

Additional Readings

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Glossary

Acreage allotment -- An individual farm's share of the national acreage that the Secretary of Agriculture determines is needed to produce sufficient supplies of a particular crop. The farm's share is based on its previous production.

Acreage reduction program (ARP) -- A voluntary land retirement system in which participating farmers idle a prescribed portion of their crop acreage base of wheat, feed grains, cotton, or rice. The base is the average of the acreage planted for harvest and considered to be planted for harvest. Acreage considered to be planted includes any acreage not planted because of acreage reduction and diversion programs during a period specified by law. Farmers are not given a direct payment for ARP participation, although they must participate to be eligible for benefits such as Commodity Credit Corporation loans and deficiency payments. Participating producers are sometimes offered the option of idling additional land under a paid land diversion program, which gives them a specific payment for each idled acre.

Acreage slippage -- A measure of the effectiveness of acreage reduction programs. Slippage occurs when harvested acres change by less than the change in idled acres.

Advance deficiency payments -- The Secretary is required to make advance deficiency payments to producers of crops when an acreage limitation program is in effect and deficiency payments are expected to be paid. Advance deficiency payments can range from 30 to 50 percent of expected payments.

Advance recourse loans -- Price-support loans made early in a marketing year to enable farmers to hold their crops for later sale. Farmers must repay the recourse loan with interest and reclaim the crops used as collateral.

Agricultural inputs -- Components of agricultural production, such as land, labor, and the capital needed to acquire other inputs, including machinery, fertilizer, seed, and pesticides.

Agricultural Stabilization and Conservation Service (ASCS) -- A USDA agency responsible for administering farm price- and income-support programs and some conservation and forestry cost-sharing programs.

Alternative farming -- A term applied to production methods other than energy- and chemical-intensive one-crop farming.

Basic commodities -- Six crops (corn, cotton, peanuts, rice, tobacco, and wheat) declared by legislation as price-supported commodities.

Carryover -- Existing supplies of a farm commodity at the beginning of a new harvest.

Cash grain farm -- A farm on which corn, grain sorghum, oats, barley, other small grains, soybeans, or field beans and peas account for at least 50 percent of the value of the products sold.

Census of Agriculture -- A survey taken by the Bureau of Census every 5 years to determine the number of farms, land in farms, crop acreage and production, farm spending, and so forth.

Cereals -- Generic name for certain grasses that produce edible seeds; includes wheat, oats, barley, rye, rice, millet, corn, and sorghum grain.

Coarse grains -- Includes corn, barley, oats, grain sorghum, and rye. Millet is also included in the statistics of some foreign nations.

Commodity Credit Corporation (CCC) -- A federally owned and operated corporation within the U.S. Department of Agriculture created to stabilize, support, and protect farm income and prices through loans, purchases, payments, and other operations. All money transactions for agricultural price and income support and related programs are handled through the CCC; the CCC also helps maintain balanced, adequate supplies of agricultural commodities and helps in their orderly distribution.

Common Agricultural Policy (CAP) -- A set of regulations by which member states of the European Community (EC) seek to merge their individual agricultural programs into a unified effort to promote regional agricultural development and achieve other goals. The variable levy and export subsidies are the two main elements of the CAP.

Conservation compliance provision -- Provision of the Food Security Act of 1985 that requires farmers with highly erodible cropland to begin implementing an approved conservation plan by 1990. The plan must be completed by 1995 for the farm operation to remain eligible for Federal program benefits.

Conservation plan -- A combination of land uses and practices to protect and improve soil productivity and to prevent soil deterioration from erosion or other adverse effects.

Conservation practices -- methods or devices which reduce soil erosion and retain soil moisture, including conservation tillage and grassed waterways.

Conservation reserve program (CRP) -- A major provision of the Food Security Act of 1985 designed to reduce erosion on 40-45 million acres of farmland. Under the program, producers who sign contracts agree to convert highly erodible cropland to approved conservation uses for 10 years. In exchange, participating producers receive annual rental payments and cash or in kind payments to share up to 50 percent of the cost of establishing permanent vegetative cover.

Conserving uses -- Land idled from production and planted in annual, biennial, or perennial grasses, or other soil conserving crop.

Corporate farm -- A farm that is created and organized under the laws of the State(s) in which the farm operates. It can be of any size, including family farms.

Cost of production -- An amount, measured in dollars, of all purchased inputs, allowances for management, and rent necessary to produce farm products.

Cover crop -- A close-growing crop grown primarily to protect and improve soil between periods of regular crops, or between trees and vines in orchards and vineyards.

Crop acreage base -- A farm's average acreage of wheat, feed grains, cotton, or rice planted for harvest, plus land not planted because of acreage reduction or diversion programs during a period specified by law. Crop acreage bases are permanently reduced by the portion of land placed in the conservation reserve program.

Crop year -- The year in which a crop is planted. Also the sorghum marketing year, which is the year beginning September 1 and ending August 31.

Cross compliance (full or strict) -- A requirement that a farmer participating in a program for one crop must also meet the program provisions for other major program crops which the farmer grows. Strict cross-compliance provisions have not been enforced since the 1960's.

Cross compliance (limited) -- A producer participating in one commodity program must not plant in excess of the crop acreage base on that farm for any of the other program commodities for which an acreage reduction program is in effect. Limited cross-compliance authority was implemented in the late 1970's and remains in effect under the Food Security Act of 1985.

Deficiency payment -- A Government payment made to farmers who participate in wheat, feed grain, rice, or cotton programs. The payment rate is per bushel, pound, or hundredweight, based on the difference between the price level established by law (target price) and the higher of the market price during a period specified by law or the price per unit at which the Government will provide loans to farmers to enable them to hold their crops for later sale (loan rate). The payment is equal to the payment rate multiplied by the acreage planted for harvest and then by the program yield established for the particular farm.

Developing countries -- Countries whose economies are mostly dependent on agriculture and primary resources and do not have a strong industrial base.

Direct payments -- Payments in the form of cash or commodity certificates made directly to producers for such purposes as deficiency payments, annual land diversion, or conservation reserve payments.

Disaster payments -- Federal aid provided to farmers for feed grain, wheat, rice, and upland cotton who have crop insurance (when available), when either planting is prevented or crop yields are abnormally low because of adverse weather and related conditions. Payments also may be made under special legislation enacted after an extensive natural disaster.

European Community (EC) -- Established by the Treaty of Rome in 1957, also known as the European Economic Community and the Common Market. Originally composed of 6 European nations, it has expanded to 12. The EC attempts to unify and integrate member economies by establishing a customs union and common economic policies, including the Common Agricultural Policy (CAP).

Exchange rate -- Number of units of one currency that can be exchanged for one unit of another currency at a given time.

Exports -- Domestically produced goods and services that are sold abroad.

Farm -- A tract or tracts of land, improvements, and other appurtenances available to produce crops or livestock, including fish. The Bureau of the Census defined a farm in 1978 as any place that has or would have had \$1,000 or more in gross sales of farm products.

Farm acreage base -- The annual total of the crop acreage bases (wheat, feed grains, Upland cotton, and rice) on a farm, the average acreage planted to soybeans, peanuts, and other approved nonprogram crops, and the average acreage devoted to conserving uses. Conserving uses include all uses of cropland except crop acreage bases, acreage devoted to nonprogram crops, acreage enrolled in annual acreage reduction or limitation programs, and acreage in the conservation reserve program.

Farm-to-retail price spread -- A measure of all processing, transportation, wholesaling, and retailing charges incurred after products leave the farm.

Farmer-owned reserve (FOR) -- A program designed to provide protection against wheat and feed grain production shortfalls and provide a buffer against unusually sharp price movements. Farmers can place eligible grain in storage and receive extended loans for 3 years with extensions as warranted by market conditions. The loans are nonrecourse in that farmers can forfeit the commodity held as collateral to the Government without penalty and without paying accumulated interest in full settlement of the loan.

Feed grains -- Any of several grains most commonly used for livestock or poultry feed, including corn, grain sorghum, oats, and barley.

Findley loan rates -- Originally proposed by Representative Paul Findley (R-Ill) this provision was adopted in the Food Security Act of 1985. It gives the Secretary of Agriculture the discretionary authority to reduce the loan rate (price per unit at which the Government will provide loans to farmers to enable them to hold their

crops for later sale) by up to 20 percent, if necessary, to make the commodity more competitive on the world market.

Food Security Act of 1985 (PL 99-198) -- The omnibus food and agriculture legislation signed into law on December 23, 1985, that provides a 5-year framework for the Secretary of Agriculture to administer various agriculture and food programs.

General Agreement on Tariffs and Trade (GATT) -- An agreement originally negotiated in Geneva, Switzerland, in 1947 among 23 countries, including the United States, to increase international trade by reducing tariffs and other trade barriers. The agreement provides a code of conduct for international commerce and a framework for periodic multilateral negotiations on trade liberalization and expansion.

Generic commodity certificates -- Negotiable certificates, which do not specify a certain commodity, that are issued by USDA in lieu of cash payments to commodity program participants and sellers of agricultural products. The certificates, frequently referred to as payment-in-kind (PIK) certificates, can be used to acquire stocks held as collateral on Government loans or owned by the Commodity Credit Corporation.

Grain consuming animal unit (GCAU) -- A term encompassing the utilization of concentrates by all livestock classes. It is a measure estimated by the U. S. Department of Agriculture as the weighted average of the number of livestock and poultry fed during the year converted to milk-cow equivalents and weighted by concentrates consumed.

Gramm-Rudman-Hollings Deficit Reduction Act -- Common name for The Balanced Budget and Emergency Deficit Control Act of 1985 (PL 99-177). The law mandates annual reductions in the Federal budget deficit to eliminate it by 1991. If Congress and the President cannot agree on a targeted budget package for any specific fiscal year, automatic cuts occur for almost all Federal programs.

Gross farm income -- Income which farm operators realize from farming; includes cash receipts from the sale of farm products, Government payments, value of food and fuel produced and consumed on farms where grown, and other items.

Inventory (CCC) -- The quantity of a commodity owned by the Commodity Credit Corporation (CCC) at any specified time.

Loan rate -- The price per unit (bushel, bale, or pound) at which the Government will provide loans to farmers to enable them to hold their crops for later sale.

Marketing year -- Generally, the period from the beginning of a new harvest through marketing the following year. The U.S. sorghum marketing year begins September 1 each year and ends on August 31 of the following year.

Nonrecourse loans -- The major price support instrument used by the Commodity Credit Corporation (CCC) to support the price of feed grains, cotton, peanuts, and tobacco. Farmers who agree to comply with all commodity program provisions may pledge a quantity of a commodity as collateral and obtain a loan from the CCC. The borrower may elect either to repay the loan with interest within a specified period and regain control of the collateral commodity or default on the loan. In case of a default, the borrower forfeits without penalty the collateral commodity to the CCC.

Normal crop acreage -- The acreage on a farm normally devoted to a group of designated crops. When a set-aside program is in effect, the total of the planted acreage of the designated crops and the set-aside acreage cannot exceed the normal crop acreage. Producers must comply to be eligible for commodity loan programs or deficiency payments.

Offsetting compliance -- Requires that a producer participating in a diversion or acreage reduction program must not offset that reduction by planting more than the acreage base for that crop on another farm under the same management control.

Paid land diversion -- If the Secretary of Agriculture determines that planted acres for a program crop should be reduced, producers may be offered a paid voluntary land diversion. Farmers are given a specific payment per acre to idle a percentage of their crop acreage base. The idled acreage is in addition to an acreage reduction program.

Parity price -- Originally defined as the price which gives a unit of a commodity the same purchasing power today as it had in the 1910-14 base period. In 1948, the base prices used in the calculation were made dependent on the most recent 10-year average price for commodities.

Parity ratio -- A measure of the relative purchasing power of farm products; the ratio between the index of prices received by farmers for all farm products and the index of prices paid by farmers for commodities and services used in farm production and family living.

Payment-in-kind (PIK) -- A payment made to eligible producers in the form of an equivalent amount of commodities owned by the Commodity Credit Corporation.

Payment limitation -- The maximum amount of commodity program benefits a person can receive. A \$50,000 per person payment limitation was established in 1981 and applies to direct subsidy payments to wheat, feed grain, cotton, and rice producers. The law was amended in 1987 for the 1987 through 1990 crops to place a \$250,000 limit on total program payments.

Permanent legislation -- Legislation that would be in force in the absence of all temporary amendments and temporarily suspended provisions. The Agricultural Adjustment Act of 1938 and the Agricultural Act of 1949 serve as the principal laws authorizing the major commodity programs.

Permitted acreage -- The maximum acreage of a crop which may be planted within the program. The permitted acreage is computed by subtracting the acreage reduction program requirement from the crop acreage base minus the diversion acreage (if applicable). For example, if a farm has a crop acreage base of 100 acres and a 10-percent acreage reduction (ARP) is required, the permitted acreage is 90 acres.

Price-support programs -- Government programs that aim to keep farm prices received by participating producers from falling below specific minimum prices.

Prices-paid index -- An indicator of changes in the prices farmers pay for goods and services (including interest, taxes, and farm wage rates) used for producing farm products and those needed for farm family living.

Prices-received index -- A measure computed on the basis of prices farmers received for their products at the point of the first sale.

Program costs -- No single definition is applicable to all uses. Program costs may be (1) gross or net expenditures of the Commodity Credit Corporation on a commodity or all commodities during a fiscal year or other period; (2) the realized loss on disposition of a commodity, plus other related net costs during a fiscal year or other period; or (3) the net costs attributed to a particular year's crop of a commodity during the marketing year for that commodity.

Program crops -- Federal support programs are available to producers of wheat, corn, barley, grain sorghum, oats, rye, extra long staple and upland cotton, rice, soybeans, tobacco, peanuts, and sugar.

Program yield -- The farm commodity yield of record determined by averaging the yield for the 1981-85 crops, dropping the high and low years. Program yields are constant for the 1986-90 crops. The farm program yield applied to eligible acreage determines the level of production eligible for direct payments to producers.

Set-aside -- A voluntary program to limit production by restricting the use of land. When offered, producers must participate to be eligible for Federal loans, purchases, and other payments.

Silage -- Usually corn, sorghum, or various legumes and grasses that have been preserved in moist, succulent condition by partial fermentation in a silo or other tight container above or below the ground; mainly used as cattle feed.

Supply control -- The policy of changing the amount of acreage permitted to be planted to a commodity or the quantity of a commodity allowed to be sold by a program participant; used to maintain a desired carryover or price level.

Target price -- A price level established by law for wheat, feed grains, rice, and cotton. Farmers participating in the Federal commodity programs receive the difference between the target price and the higher of the market price during a period prescribed by law

or the unit price at which the Government will provide loans to farmers to enable them to hold their crops for later sale (the loan rate).

Variable levies -- The difference between the price of a foreign product at the port and the official price at which competitive imports can be sold; levies are effectively a variable tax on imports or a variable subsidy to exports.

World price -- Often refers to the cost, insurance, and freight (c.i.f.) price of a commodity at the principal port of a major importing country or area.

0/92 -- An optional acreage diversion program that allows wheat and feed grain producers to devote all or a portion of their permitted acreage to conserving uses and receive deficiency payments on the acreage. The program will make deficiency payments for a maximum of 92 percent of a farm's permitted acreage.

50/92 -- Allows cotton and rice growers who plant at least 50 percent of their permitted acreage to receive 92 percent of their deficiency payments under certain conditions. The Farm Disaster Assistance Act of 1987 also authorized 50/92 for wheat, feed grain, cotton, and rice producers who were affected by a natural disaster in 1987 and met certain criteria stated in the law.

Appendix table 1--Sorghum acreage, yield, and production, 1950-88

Year	Planted	Harvested for grain	Diverted	Yield	Production
	-----Million acres-----			Bu./acre	Mil. bu.
1950	16.1	10.3	0	22.6	233
1951	15.0	8.5	0	19.1	163
1952	12.3	5.3	0	17.0	91
1953	14.6	6.3	0	18.4	115
1954	20.1	11.7	0	20.1	236
1955	23.9	12.9	0	18.8	242
1956	21.4	9.2	0	22.2	205
1957	26.9	19.7	0	28.8	568
1958	20.7	16.5	0	35.2	581
1959	19.5	15.4	0	36.1	555
1960	19.6	15.6	0	39.7	620
1961	14.3	11.0	6.1	43.7	480
1962	15.1	11.6	5.5	44.1	510
1963	17.5	13.3	4.6	43.9	585
1964	16.8	11.7	6.5	41.7	490
1965	17.1	13.0	7.0	51.6	672
1966	16.4	12.8	7.3	55.8	715
1967	18.9	15.0	4.1	50.4	755
1968	17.8	13.9	7.0	52.6	731
1969	17.2	13.4	7.5	54.3	730
1970	17.0	13.6	7.4	50.4	683
1971	20.5	16.1	4.1	53.8	868
1972	17.0	13.2	7.3	60.7	801
1973	19.0	15.7	2.0	58.8	923
1974	17.6	13.8	0	45.1	623
1975	18.1	15.4	0	49.0	754
1976	18.1	14.5	0	49.1	711
1977	16.1	13.8	0	56.6	781
1978	16.2	13.4	1.4	54.5	731
1979	15.3	12.9	1.2	62.6	807
1980	15.6	12.5	0	46.3	579
1981	15.9	13.7	0	64.0	876
1982	16.0	14.1	.7	59.1	835
1983	11.9	10.0	5.7	48.7	488
1984	17.3	15.4	.6	56.4	866
1985	18.3	16.8	.9	66.8	1,120
1986	15.3	13.9	2.4	67.7	938
1987	11.8	10.6	3.5	69.9	741
1988	10.4	9.1	2.9	63.8	578

Appendix table 2--Sorghum use and ending stocks, 1950-88

Crop year	Food	Feed	Exports	Total use	Ending stocks	Stocks-to-use ratio
	-----Million bushels-----					Percent
1950	38	142	75	255	38	14.9
1951	14	115	62	191	10	5.2
1952	6	77	10	93	8	8.6
1953	7	79	15	101	22	21.8
1954	11	124	48	183	75	41.0
1955	11	159	66	236	81	34.3
1956	13	172	22	207	79	38.2
1957	12	269	57	338	309	91.4
1958	11	269	100	380	510	134.2
1959	14	371	99	484	581	120.0
1960	13	416	70	499	702	140.7
1961	11	411	99	521	661	126.9
1962	12	391	113	516	655	126.9
1963	13	472	106	591	649	109.8
1964	13	412	148	573	566	98.8
1965	13	568	266	847	391	46.2
1966	13	601	248	862	244	28.3
1967	13	531	166	710	289	40.7
1968	13	614	106	733	287	39.2
1969	9	638	126	773	244	31.6
1970	12	680	144	836	91	10.9
1971	13	681	123	817	142	17.4
1972	10	648	212	870	73	8.4
1973	11	690	234	935	61	6.5
1974	12	425	212	649	35	5.4
1975	11	498	229	738	82	6.9
1976	11	411	254	676	117	17.3
1977	11	447	223	681	217	31.9
1978	12	538	190	740	208	28.1
1979	12	495	330	837	178	21.3
1980	11	323	293	627	130	20.7
1981	10	417	260	687	319	46.4
1982	10	505	210	715	439	61.4
1983	10	385	245	640	287	44.8
1984	18	539	297	854	300	35.1
1985	28	664	178	869	551	63.4
1986	12	536	198	746	743	99.6
1987	25	564	231	820	661	80.6
1988	25	475	300	800	438	54.8

Appendix table 3--Sorghum prices and ending stocks, 1950-88

Crop year	Ending stocks				Price received	Loan rate	Target price ^{3/}	Price support payment
	CCC ^{1/}	FOR ^{2/}	Free	Total				
	----- <u>Million bushels</u> -----				----- <u>Dollars per bushel</u> -----			
1950	17	0	21	38	1.05	1.05	--	--
1951	1	0	9	10	1.32	1.22	--	--
1952	0	0	8	8	1.58	1.33	--	--
1953	22	0	0	22	1.32	1.36	--	--
1954	68	0	7	75	1.26	1.27	--	--
1955	76	0	5	81	.97	1.00	--	--
1956	75	0	4	79	1.15	1.10	--	--
1957	294	0	15	309	.97	1.04	--	--
1958	489	0	21	510	1.00	1.02	--	--
1959	560	0	21	581	.86	.85	--	--
1960	671	0	31	702	.83	.85	--	--
1961	646	0	15	661	1.01	1.08	--	--
1962	610	0	45	655	1.02	1.08	--	--
1963	613	0	36	649	.97	1.12	--	0.29
1964	538	0	28	566	1.05	.99	1.12	.23
1965	383	0	8	391	.99	.92	1.12	.35
1966	193	0	51	244	1.02	.85	1.15	.53
1967	192	0	97	289	.99	.90	1.20	.53
1968	198	0	89	287	.95	.90	1.20	.53
1969	156	0	88	244	1.07	.90	1.20	.53
1970	65	0	26	91	1.14	.90	1.20	.53
1971	45	0	97	142	1.04	.97	1.24	.52
1972	5	0	68	73	1.37	1.00	1.34	.68
1973	0	0	61	61	2.14	1.00	1.46	^{6/} .54
1974	0	0	35	35	2.77	1.05	1.31	--
1975	0	0	82	82	2.36	1.05	1.31	--
1976	5	0	112	117	2.03	1.43	1.49	--
1977	5	32	180	217	1.82	1.90	2.28	--
1978	44	51	113	208	2.01	1.90	2.28	.33
1979	46	18	114	178	2.35	2.00	2.34	.13
1980	41	0	89	130	2.91	2.14	^{5/} 2.50	--
1981	42	229	48	319	2.25	2.28	2.55	.27
1982	171	313	-45	439	2.47	2.42	2.60	.18
1983 ^{4/}	103	179	5	287	2.74	2.52	2.72	--
1984	112	129	59	300	2.32	2.42	2.88	.46
1985	207	52	292	551	1.93	2.42	2.88	.46
1986	409	93	241	743	1.37	1.74	2.88	1.06
1987	464	70	127	661	1.56	1.74	2.88	1.14
1988	355	30	53	438	2.30	1.68	2.78	.48

-- = Not applicable. NA = Not available.

^{1/} Owned by the CCC. ^{2/} Farmer-owned reserve. ^{3/} Income support level, 1964-73; target price, 1974-83. ^{4/} Estimated. ^{5/} Target price for farmers planting within normal crop acreage (NCA); \$2.45 a bushel for those exceeding NCA. ^{6/} Payment rate for compliance with 10-percent set-aside; \$0.25 a bushel for compliance with 0 percent set-aside.

Appendix table 4--Program costs for sorghum, 1950-88

Fiscal year ^{1/}	Direct or deficiency	Diversion	Disaster	FOR storage	CCC operating costs		
					Outlays	Redemptions	Net
<u>Million dollars</u>							
1950	0	0	0	--	0	0	0
1951	0	0	0	--	0	0	0
1952	0	0	0	--	0	0	0
1953	0	0	0	--	0	0	0
1954	0	0	0	--	0	0	0
1955	0	0	0	--	178.0	42.4	135.6
1956	0	0	0	--	138.4	100.1	38.3
1957	0	0	0	--	68.7	54.7	14.0
1958	0	0	0	--	376.2	52.8	323.4
1959	0	0	0	--	417.7	80.2	337.5
1960	0	0	0	--	206.2	43.6	162.6
1961	0	137	0	--	354.5	64.3	290.2
1962	0	124	0	--	466.4	232.1	234.3
1963	59	64	0	--	465.9	280.1	185.8
1964	45	139	0	--	395.2	151.5	243.7
1965	80	145	0	--	382.2	180.4	201.8
1966	116	104	0	--	401.4	288.8	112.6
1967	114	23	0	--	344.1	401.2	-57.1
1968	114	89	0	--	198.2	32.7	165.5
1969	119	114	0	--	316.1	42.8	273.3
1970	129	108	0	--	264.6	111.7	152.9
1971	167	0	0	--	293.6	179.1	114.5
1972	220	69	0	--	326.0	110.4	215.6
1973	183	0	0	--	328.3	161.9	166.4
1974	0	0	68	--	219.6	75.5	144.1
1975	0	0	20	--	92.6	33.8	58.8
1976	0	0	34	--	50.7	29.2	21.5
TQ ^{2/}	0	0	0	--	3.9	4.1	-.2
1977	138	0	30	12	170.7	31.7	139.0
1978	181	25	37	14	591.8	204.1	387.7
1979	63	23	13	12	418.1	227.7	190.4
1980	0	0	101	-6	249.4	181.6	67.8
1981	233	0	30	74	245.2	141.3	103.9
1982	64	0	3	112	1,086.0	297.7	988.5
1983	0	110	0	59	1,344.0	530.3	813.7
1984	158	0	0	35	970.0	894.5	75.0
1985	228	0	0	30	668.9	205.5	463.0
1986	548	13	0	34	1,391.8	206.9	1,184.0
1987	574	152	0	20	1,849.8	646.8	1,203.0
1988 ^{3/}	275	58	30	10	NA	NA	NA

-- = Not applicable NA = Not available.

^{1/} Crop year is used for program payments while fiscal year is used for CCC. ^{2/} TQ is a transition quarter due to the change in fiscal year starting dates from July 1 to October 1. ^{3/} Estimated.

Appendix Table 5--Value comparisons for sorghum production, 1950-87 ^{1/}

Crop year	Loan value		Market value		Gross value	
	Nominal	Real ^{1/}	Nominal	Real ^{1/}	Nominal	Real ^{1/}
	-----Dollars per acre-----				--Million dollars--	
1950	23.7	95.6	23.7	95.6	245	988
1951	23.3	91.7	25.2	99.2	215	846
1952	22.6	87.6	26.9	104.3	142	550
1953	25.0	95.4	24.3	92.7	152	580
1954	25.5	94.5	25.3	93.8	296	1,097
1955	18.1	64.9	18.2	65.3	238	853
1956	24.4	84.6	25.5	88.4	236	818
1957	30.0	101.5	28.1	95.1	551	1,865
1958	35.9	118.8	35.1	116.1	580	1,919
1959	30.7	99.8	30.9	100.4	472	1,533
1960	33.7	108.3	33.1	106.3	515	1,655
1961	47.2	148.8	44.2	139.3	483	1,522
1962	47.6	147.8	45.0	139.8	517	1,606
1963	49.2	150.1	42.6	130.0	568	1,733
1964	41.3	123.0	43.8	130.5	512	1,525
1965	47.5	136.9	50.8	146.4	659	1,899
1966	47.4	132.9	56.9	159.5	730	2,046
1967	45.4	121.9	49.9	134.0	744	1,997
1968	47.3	120.4	49.8	126.8	691	1,759
1969	48.9	118.0	58.1	140.2	772	1,862
1970	45.4	103.7	57.5	131.3	780	1,781
1971	52.2	113.5	56.0	121.8	896	1,949
1972	60.7	124.5	83.2	170.7	1,096	2,248
1973	58.8	111.2	123.5	233.6	1,978	3,741
1974	47.4	81.8	124.9	215.4	1,722	2,970
1975	51.5	82.9	115.6	186.0	1,777	2,859
1976	70.2	106.0	99.7	150.5	1,431	2,160
1977	107.5	151.5	103.0	145.1	1,412	1,989
1978	103.6	134.5	109.5	142.2	1,464	1,901
1979	125.2	149.2	146.5	174.6	1,880	2,240
1980	99.1	107.8	136.1	148.1	1,696	1,845
1981	145.9	148.1	153.0	155.4	2,087	2,119
1982	143.0	138.9	148.9	144.7	2,104	2,044
1983	122.7	115.0	133.4	125.0	1,388	1,300
1984	136.5	124.0	130.8	118.8	2,014	1,829
1985	161.7	142.9	128.9	117.1	2,166	1,914
1986	117.8	100.9	92.7	79.4	1,289	1,104
1987	121.6	101.2	118.8	98.9	1,260	1,048

^{1/} Loan and market values are computed as loan rates and season-average farm prices times yields per harvested acre, respectively.

^{2/} Real values are deflated to 1972 dollars using the gross national product implicit price deflator.

Appendix table 6--World production, consumption, exports, and ending stocks for sorghum, 1960-89

Crop year <u>1/</u>	Production	Consumption	Exports <u>2/</u>	Ending stocks	Stocks-to-use ratio
	----- <u>Million metric tons</u> -----				<u>Percent</u>
1960/61	40.8	38.0	2.7	21.9	57.6
1961/62	39.4	39.4	3.2	21.6	54.8
1962/63	41.8	40.8	3.8	22.7	55.6
1963/64	43.0	43.2	3.6	22.4	51.9
1964/65	41.9	44.1	4.1	20.1	45.6
1965/66	46.4	50.2	7.3	14.4	28.7
1966/67	49.3	52.3	8.9	13.0	24.9
1967/68	53.3	51.9	5.6	14.9	28.7
1968/69	51.5	52.3	4.8	13.7	26.2
1969/70	54.8	55.5	5.1	12.0	21.6
1970/71	55.1	58.6	7.4	7.9	13.5
1971/72	57.7	57.4	5.6	9.0	15.7
1972/73	53.8	54.2	7.3	6.8	12.5
1973/74	64.3	62.3	10.8	7.2	11.6
1974/75	59.1	56.8	9.3	8.8	15.5
1975/76	63.8	62.0	11.0	9.2	14.8
1976/77	62.2	61.4	12.9	10.0	16.3
1977/78	64.4	60.9	10.9	12.8	21.0
1978/79	63.6	64.7	10.9	12.5	19.3
1979/80	61.5	63.4	11.7	11.4	18.0
1980/81	59.3	57.8	14.1	11.4	19.7
1981/82	70.4	66.6	13.7	15.5	23.3
1982/83	65.2	64.0	11.6	17.3	27.0
1983/84	58.9	62.9	13.0	13.8	21.9
1984/85	66.1	66.2	13.1	13.6	20.5
1985/86	70.3	65.8	8.7	19.0	28.9
1986/87	64.5	60.3	8.0	23.1	38.3
1987/88	56.0	59.5	8.4	19.9	33.4
1988/89	56.6	62.4	11.1	14.8	23.7
1989/90 <u>3/</u>	60.1	62.7	9.6	9.6	15.3

1/ Based on aggregate of differing local marketing years.

2/ Includes intra-EC trade; July/June before 1976/77, thereafter October/September.

3/ Estimated as of May 1989.

Appendix table 7--World production, trade, and ending stocks of sorghum, world and United States, 1960-89

Crop year <u>1/</u>	Production			Exports <u>2/</u>			Ending stocks		
	World	United States	U.S. share	World	United States	U.S. share	World	United States	U.S. share
	<u>Mil. metric tons</u>		<u>Pct.</u>	<u>Mil. metric tons</u>		<u>Pct.</u>	<u>Mil. metric tons</u>		<u>Pct.</u>
1960	40.8	15.7	38	2.7	2.2	81	21.9	17.8	81
1961	39.4	12.2	31	3.2	2.2	69	21.6	16.8	78
1962	41.8	13.0	31	3.8	3.0	79	22.7	16.6	73
1963	43.0	14.9	35	3.6	2.5	69	22.4	16.5	74
1964	41.9	12.4	30	4.1	3.0	73	20.1	14.4	72
1965	41.4	17.1	41	7.3	6.2	85	14.4	9.9	69
1966	49.3	18.2	37	8.9	7.1	80	13.0	6.2	48
1967	53.3	19.2	36	5.6	4.4	79	14.9	7.3	49
1968	51.5	18.6	36	4.8	2.7	56	13.7	7.3	53
1969	54.8	18.5	34	5.1	3.0	59	12.0	6.2	52
1970	55.1	17.4	32	7.4	4.2	57	7.9	2.3	29
1971	57.7	22.0	38	5.6	2.6	46	9.0	3.6	40
1972	53.8	20.4	38	7.3	4.9	67	6.8	1.9	28
1973	64.3	23.5	37	10.8	6.2	57	7.2	1.5	21
1974	59.1	15.8	27	9.3	4.9	5	8.8	1.7	19
1975	63.8	19.2	30	11.0	6.0	55	9.2	2.1	23
1976	62.2	18.1	29	12.9	6.2	48	10.0	3.0	30
1977	64.4	19.8	31	10.9	5.4	50	12.8	5.5	43
1978	63.6	18.6	29	10.9	5.3	49	12.5	5.3	42
1979	61.5	20.5	33	11.7	8.3	71	11.4	4.5	39
1980	59.3	14.7	25	14.1	7.6	54	11.4	3.3	29
1981	70.4	22.2	32	13.7	6.3	46	15.5	8.1	52
1982	65.2	21.2	31	11.6	5.4	47	17.3	11.1	64
1983	58.9	12.4	21	13.0	6.2	48	13.8	7.3	53
1984	66.1	22.0	33	13.1	7.5	57	13.6	7.6	56
1985	70.3	28.5	41	8.6	4.1	48	19.0	14.0	74
1986	64.4	23.8	37	8.0	5.1	64	23.1	18.9	82
1987	56.0	18.8	34	8.4	6.1	73	19.6	16.8	86
1988	56.6	14.7	26	11.1	8.1	73	14.8	10.3	70
1989 <u>3/</u>	60.1	17.8	30	9.6	6.5	68	12.0	7.5	63

1/ Based on aggregate of differing local marketing years.

2/ Includes intra-EC trade; July/June before 1976/77, thereafter October/September.

3/ Estimated as of May 1989.

Appendix table 8--World sorghum exports and stocks as a share of consumption; U.S. exports as a share of foreign consumption, 1960-89

Year <u>1/</u>	World exports to world consumption	World stocks to world consumption	U.S. exports to foreign consumption
	<u>Percent</u>		
1960	7.1	57.6	8.1
1961	8.1	54.8	7.7
1962	9.3	55.6	9.8
1963	8.3	51.9	8.1
1964	9.3	45.6	9.0
1965	14.5	28.7	17.5
1966	17.0	24.9	19.3
1967	10.8	28.7	11.6
1968	9.2	26.2	7.4
1969	9.2	21.6	7.7
1970	12.6	13.5	10.2
1971	9.8	15.7	6.5
1972	13.5	12.5	13.1
1973	17.3	11.6	13.9
1974	16.4	15.5	10.5
1975	17.7	14.8	12.2
1976	21.0	16.3	12.2
1977	17.9	21.0	11.0
1978	16.8	19.3	10.5
1979	18.5	18.0	16.4
1980	24.4	19.7	15.4
1981	20.6	23.3	11.3
1982	18.1	27.0	10.6
1983	20.7	21.9	11.7
1984	19.8	20.5	14.4
1985	13.2	28.9	8.5
1986	13.3	38.3	11.0
1987	14.1	33.4	13.7
1988	17.8	23.7	16.6
1989 <u>2/</u>	15.3	19.1	13.4

1/ Based on aggregate of local marketing years; exports are on July/June years before 1976/77 and on October/September years thereafter.

2/ Estimated as of May 1989.

Appendix table 9--Production and exports of sorghum, major exporters and total foreign, 1960-89 1/

Year <u>1/</u>	Argentina		Oceania		Total foreign	
	Prod.	Expts.	Prod.	Expts.	Prod.	Expts.
<u>Million metric tons</u>						
1960	1.3	0.2	0.2	0	25.1	0.5
1961	1.4	.7	.3	0	27.2	1.0
1962	1.0	.4	.3	0.1	28.9	.8
1963	1.3	.7	.2	0	28.2	1.1
1964	.9	.7	.2	0	29.5	1.1
1965	2.1	.5	.2	0	29.3	1.1
1966	1.4	1.2	.3	0	31.2	1.8
1967	1.9	.4	.3	.1	34.1	1.2
1968	2.5	1.2	.3	.1	32.9	2.1
1969	3.8	1.5	.5	.1	36.3	2.1
1970	4.7	2.0	1.3	.5	37.8	3.2
1971	2.4	1.1	1.2	1.0	35.6	2.9
1972	4.6	1.1	1.0	.7	33.5	2.4
1973	5.9	2.8	1.1	.8	40.9	4.6
1974	4.8	2.5	.9	.9	43.3	4.4
1975	5.1	2.6	1.1	.8	44.7	5.0
1976	6.6	4.8	1.0	.8	44.1	6.7
1977	7.2	4.4	.7	.2	44.6	5.5
1978	6.5	4.0	1.1	.6	45.0	5.7
1979	3.0	1.6	.9	.7	41.0	3.4
1980	7.1	4.9	1.2	.5	44.6	6.5
1981	8.0	5.2	1.3	1.2	48.1	7.4
1982	7.6	4.9	1.0	.3	44.0	6.2
1983	6.9	4.8	1.9	1.4	46.5	6.8
1984	6.2	3.4	1.4	1.2	44.1	5.6
1985	4.2	2.2	1.4	1.1	41.9	4.6
1986	3.1	1.0	1.4	.6	40.6	2.9
1987	3.0	1.2	1.4	.6	37.2	2.3
1988	1.8	.8	1.2	.6	41.9	3.0
1989 <u>2/</u>	3.0	1.3	1.5	.8	42.3	3.1

1/ Exports are on July/June years before 1976/77 and on October/September years thereafter.

2/ Estimated as of May 1989.

Appendix table 10--Provisions of sorghum programs, 1961-90

Provision	1961	1962	1963	1964
Parity price (\$/bu) 1/	1.38	1.41	1.40	1.37
Support price (\$/bu)	--	--	1.12	1.12
Payment rate (\$/bu)	--	--	0.16	0.13
Payment (\$)	--	--	2/ .16*Yld*Plt	2/ .13*Yld*Plt
Target price (\$/bu)	--	--	--	--
Deficiency payments: 3/				
Advance payment (\$/bu)	--	--	--	--
Final payment (\$/bu)	--	--	--	--
Allocation factor (%) 4/	--	--	--	--
Nonrecourse loan:				
Basic rate (\$/bu) 5/	6/ 1.08	6/ 1.08	0.96	0.99
Effective rate (\$/bu) 7/	--	--	--	--
CCC domestic sales: 8/				
Legislated minimum (\$/bu) 9/	1.13+CC	1.13+CC	1.18+CC	1.18+CC
Actual price (\$/bu) 10/	--	--	--	--
Farmer-owned reserve:				
Loan level (\$/bu)	--	--	--	--
Release level (\$/bu)	--	--	--	--
Call level (\$/bu)	--	--	--	--
Storage payment (\$/bu)	--	--	--	--
Immediate entry	--	--	--	--
Feed grain ceiling (mil bu)	--	--	--	--
Feed grain floor (mil bu)	--	--	--	--
Acreage diversion (%)	20	20	20	20-40
Payment rate (\$/bu)	50% of loan rate	50% of loan rate	20% of support	20% of support
Payment (\$)	11/ 0.54*Yld*Div	11/ 0.54*Yld*Div	2/ 0.224*Yld*Div	2/ 0.224*Yld*Div
Acreage diversion optional (%)	0-20	0-20	0-20	0-10
Payment rate (\$/bu)	60 % of loan rate	60 % of loan rate	50% of support	50% of support
Payment (\$)	11/ 0.648*Yld*Div	11/ 0.648*Yld*Div	2/ 0.56*Yld*Div	2/ 0.56*Yld*Div
Set-aside (%)	--	--	--	--
Payment rate (\$/bu)	--	--	--	--
Payment (\$)	--	--	--	--
Set-aside alternate (%)	--	--	--	--
Payment rate (\$/bu)	--	--	--	--
Payment (\$)	--	--	--	--
Set-aside voluntary (%)	--	--	--	--
Payment rate (\$/bu)	--	--	--	--
Payment (\$)	--	--	--	--
Acreage reduction (%)	--	--	--	--
Payment rate (\$/bu)	--	--	--	--
Payment (\$)	--	--	--	--
Acreage reduction voluntary (%)	--	--	--	--
Payment rate (\$/bu)	--	--	--	--
Payment (\$)	--	--	--	--
PIK acreage diversion (%)	--	--	--	--
Payment rate (bu)	--	--	--	--
Payment (bu)	--	--	--	--
Compliance restrictions:				
Soil conserving base 12/	Yes	Yes	Yes	Yes
Cross compliance 13/	No	14/ Yes	No	No
Offsetting compliance 15/	No	No	No	No
Normal crop acreage 16/	--	--	--	--
National base acres (mil)				
Feed grain	107.9	123.3	132.4	132.5
Sorghum	20.5	20.9	24.4	24.4
Corn-sorghum	--	--	--	--
Sorghum base in CRP	--	--	--	--
National allotment acres (mil)				
Feed grain	--	--	--	--
Sorghum	--	--	--	--
National program acres (mil)				

See footnotes at end of table.

Continued--

Appendix table 10--Provisions of sorghum programs, 1961-90--Continued

Provision	1961	1962	1963	1964
Feed grain	--	--	--	--
Sorghum	--	--	--	--
National program acres (mil)				
Feed grain	--	--	--	--
Sorghum	--	--	--	--
National program yield (bu/ac)	--	--	37.2	39.2
Disaster program: 17/				
Prevented plantings payment (\$/bu)	18/	18/	18/	18/
Low yield criterion (%)	--	--	--	--
Low yield payment (\$/bu)	18/	18/	18/	18/
Payment limitation (\$)	--	--	--	--
Advanced payment (%)	19/ 50	19/ 50	20/ 50	20/ 50
Support payment limitation (\$)	--	--	--	--

See footnotes at end of table.

Continued--