

## 1992 Cotton Management Economic Notes

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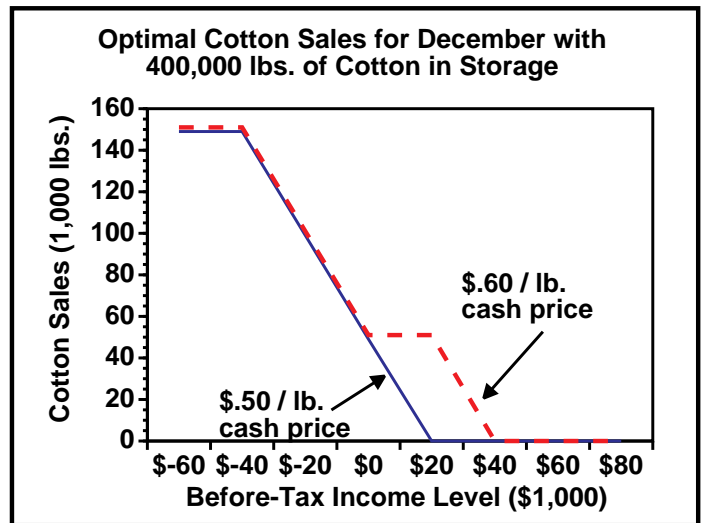
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### Tax Considerations When Marketing

Marketing decisions need to be scrutinized carefully at the end of the tax year when utilizing a cash accounting system, due to the progressive tax structure of state and federal income tax schedules. Even though cash prices may be disturbingly low — it may be wise to take advantage of near zero marginal tax rates this year. For example, if cotton is sold for \$.50/lb this December with a zero marginal tax rate the after-tax price received is \$.50/lb. If this cotton were sold in 1993 with a 15% or 28% marginal tax rate, \$.59/lb. and \$.69/lb. would be the minimum required prices needed to equal \$50/lb. for 1992, respectively. Other costs such as interest, storage, and insurance would increase the amount necessary to obtain an equivalent after-tax price.

The following figure shows how potential income tax liabilities affect “optimal” cash cotton sales for an illustrative Arizona cotton producer. Potential income tax liabilities for 1992 were calculated from a current before-tax income level whereas tax liabilities for future years were calculated from anticipated production, storage carryover, and future prices. “Optimal” results were calculated from a dynamic model based on historical cotton price movements from 1976 to 1990. The cotton producer is assumed to have a 375 acre cotton farm with a per acre yield of 1230 lbs. per acre. Storage costs were calcu-

lated at \$2.05/bale/month, interest charges were calculated at 6% after inflation, and it was also assumed that this producer is eligible for deficiency payments through acreage reduction program requirements. Managing cotton sales is the only assumed income tax management tool available to this producer.



If a producer in December has 400,000 lbs. of cotton to market and a before-tax income level less than \$-40,000, historical prices indicate that 150,000 lbs. or about 38% of this producer’s cotton should be marketed in December to take advantage of relatively low marginal tax rates. Equivalent results for January indicate that zero cotton sales should occur for cash prices below \$.60/lb., irrespective of this producer’s before-tax income level. As the before-tax income level of this producer increases, cash cotton sales decline and reach zero for before-tax income levels between \$20,000 and \$40,000 in December. High production costs for 1992 may have resulted in relatively low accumulated before-tax income levels for many producers. Annual variable and fixed costs of production for this illustrative producer were set at \$535/acre and

Recent Prices	November 13, 1992	
	<i>Upland (c/lb)</i>	<i>Pima (ELS) (c/lb)</i>
Spot	51.60	75.50
Target Price	72.90	105.80
Loan Rate	51.15	88.15
December Futures	56.75	

Note: Upland Spot for Desert SW grade 31, staple 35;  
 Pima Spot for grade 03, staple 46 11/6/92; Phoenix Loan Rates

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## Estimated Production Costs

\$/lint lb (Full Year)

The following table gives estimated production costs/lb. 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 & Harvesting Costs	Fixed Costs	All Costs
Yuma	1,300	.52	.24	.77
La Paz	1,300	.54	.27	.81
Mohave	1,100	.55	.23	.78
Maricopa	1,250	.44	.23	.67
Pinal	1,300	.51	.26	.78
Pima	1,100	.46	.28	.74
Cochise	700	.74	.42	1.16
Graham	1,050	.49	.30	.80
Greenlee	850	.58	.36	.94

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

\$240/acre, respectively. If your costs of production are lower (higher) than these figures your optimal cotton sales for December would be more (less) than what is shown in the accompanying figure.

Although every producer's income tax situation will be different, results suggest that potential tax liabilities influence cotton marketing decisions. Due to interest and storage costs, income tax considerations are most critical at the end of the tax year for cash accounting producers.

## Situation and Outlook

November is here and most of the cotton crop is harvested. Arizona's 1992 harvest is well ahead of average and it is time to look at a few facts about the cotton marketing situation.

The USDA's Economic Research Service has introduced a new publication called "Cotton & Wool Situation & Outlook Update" to be published 8 times a year as a supplement to the traditional Cotton & Wool Situation & Outlook report published in February, May, August and November. The first issue of the Update was published on November 4, 1992, and provides some very interesting information about the cotton industry. The following table summarizes some of the information through the October crop production estimates. This table shows several important pieces of information relative to the 1991/92 crop year which ended in August and the 1992/93 crop year that ends next August including the crop currently being harvested.

## U.S. COTTON SUPPLY AND USE ESTIMATES

ITEM	1992/93			
	1991/92	AUG	SEP	OCT
	Million acres			
<b>Planted</b>	14.05	13.42	13.42	13.42
Program	10.66	11.34	11.34	11.34
Non-Program	3.40	2.08	2.08	2.08
<b>Harvested</b>	12.96	11.40	11.20	11.20
<b>Yield/harvested acre</b>	652	696	683	681
	Million 480-lb. bales			
<b>Beginning Stocks</b>	2.34	3.90	3.80	3.69
<b>Production</b>	17.61	16.53	15.95	15.89
Total Supply	19.97	20.44	19.75	19.58
<b>Mill Use</b>	9.61	9.70	9.70	9.70
<b>Exports</b>	6.65	6.70	6.30	6.00
Total Use	16.25	16.40	16.00	15.70
Unaccounted	-0.01	-0.07	-0.05	-0.12
<b>Ending Stocks</b>	3.70	4.10	3.80	4.00
	Percent			
<b>Stocks-to-Use Ratio</b>	22.8	25.0	23.8	25.5

Source: USDA, ERS, "Cotton & Wool Situation & Outlook Update", November 4, 1992, Washington D.C.

First, forecasts of harvested acreage has decreased some what since the August estimate and yields have decreased to about 681 lbs/acre providing supplies of about 19.58 million bales. Domestic use estimates remain steady; while export estimates are lower. Total use for 1992/93 is estimated to be 15.70 million bales. Carry-over is estimated at about 4.00 million bales, up some 300,000 bales from August 1992. The stocks-to-use ratio is forecasted to increase to 25.5% from the 22.8%.

## November Production Report

The November forecast for US average cotton yield (which came out after the above report) stands at 694 lbs/acre, an increase of about 42 pounds over the final 1991 estimate and an increase of 13 lbs/acre from the October forecasted yield. For Arizona, yield forecasts continue to decline with the November estimate of yields of 1,077 lbs/acre for Upland and 715 lbs/acre for Pima. Estimated Upland yields are second to California. Both Upland and Pima yields are below 1991 estimates, continuing a downward trend of recent years.

Nationwide harvested acreage is 1.8 million acres below 1991 level and production has decreased 1.4 million bales to 16.2 million bales.