

example, 88x72 means there are 88 ends and 72 picks per square inch in the fabric.

**Textile.** Any product made from fibers, including yarns, fabrics, and end-use products such as apparel, home furnishings, and industrial applications.

**Twist.** The number of turns per unit of length of the fiber, strand, roving, or yarn. In the United States, twist is measured in terms of the number of turns per inch.

**Universal density bale.** A bale of cotton compressed to a density of 28 pounds per cubic foot.

**Upland cotton.** See cotton.

**Warp.** The yarns that run lengthwise in a woven or warp-knit fabric.

**Wash and wear.** A term applied to any garment which can be washed, dried, and then worn again with little or no ironing. Also called "durable press" or "permanent press."

**Weft.** The filling yarns that run crosswise in woven fabric or weft-knit fabric.

**Weight of fabric.** Three methods are used to measure fabric weight: (1) linear yards per pound, (2) ounces per linear yard, and (3) ounces per square yard.

**World price.** Often refers to the c.i.f. price of an imported agricultural commodity at the principal port of importation of a major importing country or area. See prices, raw cotton.

**Woven fabric.** Fabric made by interlacing two sets of yarn at right angles. The warp yarns run lengthwise in the fabric; the filling (weft) yarns are passed over and under the warp yarns.

**Yarn.** A continuous strand of twisted (spun) fibers of any kind and of varying staple length, usually used in the weaving or knitting of fabric.

**Yarn size.** Yarns, or threads, are numbered according to weight. The higher numbers denote fiber fineness. A "1s" cotton yarn has 840 yards in a pound; a "30s" cotton yarn has 25,200 yards in a pound. A "30/2" is a two-ply yarn containing two strands of 30s. See cotton count.

**Appendix table 1—Acreage, yield, and production of upland cotton, 1955-87**

Year	Planted	Harvested	Diverted	Yield per harvested acre	Production
		<i>Million acres</i>		<i>Pounds</i>	<i>1,000 bales<sup>1</sup></i>
1955	17.9	16.9	---	417	14,501
1956	17.0	15.6	1.1 <sup>2</sup>	408	13,102
1957	14.2	13.5	3.0 <sup>2</sup>	387	10,801
1958	12.3	11.8	4.9 <sup>2</sup>	465	11,353
1959	15.8	15.1	---	461	14,446
1960	16.0	15.2	---	446	14,199
1961	16.5	15.6	---	438	14,263
1962	16.2	15.5	---	456	14,754
1963	14.7	14.1	---	516	15,129
1964	14.7	13.9	.5	517	15,025
1965	14.1	13.51	.0	527	14,850
1966	10.3	9.54	.6	480	9,484
1967	9.4	7.94	.8	446	7,374
1968	10.8	10.13	.3	516	10,847
1969	11.8	11.0	---	433	9,913
1970	11.9	11.1	---	439	10,135
1971	12.3	11.42	.1	438	10,379
1972	13.9	12.92	.0	507	13,608
1973	12.4	11.9	---	521	12,896
1974	13.6	12.5	---	441	11,450
1975	9.4	8.7	---	453	8,247
1976	11.6	10.9	---	464	10,517
1977	13.6	13.2	---	519	14,277
1978	13.3	12.3	.3	419	10,762
1979	13.9	12.7	---	547	14,531
1980	14.5	13.1	---	402	11,018
1981	14.3	13.8	---	542	15,566
1982	11.3	9.7	1.6 <sup>3</sup>	589	11,864
1983	7.9	7.3	6.6 <sup>4</sup>	506	7,677
1984	11.1	10.3	2.5 <sup>3</sup>	599	12,852
1985	10.6	10.1	3.6 <sup>5</sup>	628	13,277
1986	9.9	8.4	4.3 <sup>6</sup>	547	9,520
1987	10.3	9.9	4.6 <sup>6</sup>	702	14,475
1988 <sup>7</sup>	12.3	9.2	3.2 <sup>6</sup>	616	15,077

--- = Not applicable.

<sup>1</sup>480-pound net-weight bales.

<sup>2</sup>Includes cotton acreage placed in acreage reserve program of the soil bank.

<sup>3</sup>Acreage reduction program.

<sup>4</sup>Includes 4.1 million acres in payment-in-kind program and 2.5 million acres in other acreage reduction programs.

<sup>5</sup>2.3 million acres acreage reduction program and 1.3 million acres paidland diversion.

<sup>6</sup>Acreage reduction program, conservation reserve program, and 50/S2-0/92 program.

<sup>7</sup>Estimated.

**Appendix table 2—Use and ending stocks for upland cotton, 1950-87**

Crop year	Mill use	Exports	Total use	Ending stocks	Stocks-to-use ratio
			<i>1,000 bales<sup>1</sup></i>		<i>Percent</i>
1950	10,355	4,108	14,443	2,196	15
1951	9,117	5,515	14,632	2,741	19
1952	9,358	3,048	12,406	5,511	44
1953	8,475	3,760	12,235	9,570	78
1954	8,730	3,445	12,175	11,028	91
1955	9,085	2,194	11,279	14,55	129
1956	8,459	7,856	16,314	11,388	70
1957	7,975	5,949	13,924	8,666	62
1958	8,683	2,870	11,553	7,776	76
1959	8,888	7,393	16,281	7,410	46
1960	8,122	6,850	14,972	7,073	47
1961	8,756	5,049	13,805	7,717	56
1962	8,322	3,426	11,748	10,390	93
1963	8,554	5,773	14,327	12,091	84
1964	9,107	4,174	12,281	13,980	105
1965	9,454	3,029	12,483	16,734	134
1966	9,438	4,819	14,257	12,081	85
1967	8,948	4,316	13,264	6,379	48
1968	8,204	2,816	11,020	6,377	58
1969	8,001	2,863	10,864	5,727	53
1970	8,105	3,885	11,990	4,134	34
1971	8,163	3,376	11,539	3,182	28
1972	7,670	5,306	12,976	4,153	32
1973	7,384	6,111	13,495	3,753	28
1974	5,797	3,914	9,711	5,649	58
1975	7,160	3,300	10,438	3,615	35
1976	6,595	4,779	11,375	2,879	25
1977	6,416	5,459	11,874	5,278	44
1978	6,286	6,150	12,435	3,905	31
1979	6,440	9,177	15,617	2,962	19
1980	5,828	5,893	11,721	2,614	22
1981	5,216	6,555	11,771	6,567	56
1982	5,457	5,194	10,651	7,844	74
1983	5,861	6,750	12,611	2,693	21
1984	5,491	6,125	11,616	4,024	35
1985	6,338	1,855	8,193	9,289	113
1986	7,385	6,570	13,955	4,942	36
1987	7,565	6,345	13,910	5,718	41
1988	7,489	5,985	3,474	7,048	52

**Appendix table 3—Prices and ending stocks for upland cotton, 1950-87**

Crop year <sup>1</sup>	Ending stocks			Average price received <sup>3</sup>	Loan rate <sup>4</sup>	Target price	Direct payment
	CCC-owned	Free <sup>2</sup>	Total				
		<i>1,000 bales</i>				<i>Cents per pound</i>	
1950	76	2,120	2,196	39.90	30.25	---	---
1951	2	2,739	2,741	37.69	32.36	---	---
1952	236	5,275	5,511	34.17	32.41	---	---
1953	129	9,441	9,570	32.10	33.50	---	---
1954	1,661	9,367	11,028	33.52	34.03	---	---
1955	5,952	8,601	14,553	32.27	34.55	---	---
1956	4,829	6,559	11,388	31.63	32.74	---	---
1957	937	7,729	8,666	29.46	32.31	---	---
1958	984	7,792	8,776	33.09	35.08	---	---
1959	4,967	2,443	7,410	31.56	34.10	---	---
1960	1,678	5,395	7,073	30.08	32.42	---	---
1961	1,449	6,155	7,604	32.80	33.04	---	---
1962	3,750	6,640	10,390	31.74	32.47	---	---
1963	4,303	7,788	12,091	32.02	32.47	---	---
1964	6,557	7,423	13,980	29.62	30.00	---	3.50 <sup>5</sup>
1965	9,715	7,019	16,734	28.03	29.00	---	4.35
1966	6,677	5,404	12,081	20.64	21.00	---	9.42
1967	552	5,827	6,379	25.39	20.2	---	11.53
1968	24	6,353	6,377	22.02	20.25	---	12.24
1969	1,890	3,837	5,727	20.94	20.25	---	14.73
1970	262	3,872	4,134	21.86	20.25	---	16.80
1971	1	3,181	3,182	28.07	19.50	---	5.00 <sup>6</sup>
1972	0	4,153	4,153	27.20	19.50	---	15.00
1973	0	3,753	3,753	44.40	19.50	---	15.00
1974	0	5,649	5,649	42.70	27.06	38.00	<sup>7</sup>
1975	0	3,615	3,615	51.10	36.12	38.00	0
1976	0	2,879	2,879	63.80	38.92	43.20	0
1977	<sup>8</sup>	5,278	5,278	52.10	44.63	47.80	0
1978	<sup>8</sup>	3,905	3,905	58.10	48.00	52.00	0
1979	<sup>8</sup>	2,962	2,962	62.30	50.23	57.70	0
1980	<sup>8</sup>	2,614	2,614	74.40	48.00	58.40	0
1981	1	6,566	6,567	54.00	52.46	70.87	7.67
1982	396	7,448	7,844	59.10	57.08	71.00	13.92
1983	158	2,535	2,693	66.00	55.00	76.00	12.10
1984	123	3,901	4,024	57.50	55.00	81.00	18.60
1985	767	8,552	9,289	56.80	57.30	81.00	23.50
1986	73	4,869	4,942	51.50	55.00	81.00	26.00
1987	3	5,715	5,718	63.70	52.25	79.40	17.30
1988	50	7,419	7,469	54.80	51.80	75.90	19.40

--- = Not applicable.

<sup>1</sup>Crop year beginning August 1.

<sup>2</sup>Includes ending stocks (July 31) of cotton in consuming establishments, public storage (including cotton under loan but excluding CCC-owned cotton), compresses, and cotton in transit.

<sup>3</sup>Season-average prices received by farmers for lint cotton, including an allowance for unredeemed loans.

<sup>4</sup>Loan rates shown for 1950-73 are basis Middling 1-inch, micronaire 3.5-4.9. Loan rates shown for 1974-85 are basis Strict Low Middling 1-1/16 inch, micronaire 3.5-4.9.

<sup>5</sup>From 1964-70, price support payments were available on the domestic allotment (67 percent of total allotment in 1964, 65 percent in 1965-70). Loans were available on the entire production within the allotment.

<sup>6</sup>From 1971-73, the direct payment represents the minimum payment rate available on the full base acreage allotment. Payments in 1971-72 were contingent on participation in the cropland set-aside program, while no set-aside requirement was imposed for 1973.

<sup>7</sup>From 1974-85, the direct payments represent deficiency payments: the difference between the target price and the higher of the calendar year average price or the base loan rate. Diversion payments, disaster payments, and payment-in-kind entitlements are excluded.

<sup>8</sup>Fewer than 500 bales.

**Appendix table 4—Farm related program costs for upland cotton, 1970-88<sup>1</sup>**

Fiscal year	Direct price support or deficiency	Diversion	Disaster	Loan operations		Total support and related expenditures <sup>2</sup>
				Outlays	Repayments	
<i>Million dollars</i>						
1970	797.6	18.7	---	383.0	247.6	891.4
1971	890.0	24.9	---	247.2	263.7	603.2
1972	819.3	.1	---	106.6	115.4	760.4
1973	808.7	.1	---	170.3	165.3	824.0
1974	713.2	.1	---	163.1	154.8	724.6
1975	---	.1	127.0	292.7	189.9	232.8
1976 <sup>3</sup>	---	---	124.7	105.8	237.3	-4.0
1977	---	---	95.2	168.5	159.3	104.3
1978	<sup>4</sup>	16.8	72.8	934.3	799.9	223.8
1979	<sup>4</sup>	23.6	189.2	332.8	404.4	141.2
1980	<sup>4</sup>	---	104.0	401.5	441.6	64.3
1981	<sup>4</sup>	.1	303.9	522.6	491.6	335.7
1982	467.4	.1	99.9	1,394.7	770.1	1,189.7
1983	804.3	3.3	105.5	1,363.3	958.5	1,362.9
1984	145.1	-1.1	.5	1,431.8	1,282.1	244.0
1985	1,048.5	161.8	---	808.6	449.2	1,552.7
1986	834.5	34.1	<sup>5</sup>	2,315.8	1,071.4	2,141.9
1987	987.4	.2	<sup>5</sup>	2,668.7	2,021.8	1,785.7
1988	211.6	-.1	<sup>5</sup>	1,539.9	1,281.7	665.8

--- = Not applicable (no outlays).

<sup>1</sup>Excludes PL 480 commodity costs.

<sup>2</sup>Direct price support or deficiency, diversion, or disaster payments plus Government expenditures on transportation, classing, loans, loan settlements, and other expenses less sale proceeds, loan repayments, and other receipts. Negative indicates net receipts.

<sup>3</sup>Includes July-Sept. 1976 to allow for shift from July/June to Oct./Sept. fiscal year.

<sup>4</sup>Net receipts of less than \$1 million.

<sup>5</sup>Less than \$50,000.

**Appendix table 5—Value comparisons for upland cotton, 1950-87**

Crop year	Loan value per acre		Market value per acre		Gross value of production	
	Current dollars <sup>1</sup>	1982 dollars <sup>2</sup>	Current dollars <sup>3</sup>	1982 dollars <sup>2</sup>	Current dollars <sup>4</sup>	1982 dollars <sup>2</sup>
	<i>Dollars</i>				<i>Million dollars</i>	
1950	81.37	340.46	131.98	552.22	2,336	9,774
1951	87.37	348.09	121.90	485.66	6,579	13,064
1952	90.75	355.88	116.01	454.94	2,993	11,737
1953	108.54	419.07	123.31	476.10	2,9 <sup>4</sup>	7,757
1954	116.04	441.22	136.98	520.84	2,630	10,000
1955	144.07	529.67	155.98	573.46	2,636	9,691
1956	133.58	475.37	152.82	543.84	2,384	8,484
1957	125.04	429.69	135.85	466.84	1,834	6,302
1958	163.12	549.26	173.14	582.96	2,043	6,879
1959	157.20	517.11	166.62	548.09	2,516	8,276
1960	144.59	467.93	156.84	507.57	2,384	7,715
1961	144.72	463.85	169.30	542.63	2,641	8,465
1962	148.06	464.14	169.74	532.10	2,631	8,248
1963	167.55	517.13	194.11	599.10	2,737	8,448
1964	155.10	471.43	181.22	550.82	2,510	7,629
1965	152.83	205.53	175.33	518.73	2,367	7,003
1966	100.80	288.00	130.32	372.34	1,238	3,537
1967	90.32	251.59	140.76	392.09	1,112	3,097
1968	104.49	277.16	141.39	375.04	1,428	3,788
1969	87.68	220.30	109.55	275.25	1,205	3,028
1970	88.90	211.69	120.54	287.00	1,338	3,183
1971	85.41	192.36	143.51	323.22	1,636	3,685
1972	93.60	201.29	158.30	340.43	2,042	4,391
1973	101.60	205.25	272.52	550.55	3,243	6,552
1974	119.33	220.98	236.00	437.04	2,950	5,436
1975	162.62	274.23	268.05	452.02	2,332	3,933
1976	180.59	286.20	334.31	529.81	3,644	5,775
1977	231.63	344.18	299.32	444.75	3,951	5,871
1978	201.12	278.56	283.17	392.20	3,483	4,824
1979	271.76	345.75	396.46	504.40	5,035	6,406
1980	193.44	225.72	343.51	400.83	4,500	5,251
1981	284.33	302.48	332.03	353.22	4,582	4,873
1982	336.20	336.20	384.12	384.12	3,762	3,762
1983	277.20	128.27	402.33	186.18	2,937	1,359
1984	329.45	354.82	392.33	422.53	4,041	4,352
1985	359.84	399.06	380.18	421.62	3,857	4,277
1986	300.85	342.67	312.97	356.47	2,614	2,977
1987	365.75	430.49	500.41	588.66	4,998	5,882

<sup>1</sup>Loan values per harvested acre obtained by multiplying appropriate base loan rates per pound (from appendix table 3) by average yields per harvested acre.

<sup>2</sup>Current dollars deflated by the GNP implicit price deflator (1972 = 100).

<sup>3</sup>Gross value of production of upland cotton lint and seed, divided by harvested acres. Excludes Government payments.

<sup>4</sup>Total value of upland cotton lint and seed produced, excluding Government payments. The value of cottonseed produced averaged about 13 percent of the total value of lint and seed in 1974-83.

**Appendix table 6—World production, consumption, exports, and ending stocks for cotton, 1960-87**

Crop year	Production	Consumption	Exports	Ending stocks	Stocks-to-use ratio
		<i>1,000 bales</i>			<i>Percent</i>
1960	45,069	46,169	17,121	20,375	41.2
1961	44,466	45,217	15,619	19,037	41.5
1962	46,958	43,923	15,933	18,774	51.7
1963	50,894	48,032	17,930	25,726	53.6
1964	53,934	51,462	16,857	28,750	55.8
1965	57,110	54,013	16,946	32,293	60.0
1966	52,496	55,987	18,229	28,539	51.1
1967	51,748	56,136	17,493	24,038	42.8
1968	57,096	56,526	16,983	24,509	43.4
1969	54,923	56,166	17,708	23,316	41.5
1970	55,304	57,295	17,748	22,357	39.1
1971	59,367	58,618	18,685	22,852	39.0
1972	62,023	59,791	21,196	24,916	41.7
1973	63,169	60,874	19,583	27,716	45.5
1974	64,222	57,897	17,497	33,435	57.7
1975	54,195	61,907	19,093	26,014	40.4
1976	56,623	60,938	17,568	21,942	36.0
1977	64,112	60,900	19,149	25,227	41.4
1978	59,881	61,242	19,791	21,697	35.4
1979	65,726	63,535	23,233	21,132	33.3
1980	64,928	66,172	19,699	20,454	30.9
1981	71,197	66,118	20,239	25,284	38.2
1982	68,125	66,127	19,449	25,198	38.1
1983	65,558	68,258	19,166	23,952	35.1
1984	88,216	69,872	20,198	42,437	60.7
1985	79,562	76,911	20,237	46,098	59.9
1986	70,452	82,435	25,944	33,581	40.7
1987	80,835	83,872	23,230	30,777	36.7
1988 <sup>1</sup>	84,000	83,799	25,627	30,142	36.0
1989 <sup>2</sup>	80,780	85,342	24,953	25,196	29.5

<sup>1</sup>Preliminary

<sup>2</sup>Estimate

**Appendix table 7—Provisions of upland cotton programs, 1961-89**

Provision	1961	1962	1963	1964
Parity price (c/lb)	38.80	39.20	40.20	40.70
Support price (c/lb)	---	---	---	33.50
Payment rate (c/lb)	---	---	---	3.5
Payment (\$)	---	---	---	.0350*Yld*Dom <sup>15</sup>
Target price (c/lb)	---	---	---	---
Deficiency payment: <sup>1</sup>				
Advance payment (c/lb)	---	---	---	---
Final payment (c/lb)	---	---	---	---
Allocation factor (%) <sup>2</sup>	---	---	---	---
Nonrecourse loan:				
Loan rate (c/lb) <sup>3</sup>	33.04	32.47	32.47	30.00
Repayment rate (c/lb) <sup>4</sup>	---	---	---	---
CCC domestic sales: <sup>5</sup>				
Legislated minimum price (c/lb) <sup>6</sup>	38.00 + CC	37.34 + CC	37.34 + CC	31.50 + CC
Actual price (c/lb) <sup>7</sup>	---	---	---	---
Acreage diversion (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage diversion optional (%)	---	---	---	---
- Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Set-aside (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Set-aside voluntary (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage reduction (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage reduction voluntary (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
PIK acreage diversion (%)	---	---	---	---
Payment rate (ba)	---	---	---	---
Payment (ba)	---	---	---	---
Compliance restrictions:				
Soil conserving base <sup>8</sup>	---	---	---	---
Cross-compliance <sup>9</sup>	---	---	---	---
Offsetting-compliance <sup>10</sup>	---	---	---	---
National marketing quota (1,000 ba) <sup>11</sup>	15,562	15,714	14,367	14,267
Marketing quota penalty (c/lb) <sup>12</sup>	19.5	50% of parity	50% of parity	50% of parity
National allotment acres (1,000) <sup>13</sup>	18,458.4	18,101.7	16,250.0	16,200.0
Acres allocated from national acreage reserve (1,000)	60.0	100.0	250.0	200.0
Farm allotment acres:				
Domestic (% of total)	---	---	---	67
Export (% of total)	---	---	---	5 <sup>16</sup>
National base allotment acres (1,000)	---	---	---	---
National program acres (1,000)	---	---	---	---
National base acres (1,000)	---	---	---	---
Base acres in CRP (1,000)	---	---	---	---
National export market acres reserve (1,000)	---	---	---	---
National program yield (lbs/ac)	---	---	---	434
Disaster program: <sup>14</sup>				
Prevented plantings payment (c/lb)	---	---	---	---
Low yield criterion (%)	---	---	---	---
Low yield payment (c/lb)	---	---	---	---
Payment limitation (\$)	---	---	---	---
Advanced payment (%)	---	---	---	---
Support payment limitation (\$)	---	---	---	---

See footnotes at end of table.

Continued—

**Appendix table 7—Provisions of upland cotton programs, 1961-89—Continued**

Provision	1965	1966	1967	1968
Parity price (c/lb)	41.70	42.80	42.90	44.50
Support price (c/lb)	33.35	30.42	31.78	32.49
Payment rate (c/lb)	4.35	9.42	11.53	12.24
Payment (\$)	.0435*Yld*Dom <sup>15</sup>	.0942*Yld*Dom <sup>16</sup>	.1153*Yld*Dom <sup>18</sup>	.1224*Yld*Dom <sup>18</sup>
Target price (c/lb)	---	---	---	---
Deficiency payment: <sup>1</sup>				
Advance payment (c/lb)	---	---	---	---
Final payment (c/lb)	---	---	---	---
Allocation factor (%) <sup>2</sup>	---	---	---	---
Nonrecourse loan:				
Loan rate (c/lb) <sup>3</sup>	29.00	21.00	20.25	20.25
Repayment rate (c/lb) <sup>4</sup>	---	---	---	---
CCC domestic sales: <sup>5</sup>				
Legislated minimum price (c/lb) <sup>6</sup>	30.45 + CC	23.10 + CC	22.27 + CC	22.27 + CC
Actual price (c/lb) <sup>7</sup>	---	---	---	---
Acreage diversion (%)	---	12.5, 25, or 35	12.5-35	5
Payment rate (c/lb)	---	10.5	10.78	10.76
Payment (\$)	---	.105*Yld*Div	.1078*Yld*Div	.1076*Yld*Div
Acreage diversion optional (%)	---	---	---	0-30
Payment rate (c/lb)	---	---	---	6.00
Payment (\$)	---	---	---	.06*Yld*Div
Set-aside (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Set-aside voluntary (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage reduction (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage reduction voluntary (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
PIK acreage diversion (%)	---	---	---	---
Payment rate (ba)	---	---	---	---
Payment (ba)	---	---	---	---
Compliance restrictions:				
Soil conserving base <sup>8</sup>	---	Yes	Yes	Yes
Cross-compliance <sup>9</sup>	Yes <sup>17</sup>	No	No	No
Offsetting-compliance <sup>10</sup>	---	---	Yes	---
National marketing quota (1,000 ba) <sup>11</sup>	14,733	15,267	16,033	16,100
Marketing quota penalty (c/lb) <sup>12</sup>	50% of parity	50% of parity	50% of parity	50% of parity
National allotment acres (1,000) <sup>13</sup>	16,200.0	16,200.0	16,200.0	16,200.0
Acres allocated from national acreage reserve (1,000)	200.0	200.0	200.0	200.0
Farm allotment acres:				
Domestic (% of total)	65	65	65	65
Export (% of total)	---	---	---	---
National base allotment acres (1,000)	---	---	---	---
National program acres (1,000)	---	---	---	---
National base acres (1,000)	---	---	---	---
Base acres in CRP (1,000)	---	---	---	---
National export market acres reserve (1,000)	---	250 <sup>16,19</sup>	250 <sup>16,19</sup>	250 <sup>16,19</sup>
National program yield (lbs/ac)	446	527	545	545
Disaster program: <sup>14</sup>				
Prevented plantings payment (c/lb)	---	... <sup>20</sup>	... <sup>20</sup>	... <sup>20</sup>
Low yield criterion (%)	---	---	---	---
Low yield payment (c/lb)	---	---	---	---
Payment limitation (\$)	---	---	---	---
Advanced payment (%)	---	---	---	---
Support payment limitation (\$)	---	---	---	---

See footnotes at end of table.

Continued—

**Appendix table 7—Provisions of upland cotton programs, 1961-89—Continued**

Provision	1969	1970	1971	1972
Parity price (c/lb)	47.60	48.90	51.90	55.10
Support price (c/lb)	34.98	37.05	35.00	35.85
Payment rate (c/lb)	14.73	16.80	---	---
Payment (\$)	.1473*Yld*Dom <sup>18</sup>	.1680*Yld*Dom <sup>18</sup>	---	---
Target price (c/lb)	---	---	---	---
Deficiency payment: <sup>1</sup>				
Advance payment (c/lb)	---	---	---	---
Final payment (c/lb)	---	---	---	---
Allocation factor (%) <sup>2</sup>	---	---	---	---
Nonrecourse loan:				
Loan rate (c/lb) <sup>3</sup>	20.25	20.25	19.5 <sup>21</sup>	19.50
Repayment rate (c/lb) <sup>4</sup>	---	---	---	---
CCC domestic sales: <sup>5</sup>				
Legislated minimum price (c/lb) <sup>6</sup>	22.27 + CC	22.27 + CC	22.42 + CC	22.42 + CC
Actual price (c/lb) <sup>7</sup>	---	---	---	---
Acreage diversion (%)	None	None	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage diversion optional (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Set-aside (%)	---	---	20	20
Payment rate (c/lb)	---	---	15.00 <sup>22</sup>	15.00 <sup>22</sup>
Payment (\$)	---	---	15.00*Yld*Plt <sup>23</sup>	15.00*Yld*Plt <sup>23</sup>
Set-aside voluntary (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage reduction (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage reduction voluntary (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
PIK acreage diversion (%)	---	---	---	---
Payment rate (ba)	---	---	---	---
Payment (ba)	---	---	---	---
Compliance restrictions:				
Soil conserving base <sup>8</sup>	Yes	Yes	Yes	Yes
Cross-compliance <sup>9</sup>	No	---	---	---
Offsetting-compliance <sup>10</sup>	---	---	---	---
National marketing quota (1,000 ba) <sup>11</sup>	15,133	16,008	None	None
Marketing quota penalty (c/lb) <sup>12</sup>	50% of parity	50% of parity	---	---
National allotment acres (1,000) <sup>13</sup>	16,200.0	17,150.0	---	---
Acres allocated from national acreage reserve (1,000)	200.0	150.0	---	---
Farm allotment acres:				
Domestic (% of total)	65	65	---	---
Export (% of total)	---	---	---	---
National base allotment acres (1,000)	---	---	11,500 <sup>24</sup>	11,500 <sup>24</sup>
National program acres (1,000)	---	---	---	---
National base acres (1,000)	---	---	---	---
Base acres in CRP (1,000)	---	---	---	---
National export market acres reserve (1,000)	187.5 <sup>18,19</sup>	62.5 <sup>18,19</sup>	---	---
National program yield (lbs/ac)	545	500	532	527
Disaster program: <sup>14</sup>				
Prevented plantings payment (c/lb)	--- <sup>20</sup>	--- <sup>20</sup>	---	---
Low yield criterion (%)	---	---	---	---
Low yield payment (c/lb)	---	---	---	---
Payment limitation (\$)	---	---	---	---
Advanced payment (%)	---	---	---	---
Support payment limitation (\$)	---	---	55,000 <sup>25</sup>	55,000 <sup>25</sup>

See footnotes at end of table.

Continued—

**Appendix table 7—Provisions of upland cotton programs, 1961-89—Continued**

Provision	1973	1974	1975	1976
Parity price (c/lb)	66.00	73.10	78.60	79.50
Support price (c/lb)	41.52	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Target price (c/lb)	---	38.00	38.00	43.20
Deficiency payment: <sup>1</sup>				
Advance payment (c/lb)	---	---	---	---
Final payment (c/lb)	---	0.00	0.00	0.00
Allocation factor (%) <sup>2</sup>	---	---	---	---
Nonrecourse loan:				
Loan rate (c/lb) <sup>3</sup>	19.50	27.06	36.12	38.92
Repayment rate (c/lb) <sup>4</sup>	---	---	---	---
CCC domestic sales: <sup>5</sup>				
Legislated minimum price (c/lb) <sup>6</sup>	21.45 + CC	31.12 + CC	43.70 + CC	49.68 + CC
Actual price (c/lb) <sup>7</sup>	---	---	---	---
Acreage diversion (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage diversion optional (%)	---	---	10	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Set-aside (%)	None	None	None	None
Payment rate (c/lb)	15.00 <sup>22</sup>	Def	Def	Def
Payment (\$)	15.00*Yld*Plt <sup>23</sup>	0.00*Yld*Plt <sup>23</sup>	0.00*Yld*Plt <sup>23</sup>	0.00*Yld*Plt <sup>23</sup>
Set-aside voluntary (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage reduction (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage reduction voluntary (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
PIK acreage diversion (%)	---	---	---	---
Payment rate (ba)	---	---	---	---
Payment (ba)	---	---	---	---
Compliance restrictions:				
Soil conserving base <sup>8</sup>	Yes	No	No	No
Cross-compliance <sup>9</sup>	---	---	---	---
Offsetting-compliance <sup>10</sup>	---	---	---	---
National marketing quota (1,000 ba) <sup>11</sup>	None	None	None	None
Marketing quota penalty (c/lb) <sup>12</sup>	---	---	---	---
National allotment acres (1,000) <sup>13</sup>	---	---	---	---
Acres allocated from national acreage reserve (1,000)	---	---	---	---
Farm allotment acres:				
Domestic (% of total)	---	---	---	---
Export (% of total)	---	---	---	---
National base allotment acres (1,000)	10,000 <sup>24</sup>	11,000 <sup>24</sup>	11,000 <sup>24</sup>	11,000 <sup>24</sup>
National program acres (1,000)	---	---	---	---
National base acres (1,000)	---	---	---	---
Base acres in CRP (1,000)	---	---	---	---
National export market acres reserve (1,000)	---	---	---	---
National program yield (lbs/ac)	540	527	536	517
Disaster program: <sup>14</sup>				
Prevented plantings payment (c/lb)	23.62 on 75% normal yield	--- <sup>33</sup>	--- <sup>33</sup>	--- <sup>33</sup>
+ Low yield criterion (%)	75	---	---	---
Low yield payment (c/lb)	23.62 on the shortfall	--- <sup>33</sup>	--- <sup>33</sup>	--- <sup>33</sup>
Payment limitation (\$)	100,000 <sup>31</sup>	100,000 <sup>31</sup>	100,000 <sup>31</sup>	100,000 <sup>31</sup>
Advanced payment (%)	---	---	50/50 <sup>36</sup>	---
Support payment limitation (\$)	50,000 <sup>30</sup>	50,000 <sup>30</sup>	50,000 <sup>30</sup>	50,000 <sup>30</sup>

See footnotes at end of table.

Continued—

**Appendix table 7—Provisions of upland cotton programs, 1961-89—Continued**

Provision	1977	1978	1979	1980
Parity price (c/lb)	83.70	90.60	99.70	110.00
Support price (c/lb)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Target price (c/lb)	47.80	52.00	57.70	58.40
Deficiency payment: <sup>1</sup>				
Advance payment (c/lb)	---	---	---	---
Final payment (c/lb)	0.00	0.00	0.00	0.00
Allocation factor (%) <sup>2</sup>	---	---	---	---
Nonrecourse loan:				
Loan rate (c/lb) <sup>3</sup>	44.63	48.00 <sup>27</sup>	50.23 <sup>27</sup>	48.00 <sup>27</sup>
Repayment rate (c/lb) <sup>4</sup>	---	---	---	---
CCC domestic sales: <sup>5</sup>				
Legislated minimum price (c/lb) <sup>6</sup>	54.90 + CC	55.24 + CC	57.76 + CC	55.20 + CC
Actual price (c/lb) <sup>7</sup>	---	---	---	---
Acreage diversion (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage diversion optional (%)	---	10	10	---
Payment rate (c/lb)	---	0.02	0.02	---
Payment (\$)	---	.02*Yld*Plt	.02*Yld*Plt	---
Set-aside (%)	None	None	None	None
Payment rate (c/lb)	Def	AF*Def	AF*Def	Af.Def
Payment (\$)	0.00*Yld*Plt <sup>23</sup>	0.00*Yld*Plt	0.00*Yld*Plt <sup>23</sup>	0.00*Yld*Plt
Set-aside voluntary (%)	---	20 <sup>28</sup>	20 <sup>28</sup>	28 <sup>10</sup>
Payment rate (c/lb)	---	Def	Def	Def
Payment (\$)	---	0.00*Yld*Plt	0.00*Yld*Plt	0.00*Yld*Plt
Acreage reduction (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage reduction voluntary (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
PIK acreage diversion (%)	---	---	---	---
Payment rate (ba)	---	---	---	---
Payment (ba)	---	---	---	---
Compliance restrictions:				
Soil conserving base <sup>8</sup>	no	No	No	No
Cross-compliance <sup>9</sup>	---	---	---	---
Offsetting-compliance <sup>10</sup>	---	Yes <sup>29</sup>	Yes <sup>29</sup>	Yes <sup>29</sup>
National marketing quota (1,000 ba) <sup>11</sup>	None	Suspended	Suspended	Suspended
Marketing quota penalty (c/lb) <sup>12</sup>	---	Suspended	Suspended	Suspended
National allotment acres (1,000) <sup>13</sup>	---	Suspended	Suspended	Suspended
Acres allocated from national acreage reserve (1,000)	---	---	---	---
Farm allotment acres:				
Domestic (% of total)	---	---	---	---
Export (% of total)	---	---	---	---
National base allotment acres (1,000)	11,000 <sup>24</sup>	11,000 <sup>24</sup>	---	---
National program acres (1,000)	---	---	10,000	13,476
National base acres (1,000)	---	---	---	---
Base acres in CRP (1,000)	---	---	---	---
National export market acres reserve (1,000)	---	---	---	---
National program yield (lbs/ac)	510	581	549	553
Disaster program: <sup>14</sup>				
Prevented plantings payment (c/lb)	15.93	75% normal yield	17.30 on 75% Normal Yield	19.23 on 75% Normal Yield
Low yield criterion (%)	66.7	75	75	---
Low yield payment (c/lb)	15.93 on the shortfall	17.30 on the shortfall	19.23 on the shortfall	19.47 on the shortfall
Payment limitation (\$)	---	---	---	---
Advanced payment (%)	---	---	---	---
Support payment limitation (\$)	20,000 <sup>26</sup>	40,000 <sup>26</sup>	45,000 <sup>30</sup>	50,000 <sup>30</sup>

See footnotes at end of table.

Continued—

**Appendix table 7—Provisions of upland cotton programs, 1961-89—Continued**

Provision	1981	1982	1983	1984
Parity price (c/lb)	117.00	119.00	119.00	125.00
Support price (c/lb)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Target price (c/lb)	70.87	71.00	76.00	81.00
Deficiency payment: <sup>1</sup>				
Advance payment (c/lb)	---	9.70	10.00	---
Final payment (c/lb)	7.67	13.92	12.10	18.60
Allocation factor (%) <sup>2</sup>	---	---	---	---
Nonrecourse loan:				
Loan rate (c/lb) <sup>3</sup>	52.46	57.08	55.00	55.00
Repayment rate (c/lb) <sup>4</sup>	---	---	---	---
CCC domestic sales: <sup>5</sup>				
Legislated minimum price (c/lb) <sup>6</sup>	60.32 + CC	65.64 + CC	71.50 + CC	71.50 + CC
Actual price (c/lb) <sup>7</sup>	---	---	---	---
Acreage diversion (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage diversion optional (%)	---	---	5	---
Payment rate (c/lb)	---	---	25.00	---
Payment (\$)	---	---	25.00*Div	---
Set-aside (%)	None	---	---	---
Payment rate (c/lb)	Af*Def	---	---	---
Payment (\$)	AF*Def*Plt	---	---	---
Set-aside voluntary (%)	28/0	---	---	---
Payment rate (c/lb)	Def	---	---	---
Payment (\$)	.0767*Yld*Plt	---	---	---
Acreage reduction (%)	---	15	20	25
Payment rate (c/lb)	---	Def	Def	Def
Payment (\$)	---	.1392*Yld*Plt	.121*Yld*Plt	.186*Yld*Plt
Acreage reduction voluntary (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
PIK acreage diversion (%)	---	---	10-30 <sup>34</sup>	---
Payment rate (ba)	---	---	.80*Yld <sup>35</sup>	---
Payment (ba)	---	---	.80*Yld*PIK <sup>35</sup>	---
Compliance restrictions:				
Soil conserving base <sup>8</sup>	---	---	---	---
Cross-compliance <sup>9</sup>	No	No	No	No
Offsetting-compliance <sup>10</sup>	No	No	No	No
National marketing quota (1,000 ba) <sup>11</sup>	Suspended	Suspended	Suspended	Suspended
Marketing quota penalty (c/lb) <sup>12</sup>	Suspended	Suspended	Suspended	Suspended
National allotment acres (1,000) <sup>13</sup>	Suspended	Suspended	Suspended	Suspended
Acres allocated from national acreage reserve (1,000)	---	---	---	---
Farm allotment acres:				
Domestic (% of total)	---	---	---	---
Export (% of total)	---	---	---	---
National base allotment acres (1,000)	---	---	11,000 <sup>24</sup>	11,000 <sup>24</sup>
National program acres (1,000)	14,022/12,838	NA <sup>32</sup>	NA <sup>32</sup>	NA <sup>32</sup>
National base acres (1,000)	---	15,000	15,600	15,800
Base acres in CRP (1,000)	---	---	---	---
National export market acres reserve (1,000)	---	---	---	---
National program yield (lbs/ac)	545	581	580	600
Disaster program: <sup>14</sup>				
Prevented plantings payment (c/lb)	23.62 on 75% normal yield	--- <sup>33</sup>	--- <sup>33</sup>	--- <sup>33</sup>
Low yield criterion (%)	75	---	---	---
Low yield payment (c/lb)	23.62 on the shortfall	--- <sup>33</sup>	--- <sup>33</sup>	--- <sup>33</sup>
Payment limitation (\$)	100,000 <sup>31</sup>	100,000 <sup>31</sup>	100,000 <sup>31</sup>	100,000 <sup>31</sup>
Advanced payment (%)	---	---	50/50 <sup>36</sup>	---
Support payment limitation (\$)	50,000 <sup>30</sup>	50,000 <sup>30</sup>	45,000 <sup>30</sup>	50,000 <sup>30</sup>

See footnotes at end of table.

Continued—

**Appendix table 7—Provisions of upland cotton programs, 1961-89—Continued**

Provision	1985	1986 <sup>37</sup>	1987	1988
Parity price (c/lb)	123.00	124.00	128.00	134.00
Support price (c/lb)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Target price (c/lb)	81.00	81.00	79.40	75.90
Deficiency payment: <sup>1</sup>				
Advance payment (c/lb)	9.90	7.80	8.145	6.40
Final payment (c/lb)	23.70	26.00	17.30	19.40
Allocation factor (%) <sup>2</sup>	---	---	---	---
Nonrecourse loan:				
Loan rate (c/lb) <sup>3</sup>	57.30	55.00	52.25	51.80
Repayment rate (c/lb) <sup>4</sup>	---	44.00	AWP	AWP
CCC domestic sales: <sup>5</sup>				
Legislated minimum price (c/lb) <sup>6</sup>	73.34 + CC	50.60 + CC	75.60 + CC	64.77 + CC
Actual price (c/lb) <sup>7</sup>	---	---	---	---
Acreage diversion (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage diversion optional (%)	10	---	---	---
Payment rate (c/lb)	30.00	---	---	---
Payment (\$)	30.00*Div	---	---	---
Set-aside (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Set-aside voluntary (%)	---	---	---	---
Payment rate (c/lb)	---	---	---	---
Payment (\$)	---	---	---	---
Acreage reduction (%)	20	25	25	12.5
Payment rate (c/lb)	Def	Def	Def	Def
Payment (\$)	.237*Yld*Plt	.26*Yld*Plt	.173*Yld*Plt	.194*Yld*Plt
Acreage reduction voluntary (%)	---	50-92 <sup>38</sup>	50-92 <sup>38</sup>	50-92 <sup>38</sup>
Payment rate (c/lb)	---	Def	Def	Def
Payment (\$)	---	.2392*Yld*Bas	.24978*Yld*Bas	.1472*Yld*Bas
PIK acreage diversion (%)	---	---	---	---
Payment rate (ba)	---	---	---	---
Payment (ba)	---	---	---	---
Compliance restrictions:				
Soil conserving base <sup>8</sup>	---	---	---	---
Cross-compliance <sup>9</sup>	No	No	Limited <sup>41</sup>	Limited <sup>41</sup>
Offsetting-compliance <sup>10</sup>	No	No	No	No
National marketing quota (1,000 ba) <sup>11</sup>	Suspended	Suspended	Suspended	Suspended
Marketing quota penalty (c/lb) <sup>12</sup>	Suspended	Suspended	Suspended	Suspended
National allotment acres (1,000) <sup>13</sup>	Suspended	Suspended	Suspended	Suspended
Acres allocated from national acreage reserve (1,000)	---	---	---	---
Farm allotment acres:				
Domestic (% of total)	---	---	---	---
Export (% of total)	---	---	---	---
National base allotment acres (1,000)	---	---	---	---
National program acres (1,000)	NA <sup>32</sup>	NA <sup>32</sup>	NA <sup>32</sup>	NA <sup>32</sup>
National base acres (1,000)	15,800	15,531	14,474	14,575
Base acres in CRP (1,000)	---	50	633	339
National export market acres reserve (1,000)	---	---	---	---
National program yield (lbs/ac)	613	608 <sup>39</sup>	593 <sup>42</sup>	590 <sup>46</sup>
Disaster program: <sup>14</sup>				
Prevented plantings payment (c/lb)	--- <sup>33</sup>	--- <sup>33</sup>	--- <sup>33</sup>	--- <sup>33</sup>
Low yield criterion (%)	---	---	---	---
Low yield payment (c/lb)	--- <sup>33</sup>	--- <sup>33</sup>	--- <sup>33</sup>	--- <sup>33</sup>
Payment limitation (\$)	100,000 <sup>31</sup>	100,000 <sup>31</sup>	Yes <sup>43</sup>	Yes <sup>43</sup>
Advanced payment (%)	50/50 <sup>36</sup>	---	30 <sup>44</sup>	40 <sup>47</sup>
Support payment limitation (\$)	50,000 <sup>30</sup>	50,000 <sup>40</sup>	50,000 <sup>45</sup>	50,000 <sup>45</sup>

See footnotes at end of table.

Continued—

**Appendix table 7—Provisions of upland cotton programs, 1961-89—Continued**

Provision	1989
Parity price (c/lb)	---
Support price (c/lb)	---
Payment rate (c/lb)	---
Payment (\$)	---
Target price (c/lb)	73.40
Deficiency payment: <sup>1</sup>	
Advance payment (c/lb)	6.42
Final payment (c/lb)	---
Allocation factor (%) <sup>2</sup>	NA <sup>32</sup>
Nonrecourse loan:	
Loan rate (c/lb) <sup>3</sup>	50.00
Repayment rate (c/lb) <sup>4</sup>	AWP
CCC domestic sales: <sup>5</sup>	
Legislated minimum price (c/lb) <sup>6</sup>	---
Actual price (c/lb) <sup>7</sup>	---
Acreage diversion (%)	---
Payment rate (c/lb)	---
Payment (\$)	---
Acreage diversion optional (%)	---
Payment rate (c/lb)	---
Payment (\$)	---
Set-aside (%)	---
Payment rate (c/lb)	---
Payment (\$)	---
Set-aside voluntary (%)	---
Payment rate (c/lb)	---
Payment (\$)	---
Acreage reduction (%)	25
Payment rate (c/lb)	Def
Payment (\$)	.214*Yld*Plt
Acreage reduction voluntary (%)	50-92 <sup>38</sup>
Payment rate (c/lb)	Def
Payment (\$)	.1969*Yld*Bas
PIK acreage diversion (%)	---
Payment rate (ba)	---
Payment (ba)	---
Compliance restrictions:	
Soil conserving base <sup>8</sup>	---
Cross-compliance <sup>9</sup>	Limited <sup>41</sup>
Offsetting-compliance <sup>10</sup>	No
National marketing quota (1,000 ba) <sup>11</sup>	Suspended
Marketing quota penalty (c/lb) <sup>12</sup>	Suspended
National allotment acres (1,000) <sup>13</sup>	Suspended
Acres allocated from national acreage reserve (1,000)	---
Farm allotment acres:	
Domestic (% of total)	---
Export (% of total)	---
National base allotment acres (1,000)	---
National program acres (1,000)	NA <sup>32</sup>
National base acres (1,000)	14,700
Base acres in CRP (1,000)	137
National export market acres reserve (1,000)	---
National program yield (lbs/ac)	590
Disaster program: <sup>14</sup>	
Prevented plantings payment (c/lb)	--- <sup>33</sup>
Low yield criterion (%)	---
Low yield payment (c/lb)	--- <sup>33</sup>
Payment limitation (\$)	Yes <sup>43</sup>
Advanced payment (%)	30 <sup>48</sup>
Support payment limitation (\$)	50,000

Footnotes for appendix table 7---Provisions of upland cotton programs.

Abbreviations used are as follows: AF = allocation factor, AWP = adjusted world price, Ba = base acres, CC = carrying charges, Div = diverted acres, Def = deficiency payment, Dom = domestic allotment, NA = not applicable, Plt = payment-in-kind, Plt = planted acres, Yld = yield.

<sup>1</sup>Deficiency payment is the difference between the target price and the higher of the calendar year average market price received by farmers or the loan rate. Starting in 1986, eligible producers who agreed to forego CCC loans may receive loan deficiency payments on their production otherwise eligible for loan, not to exceed the farm program acreage times the farm program payment yield. The loan deficiency payment rate is equal to the difference between the loan rate and the loan repayment rate. Up to one-half of the loan deficiency payment may be made in negotiable marketing certificates. Loan deficiency payments are subject to the overall \$250,000 payment limitation.

<sup>2</sup>The allocation factor, ranging from 80 to 100, is determined by dividing national program acres by number of acres harvested.

<sup>3</sup>This is the national average loan rate. Prior to 1961, support was based on Middling 7/8 inch cotton. Loans shown for 1961 through 1973 are basis Middling 1 inch, micronaire 3.5 through 4.9. Loans shown for 1974 through 1989 are basis Strict Low Middling 1-1/16 inch, micronaire 3.5 through 4.9. Prior to 1971, loans were on a gross weight basis. Since then, loans have been based on net weight at average location. Under the 1985 Act, the loan rate is determined by the legislated formula (lower of 85 percent of the average spot market price for Strict Low Middling 1-1/16 inch upland cotton (micronaire 3.5-4.9) at average U.S. location during the 5 preceding years, excluding the high and the low or 90 percent of the average of the 5 lowest priced growths among the growths quoted for Middling 1-3/32 inch cotton, c.i.f. northern Europe, adjusted downward by the average difference between the northern Europe prices and the U.S. spot market prices of SLM 1-1/16 cotton.

<sup>4</sup>If the Secretary determines that the adjusted world price is below the loan rate, then the Secretary has the authority, as granted by the 1985 Act, to implement either Plan A or Plan B for the repayment of loans. Under Plan A, the Secretary announces a loan repayment rate of 80-100 percent of the loan rate, which may not be changed subsequent to announcement. Under Plan B, the loan repayment rate is the lower of the loan rate or the current adjusted world price.

<sup>5</sup>Sales made at fixed prices or through competitive bids.

<sup>6</sup>In any event, the CCC cannot sell stockholdings for less than the going market price. In many years the announced minimum price was higher than the legislated minimum price.

<sup>7</sup>Simple average of actual sales.

<sup>8</sup>Producer must maintain soil conserving base in addition to planting diverted acres to conserving uses.

<sup>9</sup>Producer must be in compliance with programs for all program crops planted on the farm.

<sup>10</sup>Producer must be in compliance with upland cotton program requirements on other farms either owned or with an interest in.

<sup>11</sup>When marketing quotas are in effect, a farmer who does not comply with the cotton acreage allotment established for the kind of cotton grown on the farm is subject to a penalty on the farm marketing excess. The cotton crop from the farm is also ineligible for price support under CCC programs. Each type of cotton is treated independently. Extra long staple cotton cannot be substituted for upland cotton or visa versa.

<sup>12</sup>Marketing quota penalty rate for upland cotton is 50 percent of the parity price effective as of June 15 of the calendar year in which the cotton is produced.

<sup>13</sup>Includes acres allocated from the national acreage reserve provided to take care of minimum farm allotments as provided by cotton legislation.

<sup>14</sup>Bad weather or unavoidable hazard.

<sup>15</sup>Payment by CCC sight draft or payment(in)kind certificate at the election of the producer available on domestic allotment.

<sup>16</sup>Farmers who plant export acreage are not eligible for the additional price support payment.

Export cotton is not eligible for price support loan. However, the amount of cotton represented by the farm yield times the acres in the effective farm allotment is eligible for the regular price support loan.

<sup>17</sup>Producer cannot exceed feed grain base.

<sup>18</sup>Payment is available only on planted acreage if less than 90 percent of the allotment is planted.

<sup>19</sup>All cotton produced on farms receiving export acreage must be exported.

<sup>20</sup>If flood, drought, or other natural disaster conditions make it impossible for a farm operator to plant cotton on a participating farm, the ASC county committee determines the acreage that would have

been planted on the farm and payments are made on that basis, provided the acreage is not planted to an income producing crop.

<sup>21</sup>The term of the loan is 10 months from the first day of the month which the loan is made. In prior years, the loan maturity date was July 31 following the year in which the cotton was produced.

<sup>22</sup>Preliminary payment rate. The final payment rate is equal to the difference between the parity price for upland cotton as of August 1 and the average market price for Middling 1-inch upland cotton, micronaire 3.5-4.9 in the designated spot market during the first 5 months of the marketing year (August 1). No refund of this payment is required in the event the final payment rate calculates at less than 15 cents.

<sup>23</sup>If 90 percent or more of the allotment is planted, the entire allotment is considered as planted for payment purposes.

<sup>24</sup>A producer who plants less than 90 percent of the cotton acreage allotment will lose a portion of it the following year equivalent to the percentage underplanted up to 20 percent. After 3 consecutive years of zero planting, the entire allotment would be removed. Allotment acreage not planted because of natural disaster or a condition beyond the control of the producer will be regarded as planted.

<sup>25</sup>Limitation does not include loans or purchases per person per commodity (cotton, wheat, feed grain).

<sup>26</sup>Limitation on total payments to eligible upland cotton, wheat, and feed grain producers per person. Does not include loans.

<sup>27</sup>The loan period is 10 months, but producers have the option, during the 10th month, of extending the loan for an additional 8 months whenever the spot market average price in the preceding month is 130 percent or less of the average for the previous 36 months.

<sup>28</sup>Voluntary set-aside requirement applies to previous year's plantings.

<sup>29</sup>Producers must assure that the NCA is not exceeded on non-participating farms they own or operate that produce a set-aside crop.

<sup>30</sup>Limitation on total payments to eligible upland cotton, wheat, feed grain, and rice producers per person. Does not include loans or disaster payments.

<sup>31</sup>Limitation on total disaster payments under the upland cotton, wheat, feed grain, and rice programs per person.

<sup>32</sup>National program acres, allocation factors, and voluntary acreage reductions are not applicable when an acreage reduction is in effect.

<sup>33</sup>Beginning with 1982 crops, disaster payments were made only to upland cotton producers to whom Federal crop insurance is unavailable. However, at the Secretary's discretion disaster emergency assistance may be paid to producers when conditions are too serious to be relieved by crop insurance or other Federal aid.

<sup>34</sup>Farmers complying with the 20-percent acreage reduction program are also eligible to participate in the payment-in-kind program. Producers can receive payment-in-kind either by reducing their planted acreage by an additional 10-30 percent of the base or by bidding to remove their entire bases from production.

<sup>35</sup>For the whole base bid program, payment is made on the entire base times the percent of the accepted bid times the farm program payment yield. Bids were evaluated on a comparative basis within each county with the restriction that total acreage removed from production under the combined acreage reduction and the payment-in-kind could not exceed 45 percent of that county's cotton acreage base.

<sup>36</sup>Advanced deficiency payments are made at half the projected rate. Advanced diversion payments are made at half the diversion payment rate.

<sup>37</sup>All cash payments subject to reductions of 4.3%, Gramm-Rudman-Hollings Act.

<sup>38</sup>Under the 50-92 rule, growers who plant between 50 and 92 percent of the permitted acreage to upland cotton and devote the remaining permitted acres to a conserving use are eligible to receive deficiency payments on 92 percent of the permitted acreage.

<sup>39</sup>Any producers whose 1986 program yield is reduced below 97 percent of their 1985 program yield received deficiency payments in the form of cotton certificates (called "additional yield certificates") sufficient to guarantee a return equal to 97 percent of their 1985 program yield.

<sup>40</sup>Limitation on total payments to eligible upland cotton, wheat, feed grain, rice, and extra long staple cotton producers per person. The limitation does not apply to loans, purchases, loan deficiency payments, first handler certificates, or inventory protection certificates or deficiency payments resulting from the lowering the basic (statutory) loan rate for wheat and feed grain.

<sup>41</sup>To be eligible for loans, purchases, and payments for wheat, feed grains, upland cotton, or rice, the acreage planted for harvest on a farm to other program crops, excluding extra long staple cotton and oats, may not exceed the crop acreage bases of those crops.

<sup>42</sup>Any producers, whose 1987 program yield is reduced below 95 percent of their 1985 program yield, received deficiency payments in the form of cotton certificates (called "additional yield certificates") sufficient to guarantee a return equal to 95 percent of their 1985 program yield.

<sup>43</sup>The total of the following payments, combined with the total deficiency and diversion payments, is limited to \$250,000 per person: (1) disaster payments; (2) gain realized by repayment of a loan at a lower level than the original loan level; (3) any deficiency payment for wheat or feed grains attributed to a reduction in the statutory loan rate; (4) any loan deficiency payment; (5) any inventory reduction payment; and (6) any payment representing compensation for re-source adjustment or public access for recreation.

<sup>44</sup>At signup, participants may request 30 percent (half in cash and half in generic certificates) of their projected 1987 deficiency payments.

<sup>45</sup>Total deficiency and diversion payments under the wheat, feed grain, upland cotton, extra long staple cotton, and rice programs are limited to \$50,000 per person.

<sup>46</sup>Any producers whose 1988 program yield is reduced below 90 percent of their 1985 program yield will receive deficiency payments in the form of cotton certificates (called "additional yield certificates") sufficient to guarantee a return equal to 90 percent of their 1985 program yield.

<sup>47</sup>At signup, participants may request 40 percent (half in cash and half in generic certificates) of their projected 1988 deficiency payments.

<sup>48</sup>At signup, participants may request 30 percent of their projected 1989 deficiency payments in cash and after May 15, 1989, an additional 10 percent in generic certificates.

Source: Robert C. Green, *A Database for Support Programs of Program Crops, 1961-90*. Staff Report (forthcoming). U.S. Department of Agriculture, Economic Research Service.

# Part II: Wool and Mohair

John V. Lawler  
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## Abstract

**Wool and mohair have been declining industries. Sheep inventories are a fifth of their World War II level; goat numbers are a third of their mid-1960's level. High lamb prices and a strong demand for wool increased producers' net returns in the late 1980's. Government payments to wool producers in 1988 were the lowest since 1980 because of a record high wool price. Policymakers have had limited control over wool program costs given the formula-based Government support price, the trend of declining textile market share, rising raw wool textile imports, stagnant lamb and mutton consumption, and the dominance of Australia and New Zealand in the world wool market. Issues for 1990 include whether to continue the program and, if so, the level and method of determining support prices.**

## Summary

Annual U.S. wool production is equivalent to only about one-tenth of 1 percent of the value of principal crops produced in the United States, and sheep marketings are about 1 percent of the value of total livestock marketings. The value of mohair produced is but half of wool's value. However, the significance of these fibers is substantial in production areas, particularly in parts of Texas and the Rocky Mountain States where crops would fare poorly or cannot be grown.

The Food Security Act of 1985 authorized the wool and mohair program through 1990. The performance of the wool market and experience with wool support programs of the past decade have raised issues to consider when assessing policies for the future.

(1) Should there be a wool and mohair program?

(2) If so, how should support price levels be determined? Should the formula based on the parity index of prices paid by farmers be retained, or should support prices reflect market imbalance? Should an adjustment be made for productivity growth?

(3) Should price-support payments continue to be made for unshorn lambs (lambs sold to a feedlot for fattening and slaughtering)?

(4) Have wool and mohair program costs, due to escalation of price-support levels, exceeded acceptable limits?

(5) What is the economic status of wool and mohair producers?

Many of these questions involve judgments that can best be made through an understanding of trends in the U.S. wool and mohair industries.

(1) Wool has been a declining industry since World War II. Sheep inventories fell from a record high of 56 million in 1942 to a low of 10 million in 1986. Adoption of manmade fibers accelerated the decline.

(2) Wool accounts for only 2 percent of final consumption of total fibers, compared with 10 percent three decades ago.

(3) Mohair has also been in decline. There are 2.3 million Angora goats now, half as many as 20 years ago.

(4) Imports of wool--both raw and in the form of textiles--made sharp inroads in the mid-1980's, due to the dollar's appreciation, lower tariffs on raw wool, and ample foreign wool supplies. Of the wool textiles used in the United States during 1988, more than four-fifths were imported or made from imported raw wool.

(5) Per capita consumption of lamb and mutton in 1988 is slight, only 1.4 pounds out of total meat consumption of 220 pounds. Yet, meat sales accounted for an average of 70 percent of a sheep producer's receipts in 1985-87. Wool program payments serve as supplementary income.

Policymakers have limited control over current wool program costs, given the formula-based support price. Trends of declining textile market share, stagnant lamb and mutton consumption, growth in wool imports, and the dominance of Australia and New Zealand in the world wool market are key factors influencing prices received which, in turn, affect Government payments.

Foreign market developments are also critical for mohair, because 90 percent of U.S. output is exported. Recent program payments have moderated the effects of highly volatile prices. Mohair prices are influenced by the size of the U.S. and South African clips, changes in fashion demand, variations in overall economic activity, and currency fluctuations.

Wool producer prices in the 1980's varied somewhat with raw wool mill demand. They ranged from a low of \$0.61 per pound in 1983 to a record high of \$1.38 in 1988. Rising wool prices in 1987 (\$0.92) and 1988 reflected the strong overseas and domestic wool demand in those 2 years. Domestic wool prices, especially for the finer grades, are sensitive to world prices because about 70 percent of raw wool used by mills is imported. Government wool support payments for 1988, at \$41.4 million, were at an 8-year low.

Mohair's price has declined since 1984 to \$1.89 in 1988, a 13-year low. Mohair's price is very sensitive to fashion demands and the popularity of hand-knitting. Declining mohair prices in 1986-88 resulted in high government payments. This 3-year total was almost 56 percent of the total paid since 1962.

Large imports of raw wool and wool textiles will likely continue and, at best, there will be only limited growth in sheep numbers. Mohair production also has limited expansion potential. Both wool and mohair will continue to face formidable competition from manmade fiber technological developments and from increased

manmade fiber production and use in textile exporting countries.

The history of the wool and mohair programs is characterized by wool prices that have been consistently below support levels, requiring sustained Government payments. Mohair payments have been less frequent and smaller. Price support functions purely as an income supplement to producers; wool and mohair legislation has encouraged production, not required production cutbacks in return for support payments as in the case for other commodities. Wool legislation has resulted in support levels for wool consistently above world prices in an attempt to revitalize the declining wool industry. The wool and mohair programs have raised wool and mohair production and farm income, compared with levels under no program. The wool output increase has been small, because wool production is relatively unresponsive to changes in producer prices. Most Government expenditures on wool have benefited producers rather than wool consumers. The program has probably affected wool market prices only slightly if at all because the production increase has been relatively small, and because world wool prices are an important determinant of U.S. prices. The production increase has probably offset raw wool imports.

Wool consumers are adversely affected by the tariff on imported textiles but are affected little by the wool support program. The value of raw wool is often less than 5 percent of the value of its final processed product. Imports from many countries and for many wool apparel items and fabrics are subject to tariff rates in excess of 25 percent of value. The tariffs on wool textiles and on raw wool boost U.S. consumer prices of wool products and raise producer prices of raw wool.

Government expenditures on wool and mohair are taxpayer costs. These expenditures have risen during the last several years. Wool act expenditures per taxpayer, when adjusted for inflation, are also up but are less than during the late 1960's and early 1970's. During fiscal year 1988, Government outlays on all price support and related programs totaled an estimated \$12.5 billion. Wool and mohair outlays are estimated at \$130.6 million.

## Introduction

The price-support program for wool and mohair has been in effect since 1955. The Food Security Act of 1985 reauthorized the program through December 31, 1990. Experience with its provisions and knowledge of

economic conditions in the wool and mohair markets will provide the basis for assessing alternative programs for the future.

U.S. wool and mohair production has fallen dramatically. Wool's share of U.S. fiber use was 10 percent in 1950, compared with 1 percent in 1988. This trend calls into question a basic objective of the program: encouraging wool production and consumption. This report accordingly examines the intended beneficiaries of the program: those who produce and consume wool and mohair. Factors which have limited wool and mohair production are also examined.

Because U.S. wool demand and supply are small in size compared with the world wool market, and because raw wool imports account for about two-thirds of U.S. textile mill use of wool, U.S. raw wool prices hinge on foreign developments. Likewise, almost all U.S. mohair is exported, so foreign demand is the key to domestic mohair prices. In any year, U.S. prices--and consequently Government program costs--depend more on foreign developments than on U.S. production changes. Thus, this report examines the foreign sector for wool and mohair and establishes the links between U.S. and foreign markets.

Finally, this report traces the history of the wool and mohair programs, showing that Government attempts to encourage wool production have been made at the same time U.S. production and use have declined. Program effects on producers, consumers, and taxpayers are examined.

## Structure of the Wool Industry

Annual U.S. wool production is equivalent to only about one-tenth of 1 percent of the value of principal crops produced in the United States, and sheep marketings are about 1 percent of the value of total livestock marketings. Sheep and wool are produced in all States, but significant output is confined to two regions: the territory wool States and the fleece wool States. About 75 percent of the sheep are in Texas, South Dakota, the Rocky Mountains, and the Pacific Coast States. Wool from these areas is called "territory" wool. These grades are used to make better quality apparel. Most other sheep are in Virginia, West Virginia, Pennsylvania, States north of the Ohio River, and the Great Plains area. Wools from these areas, known as "fleece" wool, are medium grades used to make coats, blankets, and sweaters.

## Wool Production

The U.S. sheep inventory declined from a record high 56 million head in 1942 to a record low 10 million in 1986. The drop resulted both from declining wool demand by the U.S. textile industry as manmade fibers became pervasive and from reduced consumption of lamb and mutton. Since 1970, the number of sheep and lambs has been cut nearly in half, average flock size has fallen, and there are one-third fewer operators with sheep (table 1).

Most revenue from raising sheep comes from the sale of meat. Only about a third of cash receipts comes from wool. Consequently, changes in wool prices have only a small effect on the number of sheep and the level of wool production. The decline of lamb and mutton in the U.S. consumers' diet is a critical factor in the drop in sheep numbers. In 1970, lamb and mutton accounted for 2.9 pounds out of the 200 pounds of meat (red meat plus poultry) consumed per person, retail. In 1988, lamb and mutton were down to 1.4 pounds out of the total of 219 pounds of meat consumed. The long downward trend in sheep numbers was interrupted in the late 1970's. The reduction in livestock numbers during 1974-75 caused by rising grain prices and economic recession led to higher meat prices and flock rebuilding in the later 1970's. Lamb prices rose 40 percent and wool prices 30 percent between 1976 and 1979. However, steep drops in lamb prices beginning in 1981 and in wool prices beginning in 1982 halted the recovery in sheep numbers. Flock numbers increased in 1987 and 1988 from the

**Table 1—Number of sheep and operations, 1970-89**

Year	Sheep and lambs on January 1	Operations with sheep	Average flock size
	<i>Million head</i>	<i>Thousand</i>	<i>Head per operator</i>
1970	20.4	179.6	112
1975	14.5	129.6	107
1980	12.7	120.1	107
1981	12.9	125.9	103
1982	13.0	128.2	98
1983	12.1	126.4	93
1984	11.5	123.5	89
1985	10.4	117.4	87
1986	10.0	115.3	88
1987	10.3	114.8	93
1988	10.8	115.5	93
1989	10.8	---	---

--- = Not available.

record low in 1986 when lamb prices began to rise in 1985. Livestock numbers may be stabilized now with this upturn.

Wool production has followed the decline in sheep numbers, with the production drop exacerbated slightly by a drop in productivity (table 2). Shorn wool production in 1988 was about 89 million pounds, greasy, less than a quarter of the record 388 million pounds set in 1942. U.S. average fleece weights of about 8 pounds are low relative to the yields in two of the three largest wool-producing countries, Australia and New Zealand, which average 11-12 pounds. Fleece weights in the USSR, the second largest producer, have averaged 7.5 pounds in recent years.

Shorn wool now accounts for essentially all of U.S. wool production, but that has not always been the case. In the 1940's and 1950's, 10-15 percent of total production was "pulled" wool, wool pulled from the pelts of slaughtered lambs (app. table 1). By 1983, pulled wool production was estimated at only 1 million pounds, greasy, 1 percent of total wool production. The drop reflects the growing demand for the pelts with the wool intact. These sheepskins are used for everything from coat liners to automobile seat covers.

The size of domestic sheep flocks varies greatly. The 1982 Census of Agriculture indicated that only 1.4 percent of farms and ranches with sheep had a flock size of over 1,000 producing ewes 1 year old or older. But, 44 percent of all such ewes were in flocks of 1,000 or more. At the other end of the scale, 87 percent of

**Table 2—Sheep shorn and wool production, 1970-88**

Year	Sheep shorn	Shorn wool production	Average fleece weight
	<i>Million head</i>	<i>Million pounds, greasy<sup>1</sup></i>	<i>Pounds, greasy<sup>1</sup></i>
1970	19.2	161.6	8.43
1975	14.4	119.5	8.30
1980	13.3	105.4	7.95
1981	13.5	109.8	8.14
1982	13.2	106.1	8.04
1983	12.9	102.9	8.00
1984	12.3	95.5	7.77
1985	11.2	87.9	7.88
1986	10.9	84.8	7.82
1987	10.9	84.7	7.75
1988	11.5	89.2	7.78

<sup>1</sup>Greasy basis is wool directly from the sheep. It has not been cleaned and scoured.