

## 1981 Outlook for Cotton Markets and Marketing

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Current expectations suggest that U.S. Consumption of Cotton will decline more than seven percent from a year earlier and exports will decline by about 40 percent. While this might suggest a collapse in the demand for cotton, all that is really happening is that there is not very much cotton available to satisfy U.S. and foreign demand. A relatively small 1980 U.S. cotton crop combined with small stocks at the beginning of the marketing year mean that cotton will be in relatively tight supply at least until the 1981 crop is harvested. Cotton prices should hold up well at least until the 1981 crop has been planted. After several years of threats, Arizona finally moved decisively ahead of Mississippi to become the third ranking state in total cotton production in 1980.

Research in the last year has solidly confirmed that the futures market is a very poor forecaster of cotton prices over the period from planting time to December 1. While cotton growers should not rely on the futures price as a dependable price forecast, the futures market performs well in several other functions that are generally of substantial benefit to them. The most direct benefit is that the buyer hedging in futures contracts has been fundamental to much of the forward contracting opportunities that Arizona growers have had in recent years.

Research has shown that in addition to being a poor forecaster, the error in the forecast has had a pattern which makes the error predictable to a large extent. The pattern has been that relatively high December futures prices at planting time lead to lower December futures price on December 1. The reverse is also true. With proper adjustments for inflation, the December 1981 futures price would have to be at 90 cents on April 1 to lead to the result that it would be the same on December 1.

Then 90 cents is a particularly important level on December 1981 futures. If this price is higher than 90¢ at planting time it is very likely that the price will fall between planting time and December 1. Forward contracting when the December 1981 futures price is below 90 cents should be limited. Forward contracting gets increasingly desirable as December 1981 futures rises above 90 cents.

The research results suggest that we should be able to place a good deal of confidence in the 90 cent price as being the correct estimate of this pivotal price. But the research suggests that the highest price that futures will reach cannot be forecast with any acceptable level of confidence. This leads to the conclusion that while forward contracting should generally not take place unless the December futures is above 90 cents at planting time growers should still try to distribute their sales over several points in time over several months.

### Some Comments on the Economics of Short-Season Cotton

Roger Selley, Agricultural Economist

Higher input prices, lower cottonseed revenues, increasingly difficult insect control problems and greater pumping depths have all reduced cotton profits in recent years from what they would have otherwise have been. Possible responses to these changes include increasing farm size and making adjustments to increase per acre profits. Increasing farm size can mean additional investment as well as additional management input. Per acre profits can be increased through:

1. increasing per acre revenues where any added costs are offset by added revenues or
2. reducing inputs per acre where the cost savings exceed any reduction in revenues

Shortening the growing season is one of several possible approaches to reducing inputs. Short-season cotton can be produced by late planting or early termination. Although the economic analysis of late planting is in many respects quite similar to that of early termination there are sufficient differences to leave late planting for separate treatment.

Early termination of cotton can be considered in two contexts. For example, anticipating early termination can result in the selection of a variety that is particularly well suited to a short season and the selection of cultural practices that fit well with a short season such as the application of less nitrogen fertilizer. There is some indication that short-season production can benefit from even more dramatic changes in cultural practices such as planting in 30 inch rows. After a commitment has been made to a particular production system however, the question of early termination can be raised in