

## 1993 Cotton Management Economic Notes

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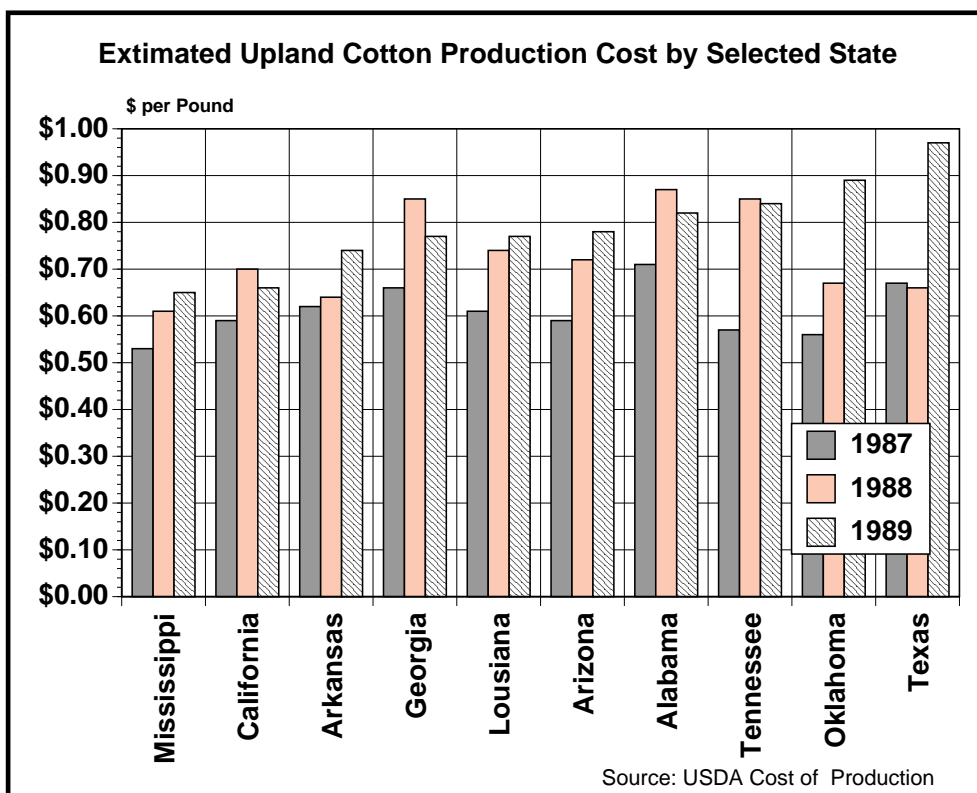
tion and harvesting cost, land cost, interest cost, and other overhead costs. The costs are also adjusted according to the actual state average yield for the year indicated.



### Cost of Production

Competition in the production of cotton has greatly changed in the past few years and these changes are very important for Arizona growers. These changes are changing the competitive advantage of various areas within the US. Some areas are experiencing conditions that are reducing the cost of production and other areas are experiencing conditions that are increasing costs. Weather and other cyclical or uncertain factors play a major part in cost of production differences among areas. Other factors are more structural in nature and renew the signal for farmer diligence and innovation. Before we think a bit about Arizona, let's examine some recent history from the major producing areas of the US as shown in the chart to the right.

Average cost of producing Upland cotton in 10 Cotton-Belt states are compared for the



The costs are total economic cost of production and include all produc-

years 1987 to 1989. Data for more recent years are not yet available. With the Adjusted World Price of cotton currently below the US loan rate, all of these costs seem extra ordinarily high.

### Recent Prices

	<b>May 28, 1993</b>	
	<b>Upland</b>	<b>Pima (ELS)</b>
	(¢/lb)	(¢/lb)
<b>Spot</b>	55.21	90.50
<b>Target Price</b>	72.90	105.80
<b>Loan Rate</b>	51.15	88.15
<b>Dec '93 Futures</b>	58.34	

**Note:** Upland Spot for Desert SW grade 31, staple 35;  
 Pima Spot for grade 03, staple 46, 5/14/93; Phoenix Loan Rates

Cost comparisons illustrate several important cost differences. First, some states have highly variable cost, e.g., Georgia, Alabama, Oklahoma, and Texas. This variability is due in large part to year-to-year weather or insect yield variability. When yields are good, costs are low and profits are high. Government

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## Estimated To-Date Production Costs

\$/lint lb (May 31)

The following table gives estimated production costs/lb to-date. These costs include both growing and fixed or ownership costs and are based on the displayed target yields. Producers with higher yields will have lower costs/lb if input costs are the same. Growers with lower yields will have higher costs/lb.

County	Target Yield	Growing Costs May To Date	Fixed Cost	All Costs To Date
Yuma	1,300	.02	.25	.31
La Paz	1,300	.01	.27	.36
Mohave	1,100	.01	.23	.33
Maricopa	1,250	.04	.23	.32
Pinal	1,300	.04	.26	.39
Pima	1,100	.01	.28	.35
Cochise	700	.09	.42	.71
Graham	1,050	.03	.31	.45
Greenlee	850	.02	.36	.47

Note: Based on Wade, et al., "1992-93 Arizona Field Crop Budgets", Various Counties, Arizona Cooperative Extension, Tucson, January 1992.

farm programs play an especially important role in such states. Costs for Arizona, California and the Mississippi Delta states have been much more stable costs. In these areas, inputs (and, therefore, costs per acre) are generally much higher.

Arizona cotton producers are facing several long term trends that signal needs for improvements in the overall costs of producing cotton on a per pound basis. Of course, the major factor is the cost of irrigation and insect control for many areas of the state. Controlling these costs is not simple and by no means costless. Growers will have to learn to substitute additional management and information for these inputs. Such approaches may introduce more uncertainty into irrigation and insect control practices.

But what about yields? In the 3 crop years since the USDA made the cost of production data available, Arizona cotton has experienced weather and insect pressures that have reduced Upland and ELS yields and increase costs. This period of variability requires that growers more clearly understand the dynamics of production, control their costs and work to obtain the best quality and best prices available.

In the short term, **cotton growers continue to depend on government farm programs and to absorb some of their capital investment to cover the total economic costs of cotton production.**

## Supply and Demand Estimates

Supply and demand estimates for 1992/93 and projections for 1993/94 are beginning to take shape as show in the table below. Revisions indicate that the 1992/93 Stock-to-Use Ratio for Upland cotton is holding steady at about 26%. Some improvement in the domestic mill use was offset by reductions in exports. Prices are holding steady as some uncertainty still exists about the final planted acreage. Foreign supplies continue to be about 40% above those of 1991/92.

The estimated Stocks-to-Use Ratio for ELS cotton has decreased from earlier months as exports increased. However, overall stocks are estimated to be almost double the ending stocks for 1991/92.

### U.S. COTTON SUPPLY AND USE ESTIMATES

ITEM	1992/93			
	1991/92	Mar	Apr	May*
<b>Upland:</b>				
<b>Million acres</b>				
<b>Planted</b>	13.80	13.03	13.03	13.43
Program	10.63	11.19	11.17	
<b>Harvested</b>	12.72	10.89	10.89	12.36
<b>Yield/harvested acre</b>	650	695	692	680
<b>Million 480-lb. bales</b>				
<b>Beginning Stocks</b>	2.26	3.58	3.58	4.40
<b>Production</b>	17.22	15.76	15.69	17.50
Total Supply	19.49	19.35	19.28	21.90
<b>Mill Use</b>	9.54	9.74	9.84	10.30
<b>Exports</b>	6.35	5.80	5.47	6.00
Total Use	15.89	15.54	15.30	16.30
<b>Ending Stocks</b>	3.58	3.96	4.08	5.70
<b>Percent</b>				
<b>Stocks-to-Use Ratio</b>	22.5	25.5	26.7	
<b>Foreign Stocks-to Use Ratio</b>	48.9	46.0	45.9	
<b>ELS:</b>				
<b>1,000 acres</b>				
<b>Planted</b>	250	263	263	
Program	25	109	109	
<b>Harvested</b>	244	260	206	
<b>Yield/harvested acre</b>	784	918	918	
<b>1,000 480-lb. bales</b>				
<b>Beginning Stocks</b>	82	121	121	
<b>Production</b>	398	497	509	
Total Supply	480	618	630	
<b>Mill Use</b>	65	65	65	
<b>Exports</b>	298	300	335	
Total Use	363	365	400	
<b>Ending Stocks</b>	121	243	220	
<b>Percent</b>				
<b>Stocks-to-Use Ratio</b>	33.3	66.6	55.0	

Source: USDA, ERS, "Cotton & Wool Situation & Outlook Update", May 4, 1993, Washington D.C. Note: \* 1993/94 Estimates are for all cotton.

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