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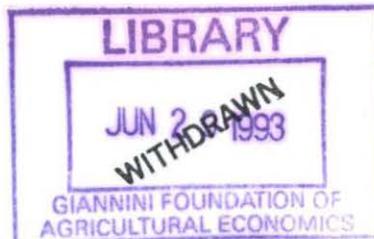
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COMMENTARY ON THE COARSE GRAIN AND WHEAT SITUATION IN THE U.S. AND REST OF THE WORLD

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In 1990, U.S. farmers grossed \$22.5 billion from marketings of feed grain and wheat and another \$5 billion from government payments. Total income of \$27.5 billion represented 15 percent of total U.S. cash farm income from marketings and government payments. Value of feed grain crops not sold would amount to another \$5 billion.

This brief discussion is designed to highlight the information contained in a set of charts and tables which are attached. Unless otherwise noted, the data originated with the U.S. Department of Agriculture.

U.S. Feed Grain

Production and utilization of feed grain in the U.S. has been expanding for a number of years. The bulk of the crop is fed to livestock domestically (Figure 1 and Table 1). Exports generally amount to 20-25 percent of the crop. A steadily growing domestic outlet is for food, alcohol, and industrial uses. Over 18 percent of the 1991 corn crop is estimated to be going into that sector.

As shown in Table 2, corn used for the production of high fructose corn syrup (HFCS), glucose and dextrose, starch, fuel alcohol and cereal food has increased substantially in the past decade.

By far, the most important feed grain is corn, followed by sorghum, barley and oats (Table 3). Oat production, in earlier years usually outpaced barley. In recent years, low profit levels have resulted in declining acres of oats. Increased imports may also have contributed to the faltering oat industry.

In per capita terms, disappearance of grain fed to livestock (including wheat) in the U.S. has fluctuated around 600 kg (Figure 2). While per capita consumption of all meat combined has increased, the shift from red meat to white meat, primarily from beef to poultry meat and fish, has also involved a shift to species which are more efficient converters of concentrate feed to product. Also, gains have been made over time in feeding efficiencies across most livestock enterprises.

In 1989-90, major importers of U.S. feed grain were Japan, CIS (former USSR), Central America and South and Southeast Asia (Figure 13 and Table 4). The importance of Europe, particularly EC-12, has declined. U.S. accounted for nearly 60 percent of world exports of feed grain in 1989-90.

The profit advantages to those participating in the farm programs in recent years have resulted in a high rate of compliance.

International Trade Policies

The current administration has taken steps to phase out some elements of agricultural programs, partly because of their leadership role to encourage trade liberalization. Current negotiations underway under the auspices of the General Agreement on Tariffs and Trade (GATT) are focusing on removing barriers to market access, phasing out farm subsidies that distort trade, and eliminating export subsidies.

High price supports on grain over the years in the EC have not only stimulated production to the point that exporters to that market have lost ground, the EC has generated surpluses which have been dumped on world markets. This prompted the U.S. to implement the Export Enhancement Program (EEP) which has been a major instrument on wheat. U.S. exporters receive subsidies in order for them to counter the EC in mutual international markets.

The U.S. has a number of other programs to promote our products in various world markets.

While a recent compromise proposal offered by the director general of GATT appears to be of net benefit to U.S. agriculture, and wheat in particular, some commodity groups are skeptical. Both the dairy and sugar lobbies are in opposition. Whether this round of GATT succeeds, the long term trend will likely be toward trade liberalization.

Tables 11-15 provide some indication of the degree to which trade is distorted by farm or consumer subsidies on corn, wheat and rice. Developed nations tend to subsidize producers at consumer and taxpayer expense. Developing nations tend to subsidize consumers at producers' expense.

International trade analysts point out that the ultimate impacts of trade liberalization are difficult to measure because of dynamic benefits. These are benefits derived from the challenge to entrepreneurs in agriculture, agribusiness and the food system in capitalizing on expanded market opportunities. Most economists believe than freer trade can contribute to world economic development. Political power of those sectors of world agriculture which stand to lose protection slows the process.

Table 1

Feed grains: Marketing year supply and disappearance, 1975/76-1991/92 1/

Year 2/	Supply				Disappearance					Ending Stocks			
	Begin- ning stocks	Produc- tion	Imports	Total	Food, alcohol, and industrial	Domestic use	Seed	Feed and residual	Total	Exports	Total disap- pearance	Govt. owned	Privately owned 3/
Million metric tons													
1975/76	21.1	185.1	0.3	206.5	16.4	1.5	115.7	133.7	48.8	182.5	0.4	23.6	23.9
1976/77	23.9	194.0	0.3	218.2	17.1	1.6	112.8	131.5	49.8	181.2	0.0	37.0	37.0
1977/78	37.0	205.3	0.2	242.5	18.1	1.5	117.4	137.0	55.2	192.2	0.2	50.1	50.3
1978/79	50.3	221.5	0.2	272.0	19.1	1.3	134.6	155.1	59.2	214.3	3.8	54.0	57.7
1979/80	57.7	237.9	0.2	295.8	20.0	1.3	140.1	161.4	70.6	232.0	7.9	55.9	63.8
1980/81	63.8	197.9	0.2	261.9	20.6	1.4	125.7	147.7	70.0	217.6	7.3	36.9	44.2
1981/82	44.2	246.2	0.2	290.6	22.4	1.4	129.4	153.1	59.5	212.6	8.3	69.7	78.0
1982/83	78.0	250.2	0.2	328.4	25.6	1.4	140.3	167.3	52.6	219.9	33.5	75.0	108.6
1983/84	108.6	136.4	0.6	245.5	27.3	1.4	121.2	149.9	56.1	205.9	8.0	31.6	39.6
1984/85	39.6	236.8	0.7	277.1	30.9	1.5	131.1	163.5	56.1	219.6	8.9	48.6	57.5
1985/86	57.5	274.3	0.8	332.6	33.5	1.5	135.1	170.0	36.1	206.2	20.4	106.0	126.4
1986/87	126.4	251.6	0.7	378.7	35.0	1.4	144.3	180.7	45.9	226.6	48.7	103.4	152.1
1987/88	152.1	216.5	1.0	369.6	35.9	1.3	146.7	183.9	52.1	236.0	34.1	99.5	133.6
1988/89	133.6	149.3	1.2	284.2	37.5	1.2	118.5	157.2	61.1	218.3	18.6	47.3	65.9
1989/90	65.9	221.0	1.3	288.2	39.2	1.1	132.7	173.0	69.7	242.7	10.5	35.0	45.5
1990/91	45.5	230.5	1.3	277.3	39.5	1.1	137.5	178.1	51.5	229.6	11.3	36.4	47.7
1991/92 4/	47.7	218.2	1.8	267.7	----41.6----	145.1	186.7	45.7	232.4	0.8	34.5	35.3	

1/ Aggregated data on corn, sorghum, barley, and oats. 2/ The marketing year for corn and sorghum begins September 1; for oats and barley, June 1. 3/ Includes total government loans (original and reseal). 4/ Projected.

Table 2

Corn: Food, seed, and industrial use, 1980/81-1991/92 1/

Year	HFCS	Glucose and dextrose	Starch	Alcohol-----		Cereals & other products	Seed	Total
				Fuel	Beverage			
Million bushels								
1980/81	165	156	151	35	78	54	20	659
1981/82	183	160	146	36	86	53	19	733
1982/83	214	165	150	140	110	60	15	854
1983/84	265	167	170	160	88	70	19	930
1984/85	310	167	172	232	84	81	21	1,067
1985/86	327	169	190	271	83	93	19	1,152
1986/87	338	171	214	290	85	109	16	1,223
1987/88	358	173	226	279	77	113	17	1,243
1988/89	361	182	223	287	107	114	19	1,293
1989/90	368	193	230	321	109	115	19	1,355
1990/91	379	200	232	343	80	114	19	1,367
1991/92	388	207	237	343	81	116	20	1,392

1/ Marketing year beginning September 1.

Table 3

Feed Grain Balance Sheets by Crops

SECTOR	Corn		Sorghum		Barley		Oats	
	Year 1/	90/91	91/92	90/91	91/92	90/91	91/92	90/91
Million acres								
Planted	74.2	76.0	10.5	11.0	8.2	8.9	10.4	8.7
Harvested	67.0	68.8	9.1	9.8	7.5	8.4	5.9	4.8
Yield (bu/ac)	118.5	108.6	63.1	59.0	56.1	55.2	60.1	50.6
Million bushels								
Beg. stocks	1344	1521	220	143	161	135	157	171
Production	7934	7474	573	579	422	464	358	243
Supply	9282	9016	793	722	596	620	578	474
Dom. disp.	6036	6400	419	405	380	390	406	370
FSI	1367	1400	14	15	176	175	120	125
Feed/res.	4669	5000	405	390	205	215	286	245
Exports	1725	1525	232	200	81	85	1	1
End. stocks	1521	1091	143	117	135	145	171	103
Stocks-use ratio, %	19.6	13.8	21.9	19.4	29.4	30.5	42.1	27.9
Avg. farm price, \$/bu	2.28	2.30- 2.60	2.12	2.25- 2.55	2.14	2.05- 2.15	1.14	1.15- 1.25

1/ Corn and sorghum, September/August; barley and oats, June/May.

2/ Based on corn since 1975/76.

Table 4

Imports of Feed Grain from the U.S. Compared With
 Total Feed Grain Imports, Major Nations or
 Regions, Calendar Years, 1989-90¹

<u>Nation or Region</u>	<u>Imports of Feed Grain, Annual Average, 1989-90</u>		<u>Percent from the U.S.</u>
	<u>From U.S.</u>	<u>Total</u>	
	<u>Mil. MT</u>	<u>Mil. MT</u>	<u>%</u>
Central America	7.8	8.8	89
South America	1.5	2.1	71
Europe	5.1	21.7	24
Africa	3.4	5.9	58
Mideast	4.4	9.3	47
CIS	14.4	20.4	71
China	.2	6.3	3
Japan	16.7	21.7	77
Other Asia	9.8	11.4	86
Other Nations	.9	1.6	56
World	64.2	109.2	59

¹Source: U.S. Department of Agriculture, Foreign Agricultural Trade of the United States, Calendar Year 1990 Supplement, Commodity Economics Division, Economic Research Service, November 1991; FAO, United Nations, FAO Yearbook, Trade, Vol. 44, 1990, Rome, 1991.

Table 5

WORLD COARSE GRAINS SUPPLY AND DEMAND TABLE
OCTOBER/SEPTEMBER YEARS
(IN MILLIONS OF METRIC TONS)

	1987/88	1988/89	1989/90	1990/91	1991/92 FEB 11	1991/92 MAR 11
EXPORTS						
CANADA	4.3	4.4	4.4	5.3	6.1	6.2
AUSTRALIA	2.5	1.9	2.8	3.2	2.6	2.6
ARGENTINA	5.3	3.5	4.5	5.3	6.5	7.5
SOUTH AFRICA	0.6	2.0	2.9	0.8	0.8	0.8
THAILAND	0.8	1.4	1.4	1.4	0.9	0.8
SUBTOTAL	13.5	13.2	16.0	15.9	16.9	17.8
EC-12	8.5	10.8	8.1	7.9	9.0	9.0
CHINA	4.2	4.9	3.5	7.0	7.9	7.9
OTHERS	3.2	4.1	3.3	3.6	4.4	5.9
TOTAL NON-U.S.	29.4	32.9	30.8	34.3	38.2	40.7
U.S. 3)	53.5	61.3	69.1	51.8	45.9	45.9
WORLD TOTAL	82.9	94.2	100.0	86.1	84.1	86.6
IMPORTS						
EC-12	6.2	5.2	5.9	3.9	2.5	2.5
FORMER USSR	10.4	22.5	23.0	14.7	16.0	16.5
JAPAN	22.4	21.6	21.6	21.5	21.4	21.4
EASTERN EUROPE	2.4	2.9	2.7	3.0	0.9	1.0
CHINA	0.6	0.3	1.1	0.9	0.9	0.9
OTHERS	41.1	41.8	45.8	42.1	42.4	44.3
WORLD TOTAL	82.9	94.2	100.0	86.1	84.1	86.6
PRODUCTION 4)						
CANADA	25.5	19.7	23.5	25.4	22.7	22.7
AUSTRALIA	7.2	6.7	6.9	6.7	6.9	6.9
ARGENTINA	13.1	7.3	8.3	11.0	11.4	12.6
SOUTH AFRICA	7.9	13.1	9.5	8.8	6.6	4.9
THAILAND	2.9	4.4	4.3	4.1	3.9	3.9
EC-12	89.6	94.3	89.8	84.1	88.8	88.6
FORMER USSR 5)	113.7	97.5	104.8	113.3	85.5	85.5
EASTERN EUROPE	57.6	55.1	60.2	52.2	61.4	61.4
CHINA	95.8	94.2	93.5	113.5	110.6	110.3
OTHERS	165.8	189.7	180.6	182.8	188.1	188.1
TOTAL NON-U.S.	579.2	581.9	581.4	601.9	585.7	584.8
U.S.	217.0	149.7	221.4	230.7	218.5	218.5
WORLD TOTAL	796.2	731.6	802.7	832.6	804.2	803.3
UTILIZATION 6)						
FORMER USSR 5)	122.6	121.0	127.7	123.7	103.5	104.5
CHINA	91.8	91.9	91.9	97.1	98.3	98.4
OTHERS	417.8	425.4	435.2	420.2	425.6	424.9
TOTAL NON-U.S.	632.2	638.2	654.8	641.1	627.4	627.8
U.S.	184.4	157.7	173.5	178.5	187.1	187.1
WORLD TOTAL	816.6	795.9	828.2	819.6	814.6	814.9
END STOCKS 7)						
TOTAL FOREIGN 8)	79.5	83.1	78.2	89.0	90.7	89.7
FMR. USSR: STKS CH	1.1	-0.5	1.0	1.0	-2.0	-2.0
U.S.	134.1	66.2	45.7	47.8	35.4	35.4
WORLD TOTAL	213.6	149.3	123.8	136.8	126.1	125.2

Table 6

Wheat: Supply and disappearance, United States, 1910/11-1991/92

Marketing year 1/	Acreage harvested	Yield per harvested area	Production	Domestic use 2/	Exports	Ending stocks	Season-average farm price	Stocks-to-use ratio
	Million acres	Bushels	-----	Million bu.	-----	\$/bu.	Percent	
1910/11	45.8	13.7	625.5	540.0	71.3	125.0	0.91	20.4
1911/12	49.9	12.4	618.2	554.0	81.9	110.0	0.87	17.3
1912/13	48.4	15.1	730.0	570.0	145.2	125.0	0.81	17.5
1913/14	52.0	14.4	751.1	616.0	148.0	115.0	0.79	15.1
1914/15	55.6	16.1	897.5	609.0	335.7	67.0	0.98	7.1
1915/16	60.3	16.7	1,008.6	609.0	246.2	225.0	0.96	26.3
1916/17	53.5	11.9	634.6	596.0	206.0	80.0	1.43	10.0
1917/18	46.8	13.2	619.8	556.0	132.6	40.0	2.05	5.8
1918/19	61.1	14.8	904.1	580.0	287.4	85.0	2.05	9.8
1919/20	73.7	12.9	952.1	647.0	222.0	170.0	2.16	19.6
1920/21	62.4	13.5	843.3	575.0	369.3	124.0	1.83	13.1
1921/22	64.6	12.7	819.0	579.0	282.6	96.0	1.03	11.1
1922/23	61.4	13.8	846.6	602.0	224.9	132.0	0.97	16.0
1923/24	56.9	13.3	759.5	619.0	159.9	137.0	0.93	17.6
1924/25	52.5	16.0	841.6	613.0	260.8	108.0	1.25	12.4
1925/26	52.4	12.8	668.7	585.0	108.0	97.0	1.44	14.0
1926/27	56.6	14.7	832.2	610.0	219.2	109.0	1.22	13.1
1927/28	59.6	14.7	875.1	678.0	206.3	113.0	1.19	12.8
1928/29	59.2	15.4	914.4	653.0	163.7	227.0	1.00	27.8
1929/30	63.4	13.0	824.2	616.0	153.2	291.0	1.04	37.8
1930/31	62.6	14.2	886.5	751.0	131.5	313.0	0.67	35.5
1931/32	57.7	16.3	941.5	753.0	135.8	375.0	0.39	42.2
1932/33	57.9	13.1	756.3	719.0	41.2	378.0	0.38	49.7
1933/34	49.4	11.2	552.2	628.0	37.0	273.0	0.74	41.1
1934/35	43.3	12.2	526.1	654.0	21.5	146.0	0.85	21.6
1935/36	51.3	12.2	628.2	661.0	15.9	140.0	0.83	20.7
1936/37	49.1	12.8	629.9	689.0	21.6	83.0	1.02	11.7
1937/38	64.2	13.6	873.9	697.0	107.2	153.0	0.96	19.0
1938/39	69.2	13.3	919.9	712.0	115.8	250.0	0.56	30.2
1939/40	52.7	14.1	741.2	663.0	54.3	280.0	0.69	39.0
1940/41	53.3	15.3	814.6	676.0	40.6	385.0	0.68	53.7
1941/42	55.9	16.9	942.0	667.0	35.8	631.0	0.94	89.8
1942/43	49.8	19.5	969.4	946.0	33.4	619.0	1.10	63.2
1943/44	51.4	16.4	843.8	1,237.0	51.1	317.0	1.36	24.6
1944/45	59.7	17.8	1,060.1	1,086.0	56.7	279.0	1.41	24.4
1945/46	65.2	17.0	1,107.6	965.0	318.7	100.0	1.49	7.8
1946/47	67.1	17.2	1,152.1	836.0	367.4	84.0	1.90	7.0
1947/48	74.5	18.2	1,358.9	903.0	479.8	196.0	2.29	14.2
1948/49	72.4	17.9	1,294.9	854.0	505.3	307.0	1.98	22.6
1949/50	75.9	14.5	1,098.4	800.0	308.2	425.0	1.88	38.4
1950/51	61.6	16.5	1,019.3	689.6	344.7	491.7	2.00	47.5
1951/52	61.9	16.0	988.2	694.6	485.5	329.7	2.11	27.9
1952/53	71.1	18.4	1,306.4	655.6	332.0	672.2	2.09	68.1
1953/54	67.8	17.3	1,173.1	643.7	213.6	993.6	2.04	115.9
1954/55	54.4	18.1	983.9	604.7	267.2	1,109.4	2.12	127.2
1955/56	47.3	19.8	937.1	603.9	322.2	1,130.2	1.98	122.0
1956/57	49.8	20.2	1,005.4	598.6	541.0	1,004.0	1.97	88.1
1957/58	43.8	21.8	955.7	589.7	418.5	962.2	1.93	95.4
1958/59	53.0	27.5	1,457.4	610.3	449.6	1,368.1	1.75	129.1
1959/60	51.7	21.6	1,117.7	606.9	501.8	1,384.2	1.76	124.8
1960/61	51.9	26.1	1,354.7	591.0	653.5	1,502.4	1.74	120.7
1961/62	51.6	23.9	1,232.4	604.4	715.7	1,420.6	1.83	107.6
1962/63	43.7	25.0	1,092.0	598.8	649.4	1,269.7	2.04	101.7
1963/64	45.5	25.2	1,146.8	581.5	845.6	993.5	1.85	69.6
1964/65	49.8	25.8	1,283.4	634.9	722.7	921.1	1.37	67.8
1965/66	49.6	26.5	1,315.6	725.3	851.8	660.5	1.35	41.9
1966/67	49.6	26.3	1,304.9	683.1	771.3	512.8	1.63	35.3
1967/68	58.4	25.8	1,507.6	625.8	765.3	630.2	1.39	45.3
1968/69	54.8	28.4	1,556.6	739.7	544.2	904.0	1.24	70.4
1969/70	47.1	30.6	1,442.7	764.0	603.0	982.6	1.25	71.9
1970/71	43.6	31.0	1,351.6	772.1	740.8	822.8	1.33	54.4
1971/72	47.7	33.9	1,618.6	849.3	609.8	983.4	1.34	67.4
1972/73	47.3	32.7	1,546.2	798.7	1,135.1	597.1	1.76	30.9
1973/74	54.1	31.6	1,710.8	753.4	1,217.0	340.1	3.95	17.3
1974/75	65.4	27.2	1,781.9	671.9	1,018.5	435.0	4.09	25.7
1975/76	69.5	30.6	2,126.9	725.8	1,172.9	665.6	3.56	35.1
1976/77	70.9	30.3	2,148.8	754.4	949.5	1,113.2	2.73	65.3
1977/78	66.7	30.7	2,045.5	859.0	1,123.8	1,177.8	2.33	59.4
1978/79	56.5	31.4	1,775.5	837.0	1,194.1	924.1	2.98	45.5
1979/80	62.5	34.2	2,134.1	783.1	1,375.2	902.0	3.80	41.8
1980/81	71.1	33.5	2,380.9	782.5	1,513.8	989.1	3.99	43.1
1981/82	80.6	34.5	2,785.4	847.2	1,770.7	1,159.4	3.69	44.3
1982/83	77.9	35.5	2,765.0	908.2	1,508.7	1,515.1	3.45	62.7
1983/84	61.4	39.4	2,419.8	1,113.8	1,426.4	1,398.6	3.51	55.1
1984/85	66.9	38.8	2,594.8	1,156.1	1,421.4	1,425.2	3.39	55.3
1985/86	64.7	37.5	2,424.1	1,051.5	909.1	1,905.0	3.08	97.2
1986/87	60.7	34.6	2,090.6	1,197.4	998.5	1,820.9	2.42	82.9
1987/88	55.9	37.7	2,107.7	1,086.0	1,597.8	1,260.8	2.57	47.0
1988/89	53.2	34.1	1,812.2	974.9	1,419.2	701.6	3.72	29.3
1989/90	62.2	32.7	2,036.6	991.9	1,233.3	536.5	3.72	24.1
1990/91 3/	69.3	39.5	2,736.4	1,375.4	1,067.9	865.9	2.61	35.4
1991/92 4/	57.7	34.3	1,980.7	1,217.0	1,275.0	389.6	3.00-3.10	15.6

1/ 1910/1911-1949/50 - July-June marketing year; 1950/51-1988/89 - June-May marketing year. 2/ 1941/42-1949/50 includes procurement for both civilian relief feeding and military food use. 3/ Estimate. 4/ Projected.

Table 7

Wheat production, trade, and ending stocks, world and United States, 1965-91

Year	Production			Exports			Ending stocks		
	World	United States	U.S. share	World 1/	United States	U.S. share	World	United States	U.S. share
	Million bushels	Percent		Million bushels	Percent		Million bushels	Percent	
1965	9,675	1,283	13.26	2,241	852	38.01	2,232	660	29.57
1966	11,314	1,315	11.62	2,058	771	37.47	3,220	513	15.93
1967	10,927	1,507	13.79	1,874	765	40.82	3,589	630	17.56
1968	12,149	1,557	12.82	1,653	544	32.90	4,457	904	20.28
1969	11,390	1,443	12.67	1,837	603	32.82	3,805	983	25.84
1970	11,525	1,352	11.73	2,021	741	36.67	2,959	823	27.81
1971	12,895	1,619	12.55	1,911	599	31.37	3,279	985	30.04
1972	12,637	1,546	12.24	2,462	1,116	45.35	2,753	597	21.68
1973	13,735	1,711	12.46	2,315	1,217	52.57	3,040	340	11.18
1974	13,261	1,782	13.44	2,363	1,018	43.11	2,989	435	14.55
1975	13,121	2,127	16.21	2,451	1,173	47.86	3,187	666	20.90
1976	15,483	2,149	13.88	2,326	1,950	40.85	4,678	1,113	23.79
1977	14,115	2,046	14.50	2,675	1,124	42.02	4,013	1,178	29.35
1978	16,428	1,776	10.81	2,646	1,194	45.14	4,955	924	18.65
1979	15,618	2,134	13.66	3,160	1,375	43.51	4,452	902	20.26
1980	16,286	2,381	14.62	3,458	1,514	43.79	4,183	989	23.64
1981	16,557	2,785	16.82	3,722	1,771	47.58	4,178	1,159	27.74
1982	17,579	2,765	15.73	3,627	1,509	41.61	4,811	1,515	31.49
1983	18,001	2,420	13.44	3,777	1,429	37.83	5,373	1,399	26.03
1984	18,877	2,595	13.75	3,932	1,424	36.22	6,075	1,425	23.46
1985	18,408	2,424	13.17	3,116	909	29.18	6,235	1,905	30.55
1986	19,515	2,091	10.71	3,355	999	29.76	6,527	1,821	27.90
1987	18,459	2,108	11.42	3,899	1,598	40.99	5,468	1,261	23.06
1988	18,418	1,812	9.84	3,571	1,419	39.73	4,345	702	16.15
1989	19,764	2,037	10.30	3,531	1,233	34.92	4,454	536	12.04
1990	21,796	2,736	12.55	3,421	1,068	31.22	5,158	866	16.79
1991 2/	20,058	1,981	9.88	3,957	1,275	32.22	4,605	390	8.46

1/ Excludes intra-EC trade. 2/ Preliminary.

Table 8

--Wheat classes: Marketing year supply and disappearance, 1974/75-1991/92

Year beginning June 1	Supply			Disappearance			Ending stocks May 31	
	Beginning stocks	Pro- duction	Total 2/	Domestic use	Exports	Total		
Million bushels								
1983/84:								
Hard winter	754	1,198	1,952	503	704	1,207	745	
Hard spring	408	323	732	198	220	418	314	
Soft red	74	504	578	284	220	504	74	
White	143	322	465	78	220	298	167	
Durum	136	73	212	51	62	113	99	
All classes	1,515	2,420	3,938	1,114	1,426	2,540	1,399	
1984/85:								
Hard winter	745	1,251	1,996	564	715	1,279	717	
Hard spring	314	409	727	173	183	356	371	
Soft red	74	531	605	289	252	541	64	
White	167	301	469	86	210	296	173	
Durum	99	103	206	45	61	106	100	
All classes	1,399	2,595	4,002	1,157	1,421	2,578	1,425	
1985/86:								
Hard winter	717	1,230	1,947	545	393	938	1,009	
Hard spring	371	460	841	178	165	343	498	
Soft red	64	367	431	204	148	352	79	
White	173	254	428	80	150	230	198	
Durum	100	113	216	42	53	95	121	
All classes	1,425	2,424	3,865	1,051	909	1,960	1,905	
1986/87:								
Hard winter	1,009	1,017	2,026	624	429	1,053	973	
Hard spring	498	451	957	268	199	467	490	
Soft red	79	292	371	180	114	294	77	
White	198	232	437	77	175	252	185	
Durum	121	98	225	49	82	131	95	
All classes	1,905	2,091	4,017	1,197	999	2,196	1,821	
1987/88 :								
Hard winter	973	1,019	1,992	514	911	1,425	567	
Hard spring	490	431	925	268	255	523	402	
Soft red	77	349	427	192	160	352	75	
White	185	216	403	59	210	269	135	
Durum	95	93	197	52	62	114	83	
All classes	1,821	2,108	3,945	1,086	1,598	2,684	1,261	
1988/89:								
Hard winter	567	882	1,449	507	639	1,146	302	
Hard spring	402	181	590	176	195	371	219	
Soft red	75	473	547	193	315	508	39	
White	135	232	370	40	250	290	81	
Durum	83	45	139	59	20	79	60	
All classes	1,261	1,812	3,096	975	1,419	2,394	702	
1989/90 :								
Hard winter	302	711	1,013	438	360	798	215	
Hard spring	219	433	660	225	280	505	155	
Soft red	39	549	588	212	345	557	32	
White	81	251	335	57	193	250	85	
Durum	60	92	165	60	55	115	50	
All classes	702	2,037	2,762	992	1,233	2,225	536	
1990/91:								
Hard winter	215	1,199	1,414	686	368	1,054	360	
Hard spring	155	555	717	239	201	440	277	
Soft red	32	547	579	269	230	499	80	
White	85	313	408	105	216	321	87	
Durum	50	122	192	76	53	129	62	
All classes	536	2,736	3,309	1,375	1,068	2,443	866	
1991/92: 3/								
Hard winter	360	901	1,262	540	570	1,110	152	
Hard spring	277	431	723	243	380	623	100	
Soft red	80	325	405	264	105	369	36	
White	87	219	308	91	175	266	42	
Durum	62	104	184	80	45	125	59	
All classes	866	1,981	2,882	1,217	1,275	2,492	390	

1/ Data, except production, are approximations. Imports and exports include flour and products in wheat equivalent. 2/ Total supply includes imports. 3/ Projected.

Table 9

Imports of Wheat and Flour (Wheat Equivalent) From the U.S.
 Compared with Total Wheat and Flour Imports, Major
 Nations or Regions, Calendar Years, 1989-90¹

<u>Nation or Region</u>	<u>Imports of Wheat and Flour, Annual Average, 1989-90</u>		<u>Percent from the U.S.</u>
	<u>From U.S.</u>	<u>Total</u>	
	<u>Mil. MT</u>	<u>Mil. MT</u>	<u>%</u>
Central America	1.8	3.2	56
South America	2.0	4.8	42
Europe	1.0	17.0	6
Africa	6.4	19.4	33
Mideast	2.3	12.2	19
CIS	4.5	14.9	30
China	5.5	14.7	37
Japan	2.8	5.5	51
Other Asia	6.8	15.6	44
Other Nations	.1	.9	11
World	33.2	108.2	31

¹Source: U.S. Department of Agriculture, Foreign Agricultural Trade of the United States, Calendar Year 1990 Supplement, Commodity Economics Division, Economic Research Service, November 1991; FAO, United Nations, FAO Yearbook, Trade, Vol. 44, 1990, Rome, 1991.

Table 10

WORLD WHEAT AND WHEAT FLOUR SUPPLY AND DEMAND TABLE
JULY/JUNE YEARS
(IN MILLIONS OF METRIC TONS)

	1987/88	1988/89	1989/90	1990/91	1991/92 FEB 11	1991/92 MAR 11
EXPORTS						
CANADA	23.6	13.5	17.0	20.3	24.0	24.0
AUSTRALIA	12.1	10.7	10.8	11.8	7.1	7.1
ARGENTINA	3.8	3.5	5.6	4.7	5.5	5.5
SUBTOTAL	39.6	27.7	33.5	36.8	36.6	36.6
EC-12	14.8	21.0	21.0	20.0	23.0	22.0
FORMER USSR	0.5	0.5	0.5	0.5	0.5	0.5
OTHERS	7.8	10.3	7.8	7.2	12.9	12.4
TOTAL NON-U.S.	62.7	59.5	62.7	64.5	73.0	71.5
U.S. 3)	43.4	37.6	33.5	28.3	34.7	34.7
WORLD TOTAL	106.1	97.1	96.2	92.8	107.7	106.2
IMPORTS						
EC-12	2.2	2.5	2.0	1.9	1.8	1.8
FORMER USSR	21.5	15.5	14.6	14.8	23.0	22.0
JAPAN	5.7	5.4	5.6	5.6	5.8	5.8
EASTERN EUROPE	2.9	2.3	1.7	1.6	1.5	1.5
CHINA	15.0	15.5	13.0	9.5	15.0	15.0
OTHERS	58.9	55.9	59.3	59.3	60.7	60.2
WORLD TOTAL	106.1	97.1	96.2	92.8	107.7	106.2
PRODUCTION 4)						
CANADA	26.0	16.0	24.6	32.7	32.8	32.8
AUSTRALIA	12.4	14.1	14.2	15.1	10.0	10.0
ARGENTINA	8.8	8.4	10.2	10.5	8.5	9.0
EC-12	75.5	78.4	82.0	84.6	90.3	90.4
FORMER USSR 5)	83.3	84.4	92.3	108.0	78.0	78.0
EASTERN EUROPE	35.8	41.1	40.7	41.1	39.2	39.2
CHINA	85.8	85.4	90.8	98.2	96.0	96.0
INDIA	44.3	46.2	54.1	49.9	54.5	54.5
OTHERS	73.1	78.0	73.6	78.6	82.6	83.1
TOTAL NON-U.S.	445.0	451.9	482.4	518.7	492.0	493.0
U.S.	57.4	49.3	55.4	74.5	53.9	53.9
WORLD TOTAL	502.4	501.3	537.9	593.2	545.9	547.0
UTILIZATION 6)						
FORMER USSR 5)	101.5	100.4	103.4	119.3	106.0	105.0
CHINA	102.8	104.4	104.5	106.0	110.0	110.0
OTHERS	297.3	300.5	299.8	311.0	311.8	314.1
TOTAL NON-U.S.	501.6	505.3	507.8	536.3	527.8	529.1
U.S.	29.6	26.5	27.0	37.4	33.1	33.1
WORLD TOTAL	531.2	531.8	534.8	573.7	560.9	562.2
END STOCKS 7)						
TOTAL FOREIGN 8)	114.5	99.2	106.8	117.3	114.7	114.9
FMR. USSR: STKS CH	2.8	-1.0	3.0	3.0	-5.5	-5.5
U.S.	34.3	19.1	14.6	23.6	10.6	10.6
WORLD TOTAL	148.8	118.3	121.4	140.8	125.3	126.5

Table 11

Producer and Consumer Subsidy Equivalents on Corn,
U.S. and the E.C., Annual Average, 1988-90^{a/}

	Nation(s)	
	U.S.	E.C.
Production (mil. MT)	172.7	25.8
Value of production (mil. \$)	16,310	5,348
Direct payments (mil. \$)	3,599	-126
Adjusted value of production (mil. \$) ^{b/}	19,909	5,222
Producer subsidy equivalents (mil. \$)		
Market price support	0	2,166
Direct payments	3,599	-126
Other payments	<u>2,359</u>	<u>375</u>
Total	5,958	2,415
Values in \$/bu.		
Producer price	2.40	5.27
Direct payments	.53	-.12
Other payments	<u>.35</u>	<u>.37</u>
Total return to producers	3.28	5.52
Market price support	0	2.13
Producer subsidy equivalent ^{c/}	.88	2.37
Percent producer subsidy equivalent ^{d/}	31	47
Consumer subsidy equivalent ^{e/}		
Total (mil. \$)	8	-1,998
Percent of value of consumption	nil	-35

^{a/}Source: Organization for Economic Cooperation and Development (OECD), Tables of Producer Subsidy Equivalents and Consumer Subsidy Equivalents, 1979-1990, Paris 1991.

^{b/}Value of production plus direct payments. Used as base for calculating percent producer subsidy equivalents.

^{c/}Direct and other payments plus market price support.

^{d/}Producer subsidy equivalent divided by adjusted value of production.

^{e/}Amount of subsidy consumers would need to maintain their economic well-being if the producer subsidy program were eliminated.

Table 12

Producer and Consumer Subsidy Equivalents on Wheat,
Selected Nations and the E.C., Annual Average, 1988-90^{a/}

	Nation(s)			
	U.S.	Australia	Canada	E.C.
Production (mil. MT)	59.8	14.6	24.1	77.6
Value of production (mil. \$)	7,151	1,678	2,905	16,260
Direct payments (mil. \$)	1,748	0	401	40
Adjusted value of production (mil. \$) ^{b/}	8,899	1,678	3,306	16,300
Producer subsidy equivalents (mil. \$)				
Market price support	662	4	632	5,612
Direct payments	1,748	0	401	40
Other payments	<u>815</u>	<u>200</u>	<u>155</u>	<u>979</u>
Total	3,225	204	1,188	6,631
Values in \$/bu.				
Producer price	3.25	3.16	3.43	5.70
Direct payments	.80	0	.61	.01
Other payments	<u>.37</u>	<u>.37</u>	<u>.24</u>	<u>.34</u>
Total return to producers	4.42	3.53	4.28	6.05
Market price support	.30	.01	.96	1.97
Producer subsidy equivalent ^{c/}	1.47	.38	1.81	2.32
Percent producer subsidy equivalent ^{d/}	36	13	36	41
Consumer subsidy equivalent ^{e/}				
Total (mil. \$)	-264	-4	-117	-4,265
Percent of value of consumption	-7	-2	-18	-34

^{a/}Source: Organization for Economic Cooperation and Development (OECD), Tables of Producer Subsidy Equivalents and Consumer Subsidy Equivalents, 1979-1990, Paris 1991.

^{b/}Value of production plus direct payments. Used as base for calculating percent producer subsidy equivalents.

^{c/}Direct and other payments plus market price support.

^{d/}Producer subsidy equivalent divided by adjusted value of production.

^{e/}Amount of subsidy consumers would need to maintain their economic well-being if the producer subsidy program were eliminated.

Table 13

**Producer and Consumer Subsidy Equivalents on Rice (Milled Equivalent),
U.S. and Japan, Annual Average, 1988-90^{a/}**

	<u>Nation(s)</u>	
	U.S.	Japan
Production (mil. MT)	7.14	10.21
Value of production (mil. \$)	1,096	20,698
Direct payments (mil. \$)	651	1,737
Adjusted value of production (mil. \$) ^{b/}	1,747	22,435
Producer subsidy equivalents (mil. \$)		
Market price support	0	16,127
Direct payments	651	1,737
Other payments	<u>119</u>	<u>1,769</u>
Total	770	19,633
Values in \$/cwt.		
Producer price	6.96	91.95
Direct payments	4.14	7.72
Other payments	<u>.76</u>	<u>7.86</u>
Total return to producers	11.86	107.53
Market price support	0	71.65
Producer subsidy equivalent ^{c/}	4.90	87.23
Percent producer subsidy equivalent ^{d/}	44	87
Consumer subsidy equivalent ^{e/}		
Total (mil. \$)	12	-18,521
Percent of value of consumption	2	-87

^{a/}Source: Organization for Economic Cooperation and Development (OECD), Tables of Producer Subsidy Equivalents and Consumer Subsidy Equivalents, 1979-1990, Paris 1991.

^{b/}Value of production plus direct payments. Used as base for calculating percent producer subsidy equivalents.

^{c/}Direct and other payments plus market price support.

^{d/}Producer subsidy equivalent divided by adjusted value of production.

^{e/}Amount of subsidy consumers would need to maintain their economic well-being if the producer subsidy program were eliminated.

Table 14

Producer and Consumer Subsidy Equivalents on Corn,
Selected Nations, 1987^{a/}

	Nation(s)			
	U.S.	Mexico	Argentina	Kenya
Production (mil. MT)	179.6	11.6	11.5	1.9
Value of production (mil. \$)	13,985	2,222	555	244
Direct payments (mil. \$)	7,803	0	0	0
Adjusted value of production (mil. \$) ^{b/}	21,788	2,222	555	244
Producer subsidy equivalents (mil. \$)				
Market price support	0	1,280	-149	50
Direct payments	7,803	0	0	0
Other payments	<u>2,256</u>	<u>391</u>	<u>277</u>	<u>-19</u>
Total	10,059	1,671	128	31
Values in \$/bu.				
Producer price	1.98	5.29	1.23	3.23
Direct payments	1.10	0	0	0
Other payments	<u>.32</u>	<u>.93</u>	<u>.61</u>	<u>-.25</u>
Total return to producers	3.40	6.22	1.84	2.98
Market price support	0	3.05	-.33	.66
Producer subsidy equivalent ^{c/}	1.42	3.98	.28	.44
Percent producer subsidy equivalent ^{d/}	46	75	-23	13
Consumer subsidy equivalent ^{e/}				
Total (mil. \$)	--	301	--	-172
Percent of value of consumption	--	89	--	-26

^{a/}Source: Webb, Alan, Michael Lopez and Renata Penn, "Estimates of Producer and Consumer Subsidy Equivalents," Statistical Bulletin No. 803, ERS, U.S. Department of Agriculture, April 1990.

^{b/}Value of production plus direct payments. Used as base for calculating percent producer subsidy equivalents.

^{c/}Direct and other payments plus market price support.

^{d/}Producer subsidy equivalent divided by adjusted value of production.

^{e/}Amount of subsidy consumers would need to maintain their economic well-being if the producer subsidy program were eliminated.

Table 15

**Producer and Consumer Subsidy Equivalents on Wheat,
Selected Nations, 1987^{a/}**

	Nation(s)			
	U.S.	India	China	CIS ^{f/}
Production (mil. MT)	57.4	44.3	85.8	87.9
Value of production (mil. \$)	5,497	6,340	11,199	6,663
Direct payments (mil. \$)	3,531	0	0	0
Adjusted value of production (mil. \$) ^{b/}	9,028	6,340	11,199	6,663
Producer subsidy equivalents (mil. \$)				
Market price support	1,453	-2,398	-1,921	-3,171
Direct payments	3,386	0	0	0
Other payments	<u>874</u>	<u>2,866</u>	<u>0</u>	<u>1,170</u>
Total	5,713	468	-1,921	-2,001
Values in \$/bu.				
Producer price	2.61	3.89	3.55	2.06
Direct payments	1.61	0	0	0
Other payments	<u>.41</u>	<u>1.76</u>	<u>0</u>	<u>.36</u>
Total return to producers	4.63	5.65	3.55	2.42
Market price support	.69	-1.47	-.61	-.98
Producer subsidy equivalent ^{c/}	2.71	.29	-.61	-.62
Percent producer subsidy equivalent ^{d/}	63	7	-17	-30
Consumer subsidy equivalent ^{e/}				
Total (mil. \$)	-748	2,526	3,049	4,811
Percent of value of consumption	-23	27	26	71

^{a/}Source: Webb, Alan, Michael Lopez and Renata Penn, "Estimates of Producer and Consumer Subsidy Equivalents," Statistical Bulletin No. 803, ERS, U.S. Department of Agriculture, April 1990.

^{b/}Value of production plus direct payments. Used as base for calculating percent producer subsidy equivalents.

^{c/}Direct and other payments plus market price support.

^{d/}Producer subsidy equivalent divided by adjusted value of production.

^{e/}Amount of subsidy consumers would need to maintain their economic well-being if the producer subsidy program were eliminated.

^{f/}1986.

Figure 1

UTILIZATION OF FEED GRAIN IN THE U.S.

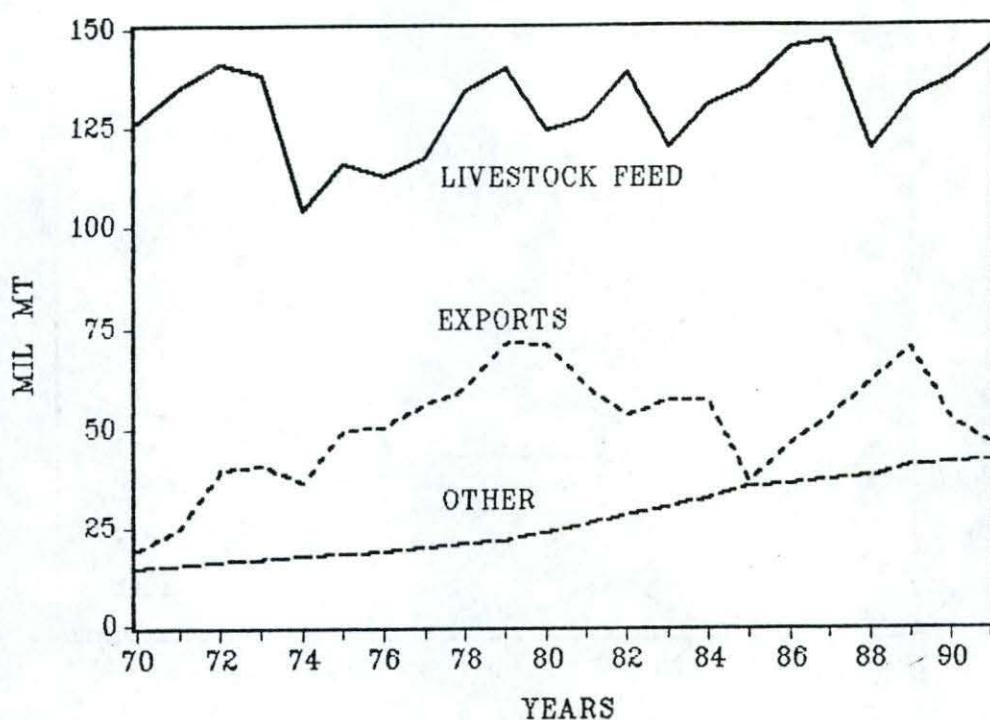
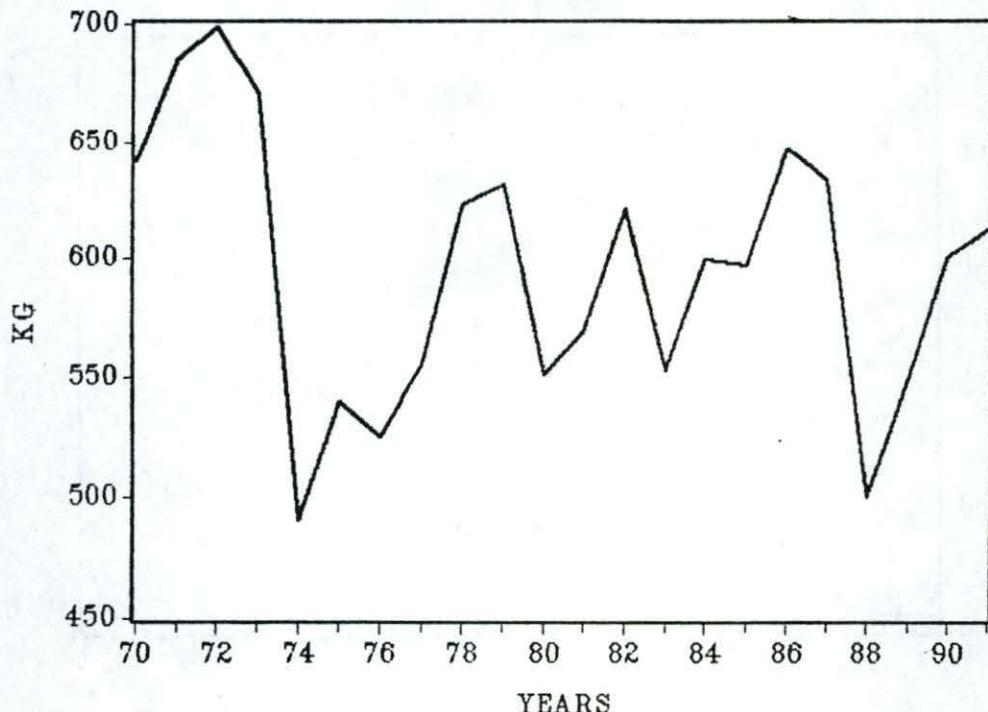


Figure 2

PERCAPITA DISAPPEARANCE OF GRAIN
FED TO LIVESTOCK IN THE U.S.*

* FEED GRAIN AND WHEAT

Figure 3

UTILIZATION OF WHEAT IN THE U.S.

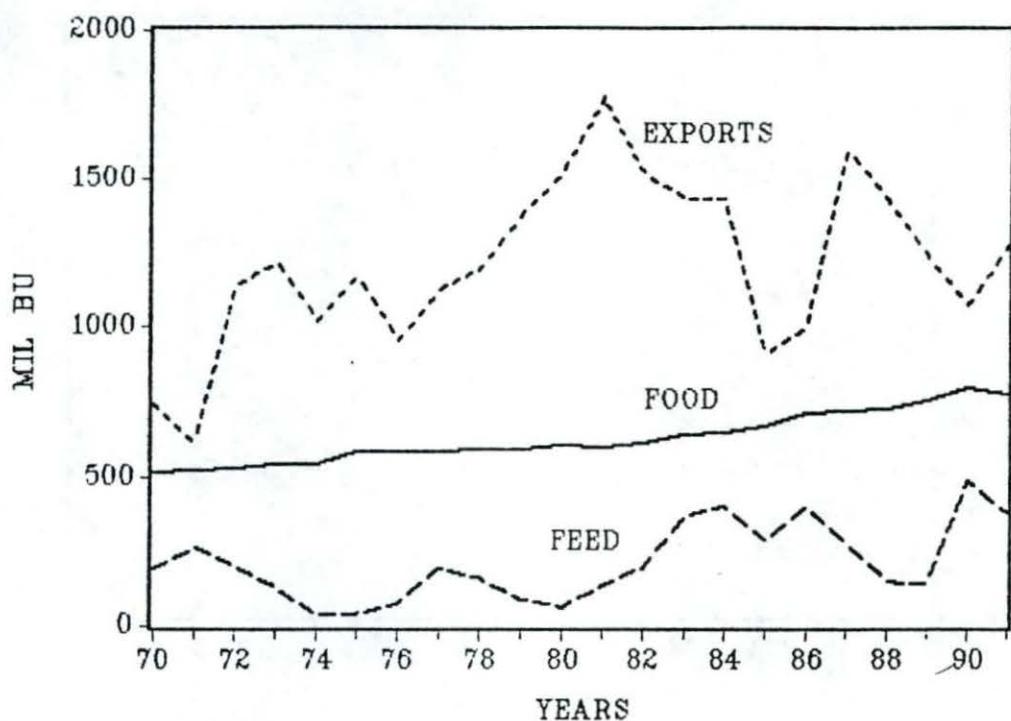


Figure 4

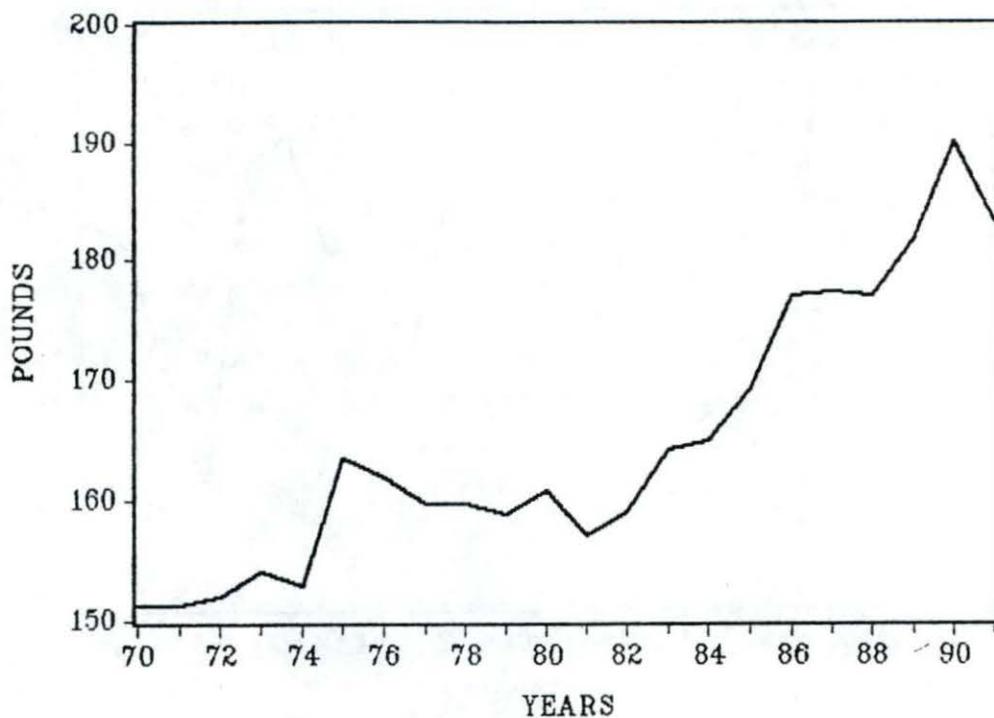
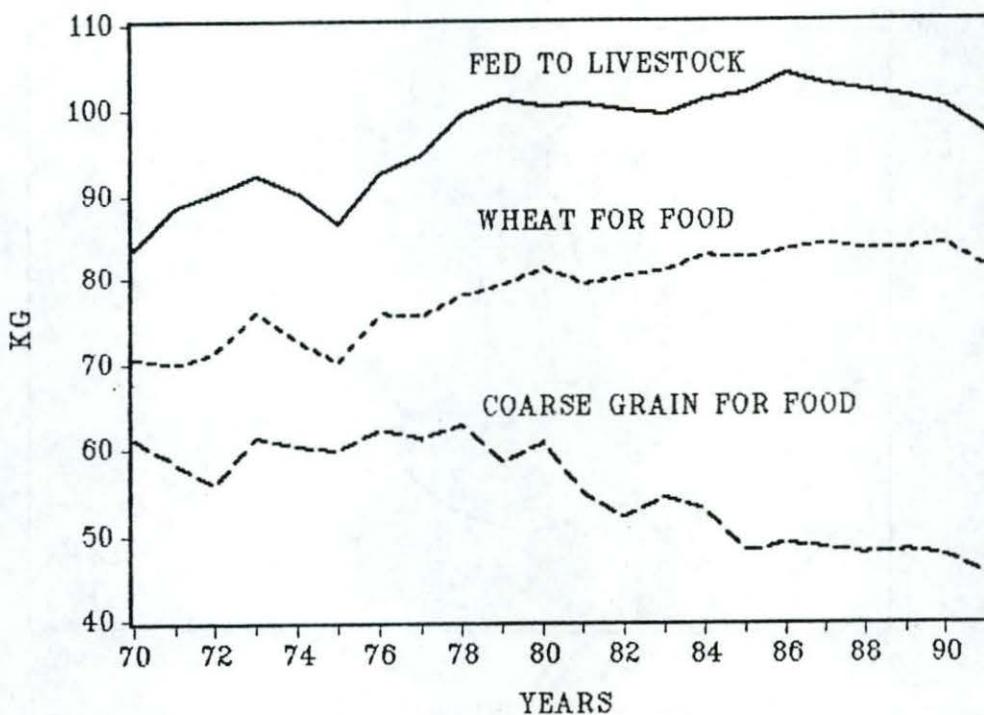
PERCAPITA CONSUMPTION OF WHEAT
IN THE U.S.

Figure 5

PERCAPITA DISAPPEARANCE OF GRAIN
OUTSIDE OF THE U.S.*



* WHEAT AND COARSE GRAIN

Figure 6

ENDING STOCKS OF COARSE GRAIN
IN THE U.S. AND REST OF THE WORLD

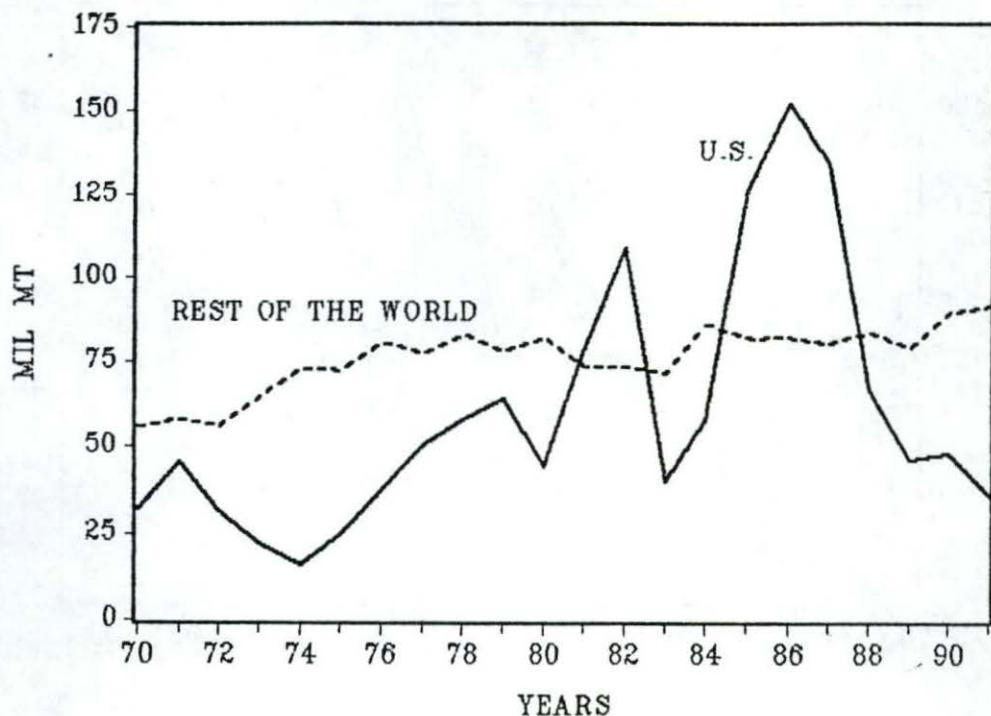


Figure 7

ENDING STOCKS OF WHEAT
IN THE U.S. AND REST OF THE WORLD

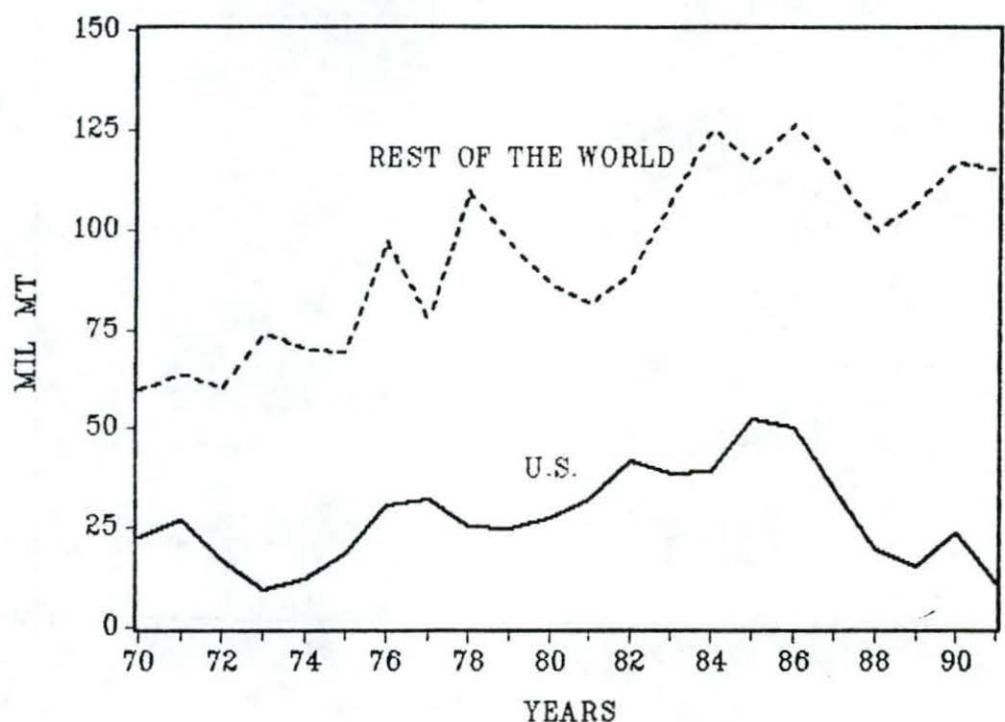


Figure 8

CORN AND WHEAT YIELDS IN THE U.S.

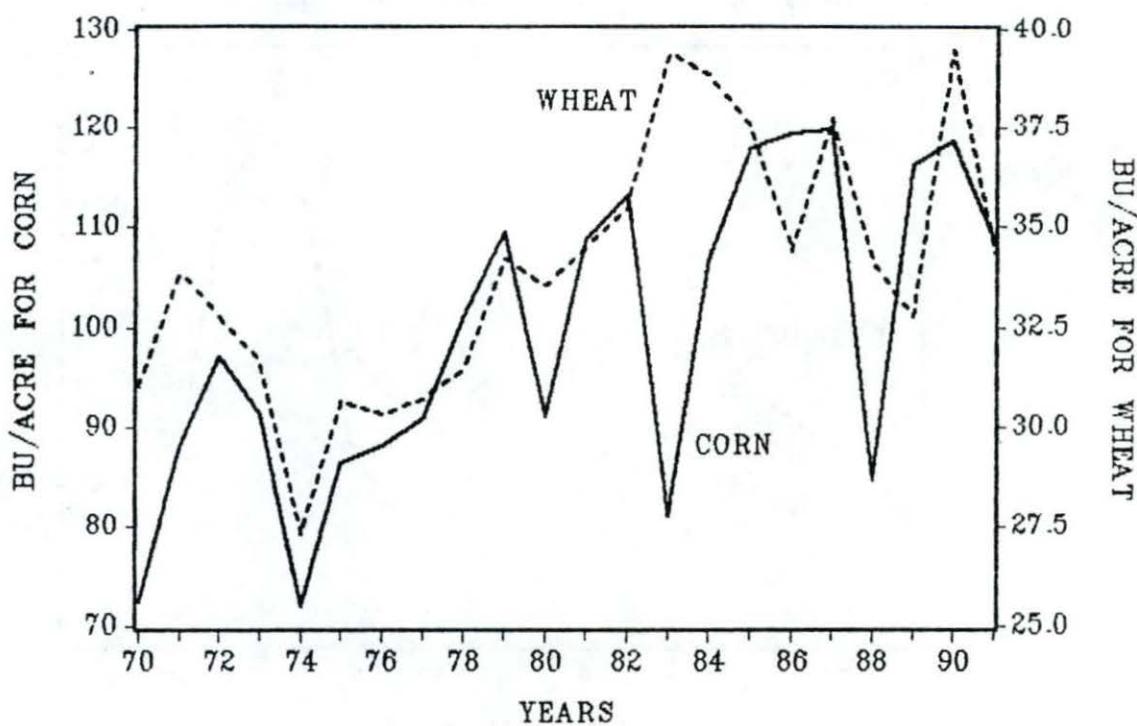


Figure 9

GRAIN YIELDS PER HECTARE IN U.S., CIS, and LDCs

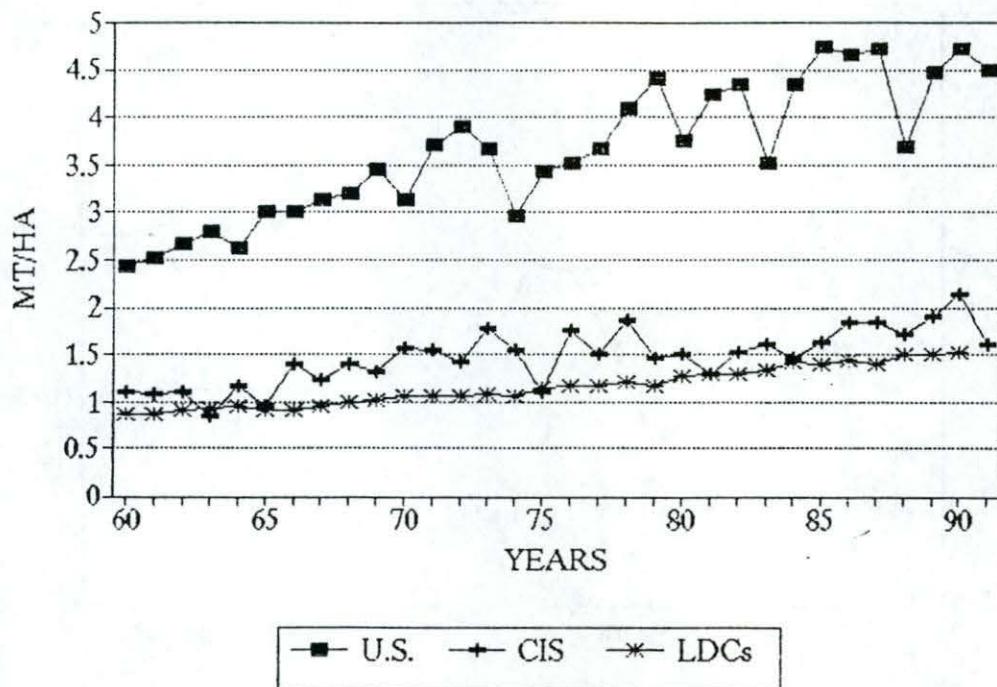


Figure 10

PRICES RECEIVED BY U.S. FARMERS FOR CORN AND WHEAT

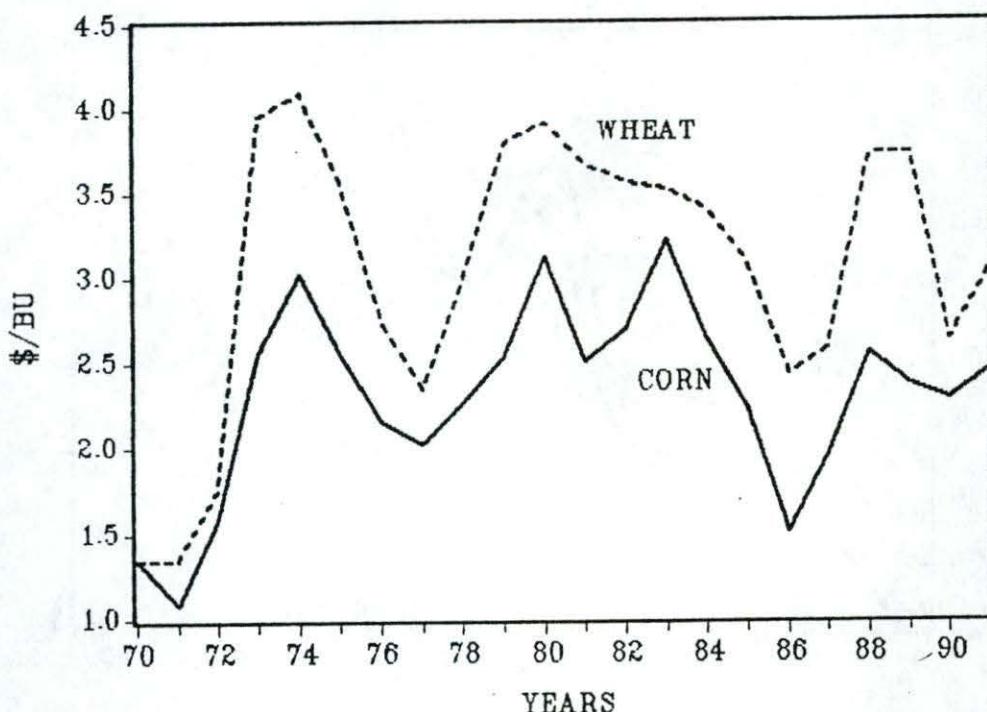


Figure 11

GROSS MARGINS OVER VARIABLE COSTS PER ACRE
FOR U.S. PRODUCERS IN AND OUT OF THE CORN PROGRAM

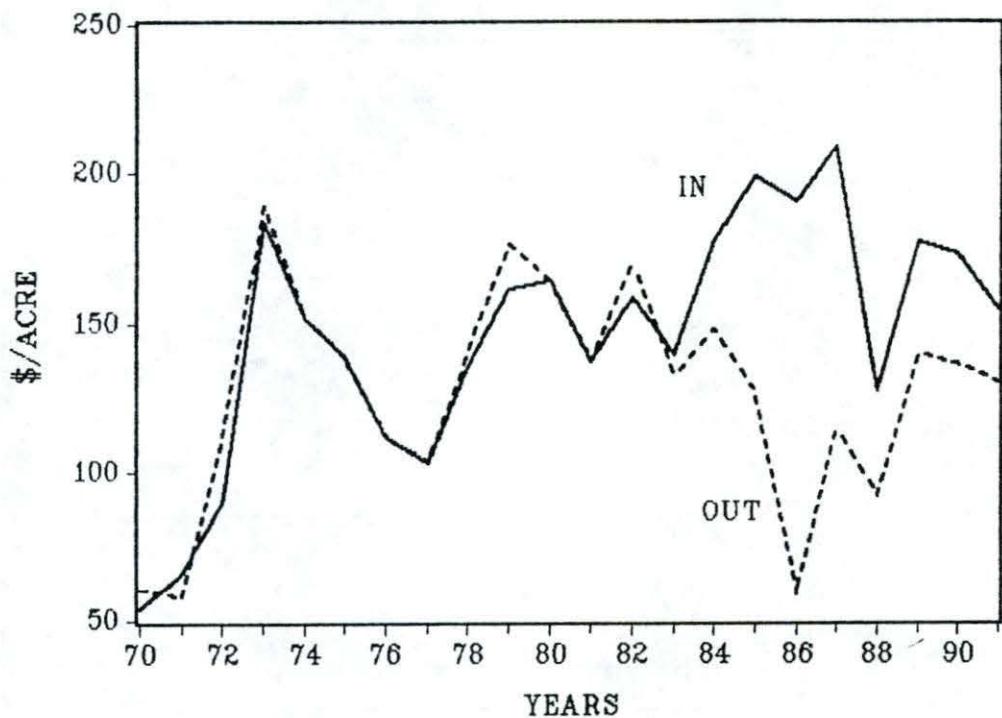


Figure 12

GROSS MARGINS OVER VARIABLE COSTS PER ACRE
FOR U.S. PRODUCERS IN AND OUT OF THE WHEAT PROGRAM

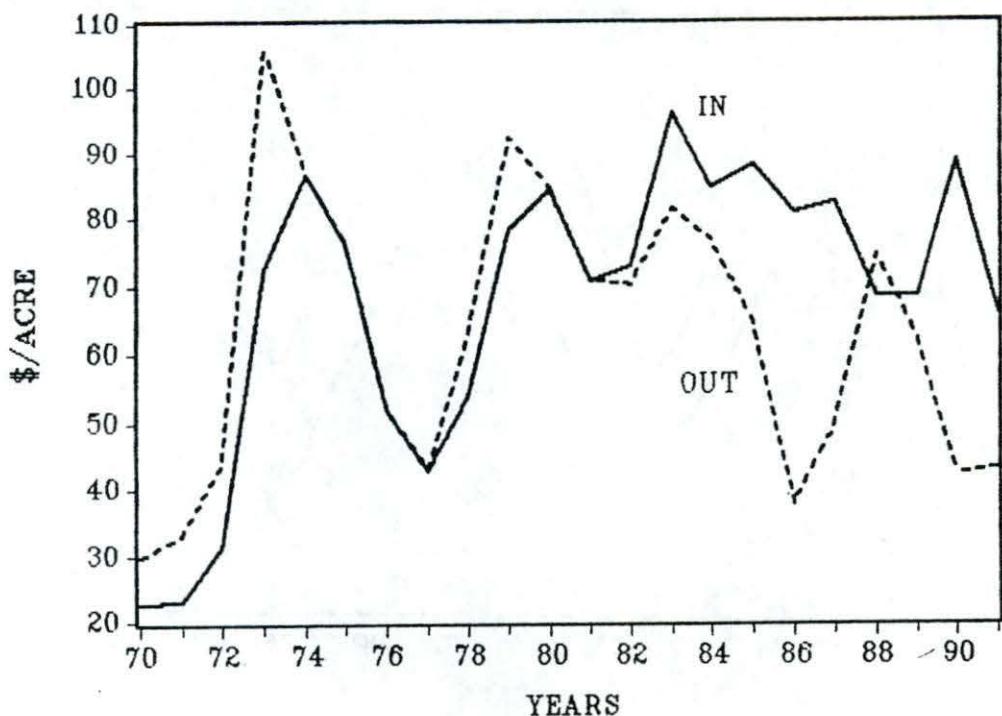


Figure 13

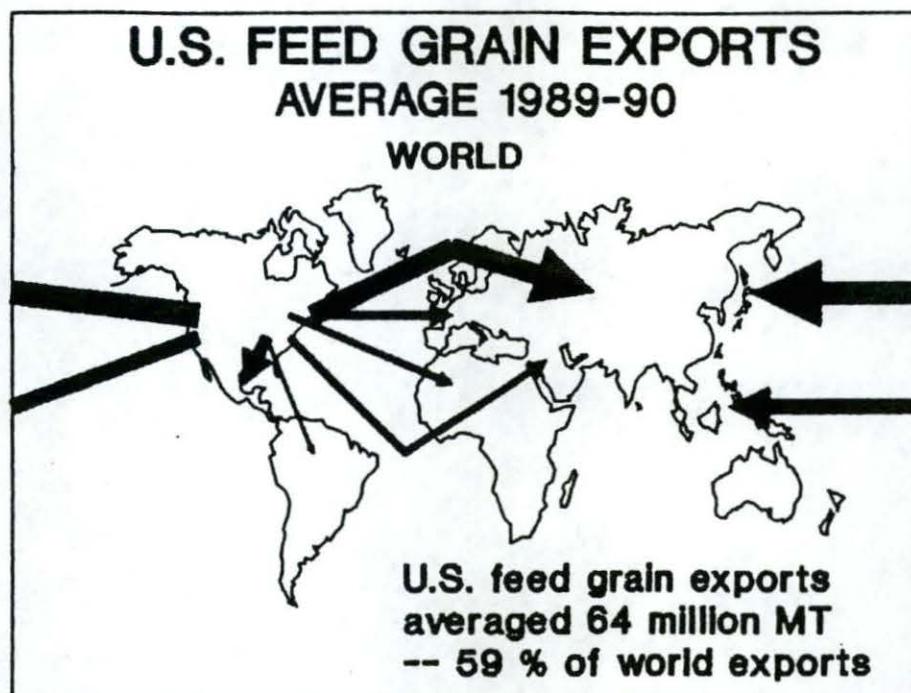


Figure 14

