) is the lowest since the early 1950's and there may be another moderate reduction in stocks by August 1969.

Soviet production of cotton failed to increase for the second year in a row and the United States regained its long-standing position as the world's largest producer (table 16). In the UAR, acreage was down and production remained low for the third successive year. The extra-long-staple crop in the UAR fell for the second year.

Harvests in Mainland China and India were down from the excellent 1967 harvests. Cotton production reached new highs in Pakistan and Turkey.

Brazil's second consecutive record crop, grown on a larger acreage with increased use of fertilizer and plant protection chemicals, is indicative that country's potential to continue as one of the top cotton producers and exporters of the world. Because of increased area and more favorable weather, Mexican cotton production recovered to about the 1966 level. Crops were small for the third year in Central America and Peru. The Nicaraguan crop was

damaged by volcanic ash, and a shortage of irrigation water again reduced the size of the extra-long-staple crop in Peru. The harvest in Colombia was a record.

Table 16.--Cotton production by major producers, 1963-68

Country or region	Season beginning August 1					
	1963	1964	1965	1966	1967	1968 <sup>1/</sup>
	- - Million Bales <sup>2/</sup> - -					
United States	15.33	15.18	14.97	9.58	7.46	10.82
Brazil	2.30	2.10	2.50	2.05	2.70	3.30
Mexico	2.11	2.40	2.63	2.25	2.00	2.30
Central America	1.10	1.32	1.23	1.06	1.04	1.06
Colombia	.34	.30	.30	.40	.46	.60
Peru	.63	.65	.52	.48	.46	.42
Other South America	.57	.80	.67	.53	.48	.60
Western Europe	.92	.70	.74	.84	.76	.67
Eastern Europe	.09	.10	.08	.12	.11	.10
USSR	8.10	8.20	8.80	9.30	9.30	9.30
UAR	2.03	2.32	2.39	2.09	2.01	1.93
Sudan	.45	.70	.75	.89	.90	.85
East African Community	.54	.63	.70	.74	.64	.52
Nigeria	.21	.20	.20	.24	.12	.20
Chad	.18	.17	.15	.19	.18	.20
Other Africa	.59	.63	.70	.81	.85	.97
Mainland China	4.70	6.00	6.60	6.50	7.00	6.40
India	5.20	4.90	4.60	4.60	5.30	5.00
Pakistan	1.94	1.75	1.92	2.10	2.30	2.40
Turkey	1.15	1.50	1.50	1.75	1.80	1.85
Iran	.53	.53	.65	.52	.53	.65
Syria	.70	.81	.83	.65	.58	.65
Other Asia and Oceania	.49	.54	.60	.64	.71	.75
World <sup>3/</sup>	50.21	52.44	54.03	48.32	47.71	51.56

<sup>1/</sup> Preliminary.

<sup>2/</sup> Bales of 480 pounds net.

<sup>3/</sup> Components may not add to totals because of rounding.

U.S. cotton exports got off to a very slow start in 1967/68 but recovered somewhat in the latter part of the season; total exports for the season were 10 percent below the 1966/67 figure (table 17). There were large declines in U.S. exports to Japan, Canada, Indonesia, Yugoslavia, and West Germany; sales to Hong Kong and India advanced. Among the major exporters, only Pakistan and the Sudan made significant gains. Following steady rises during 1964/65 - 1966/67, Soviet and Turkish exports maintained the high level of the previous



year. Central American exports remained low, and all other countries experienced declines.

Table 17.--Cotton exports by country of origin, 1963-67

Country	Year beginning August 1				
	1963	1964	1965	1966	1967
	-- Million bales 1/ --				
United States	5.78	4.20	3.04	4.83	4.36
USSR	1.70	2.00	2.30	2.40	2.40
Mexico	1.43	1.62	2.13	1.39	1.24
UAR	1.37	1.56	1.58	1.43	1.17
Brazil	1.02	1.04	.94	1.01	.84
Turkey	.59	.77	.92	1.05	1.04
Central America	.98	1.11	1.12	.84	.87
Sudan	.72	.47	.57	.68	.83
Syria	.61	.73	.71	.58	.49
East African Community	.52	.60	.63	.73	.54
Pakistan	.69	.49	.49	.56	.89
Peru	.51	.47	.52	.38	.28

1/ Bales of 480 pounds net.

U.S. exports in the first 5 months (August-December) of the 1968/69 season were about 20 percent below the same period a year earlier and are not expected to recover to year-earlier levels. Soviet exports are not likely to increase, but exportable supplies are large in Brazil, Mexico, Turkey, and Pakistan. U.S. exports to Hong Kong, South Korea, Taiwan, and the Philippines are expected to increase but those to Japan, Europe, and Canada are likely to decline from the 1967/68 level.

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