

1992 Cotton Management Economic Notes

The University of Arizona • College of Agriculture • Tucson, Arizona, 85721
 Department of Agricultural Economics

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James C. Wade and Russell Tronstad
Extension Economists

Introduction

This informal note is the first of an irregular series designed to provide economic insight and educational information to Arizona cotton growers. These notes will address briefly both marketing and management issues directly related to the conditions that farmers are facing in 1992. Your written suggestions or comments are welcome.

1992 Crop Conditions

The new crop year has started with many good signs. After a wet and warm winter and some delayed planting, most cotton is planted and progressing well in the warm conditions that have prevailed for the past few weeks. Warm weather may prompt some growers to "water back" earlier than expected.

Market Notes

The 1991 cotton crop is history in several ways; it's done, but also it was history making. Never since the Great Depression has the United States produced so much cotton. Perhaps, it is significant that this large crop occurred during another economic downturn. The combination of these conditions have put significant downward pressure on 1991 cotton. Will 1992 be better? Well, maybe. The USDA has increased the required set-aside for Cotton Program participation, so there should be a somewhat smaller crop. 1992 carryover of the 1991 crop, while projected to be higher than in 1991, should not be extremely high. The current

Recent Prices	May 15, 1992	
	<i>Upland</i> (c/lb)	<i>Pima (ELS)</i> (c/lb)
Spot	61.50	88.00
Target Price	72.90	105.80
Loan Rate	51.15	88.15
December Futures	62.85	

Note: Upland Spot for Desert SW grade 31, staple 35; Pima Spot for grade 03, staple 46 (5/8/92); Phoenix Loan Rate.



recession will likely dampen domestic consumption. Exports should remain high because of low world wide prices.

Look for additional upward movement in both Upland and Pima cotton prices before the end of the 1991 season on July 31.

Management Notes

Cotton farming in Arizona is for one purpose; **produce a product to make money.** This hard fact is not lost on the cotton farmer, but an occasional reminder doesn't hurt. Arizona cotton farmers can take pride in the quality and yields of both Upland and Pima cotton grown in the state. The hard fact is that making money farming cotton in Arizona is becoming more difficult. **What's a farmer to do?**

There are no simple answers. Some facts will not go away. To produce cotton land must be prepared, seed planted, fertilizer applied, irrigation water added, pest controlled and, finally, the crop harvested. But if it were that easy and profits were automatic, everyone would be doing it. Water costs are high, constraints on production are increasing and worse prices are in the toilet. The resulting squeeze is forcing growers to look for new ways to make money, even those continuing to grow cotton.

Arizona growers should not forget that what got them into the cotton business was high yield and high quality. **But at what cost?**

The reemergence of lower cost growers in the southern states is continuing to keep the market down. Yes, California is having water problems and Texas is always a question. However, numerous factors point to a need for Arizona growers to find ways to contain costs of production. One way to reduce costs, of course, is to seek relief from high water costs. Some relief appears to be coming in the form of lower water costs in exchange for recharge credits.

But are there other ways? Can reduced water costs alone make the difference in the cost of producing cotton in Arizona? Let's examine some ways that costs could be reduced.

Fixed Costs: A major factor in Arizona farming are those costs associated with owning land and irrigations systems. Before the season ever starts the grower has to figure out how to cover the costs of land rent and the water assessment. Of course there also are the costs of owning all of that equipment and meeting the payroll. No small amount of money is required to cover just the costs of getting started.

Water Costs. The most obvious way to reduce cost is to reduce the quantity of irrigation water used. This could be accomplished in several ways; some are very expensive, others less so. Perhaps, the easiest and most obvious way to cut water use is to simply irrigate less. But can the cotton make the yields and quality needed for profits? Close monitoring of water use during the season can cut waste. Monitoring can also reduce irrigation by lessening the amount of water applied during the season. Another way to reduce water use is to terminate irrigation earlier. The question that growers must ask is: ***Will the expense of additional irrigation be made-up in added yields and revenues? No single answer will do. The answer will be different for each source of water. Farmers with inexpensive water will be less concerned with cost of extra irrigations and in most cases only minor improvements in yield are required to cover the cost of additional water. Few farmers have such inexpensive water. The higher the water cost the more you have to increase yield to pay for the added irrigations.***

Insecticide Costs. The next largest cost item is for insecticide. Can Arizona cotton growers afford to "fight the good fight" against insects with expensive and decreasingly available chemicals? A war with limited resources must be a war fought with carefully planned strategies; strategies that look at the pest and use an entire arsenal of weapons. One strategic weapon is to use the natural instincts of insects to control their population. One nice thing about this strategy is that it is cheap. But it also requires careful planning. Hit the bugs when they are at reduced numbers and when they are the weakest. To reduce dependence on expensive chemical treatments requires a sustained and directed strategy from the beginning of the season. Much of Arizona's crop has been called "sticky" cotton, loosing at least one grade as a result of the honeydew left by whiteflies and other late season insects. In cotton, the strategy starts before planting and never ends.

Planting Costs. Only small cost reductions are available at planting. Seed costs are similar for all varieties. The major cost reduction is in the plant population. Optimal

planting levels will save some costs from the high levels that are often used. **More important** is the choice of an appropriate variety to carry out a season-long strategy and provide the yields and quality desired. Getting off to a good start is every farmer's most fond desire.

Plant Nutrients Costs. You have to feed the plants. But if you overdo it, profits are reduced. More and more farmers are realizing that wasted nutrients are expensive nutrients. Using pre-season soil testing and in-season petiole testing can provide information about what nutrients are required to provide optimal cotton growth and keeps costs down.

Weed Control Costs. It is bad enough to compete with the world market but to let the weeds take the moisture and to deteriorate the quality of the crop is adding insult to injury. Weed control is usually not extremely expensive. However, it is very important in maintaining healthy plants and high quality cotton.

Defoliation Costs. Terminating the crop is essential in Arizona, but it isn't easy. Water must be stopped and chemicals applied to force the plant to drop its leaves. These chemical costs can be high. Proper termination strategies can reduce costs and provide the level of defoliation necessary for efficient harvest of high quality cotton.

Harvesting Costs. Harvest costs are also high. This is another tough area to reduce costs. Cotton pickers are expensive to own and operate. Equipment should be in good repair and operated properly. The real questions is, Are you getting enough cotton to pay for the second time over? The same question can also be asked about rood cotton.

Cotton Growers with Attitudes

In summary, the goal is to make money growing cotton. To succeed at this goal, growers can no longer simply work for the highest yields. ***High yields are great, but with relatively low cotton prices they can be very costly.*** Extra time and inputs required to get the last 10 to 20% of final yields may be too costly. Growers should look to maximize profits by examining the returns to inputs; especially late season inputs such as irrigation and insecticide treatments. A new "lean and mean" attitude will be required to compete in the new world economics with decreasing subsidies and increasing competition. *This series of notes addresses economic issues facing Arizona cotton growers in 1992 by examining specifics of the choices outlined above.*

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