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2004 Cotton Management Economic Notes

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## Farming Your Net Price Received

Cotton prices have increased noticeably from two years earlier as described in the figure below. In February 2002 the Adjusted World Price (AWP) was less than  $30\phi/lb$ . and it presently exceeds  $60\phi/lb$ . The nearby December 02 Futures was around  $40\phi/lb$ . while the December 04 Futures has been above  $65\phi/lb$ . How will changes in the market impact your net price received for the 2004 crop? An illustrative look at the role of both crop insurance and government payments are provided below to examine this question.

Arizona Crop Insurance Returns. The upper table on the following page gives the historical payout received for each \$1.00 of producer premium and signup costs expended for the three general crop insurance policy options available. Overall for the last five years, Arizona cotton producers have received \$3.46, \$2.56, and \$2.78 back in indemnity claims for each dollar expended on Crop Revenue Coverage (CRC), Actual Production History - Buy Up (APH-BUP), and APH-Catastrophic (APH-CAT) policies, respectively. The high return rate reflects that the government subsidizes anywhere from 30% to 100% of the premium cost of these policies to the producer. In general, as coverage increases, the per acre dollar subsidy increases while the percentage of the total premium subsidized decreases. Because the entire premium is subsidized for

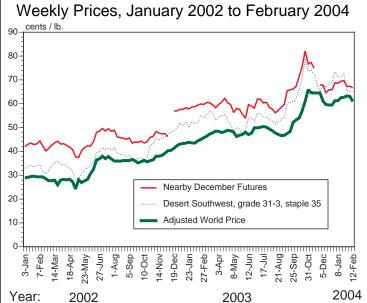
Recent Prices (February 13, 2004)		Pima (ELS) (¢/lb.)					
Spot - uncompressed	65.18	100.75					
Mar '04 Futures	66.35						
Jul '04 Futures	69.31						
Dec '04 Futures	65.70						
Adj. World Price	60.32						
Note: Upland Spot for Desert SW grade 31-3, staple 35, add 300 points							

Note: Upland Spot for Desert SW grade 31-3, staple 35, add 300 poin for compressed bales, Pima Spot for DSW grade 03, staple 46. Volume 11, Number 1, Statewide



the minimum coverage of APH-CAT, payout rates do not reflect the coverage provided, or even the best "crop insurance investment." The average per acre indemnity claim less producer premium during the last five years for CRC, APH-BUP, and APH-CAT policies has been \$105.75, \$26.40, and \$0.28, respectively. Based on past performance, however, one cannot definitely say a policy option will outperform for this year for a given producer. But since all producers face essentially the same market price and CRC provides the highest per acre premium subsidies, CRC is an attractive option over the long-term. CRC has had the highest historical payout and per acre return over the last five years, yet it has accounted for less than 5% of the insured acres in the last two years. APH-BUP has been the most popular product over this period, accounting for about 62% of all insured acres.

CRC establishes a minimum revenue base for the producer by considering both price and yield factors. Since the price election for CRC is based on December Futures prices for the January 15 to February 15 period, an attractive price election for CRC is expected relative to the 59¢/lb. price election available under APH policies for 2004.



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Historical payout for each \$1.00 of AZ cotton producer premium & signup costs, and per acre indemnity claims and producer costs by insurance option

	<u>1999</u>	2000	<u>2001</u>	2002	2003
CRC: historical payout	\$ 6.41	\$ 1.34	\$ 8.29	\$ 0.67	\$ 0.58
indemnity/acre	\$264.05	\$ 96.82	\$356.83	\$ 23.87	\$ 30.14
producer cost/acre	\$ 41.21	\$ 72.01	\$ 43.03	\$ 35.52	\$ 51.35
APH-BUP: historical payout	1.70	2.17	2.52	2.96	3.44
indemnity/acre	32.77	51.29	37.97	46.21	52.19
producer cost/acre	19.29	23.62	15.08	15.62	15.17
APH-CAT: historical payout	1.81	6.12	1.30	4.67	0.00
indemnity/acre	0.19	0.55	0.14	0.53	0.00
producer cost/acre	0.10	0.09	0.11	0.11	0.10
All Cotton Policies: payout	3.22	1.95	4.56	2.63	2.88
indemnity/acre	39.13	32.37	59.10	29.92	34.16
producer cost/acre	12.14	16.57	12.95	11.36	11.85
Note: Average payout rates and	l indemnity cl	aims per pla	inted acre for	r 2003 will lik	ely increase

Note: Average payout rates and indemnity claims per planted acre for 2003 will likely increase some since not all 2003 crop year policies have been settled as of February 12, 2004. Source: www.rma.usda.gov – "Participation Data."

price for a region since CCPs are based on the average U.S. farm price. Although recent prices place Arizona above the U.S. average, the Arizona farm price averaged 2.85¢/lb. less than the US farm price for the 1998 to 2002 crop marketing years.

As illustrated below, obtaining a CRC policy on your 2004 crop can allow for a substantial net price enhancement if the market drops. Using average price spreads for recent years, an Arizona price of around 59¢/

Given that CRC, Loan Deficiency Payments (LDPs), lb. rest and Counter Cyclical Payments (CCPs) are tied to prices, the table below provides an illustrative look at how changes in the Desert Southwest (DSW) spot market will impact upcoming revenues or "net cash" prices for 2004. For the last five crop marketing years (1998 to 2002), the Arizona farm price has averaged 6.8¢/lb. more than the AWP – creating a price floor for actual cotton sales at around 58.8¢/lb. A strong regional (*www*.

price premium is not only desirable for having a better sale price but it can also increase the effective target

lb. results in the lowest "net cash" price received.

Signup Deadline. Any new policies or policy changes need to be made before the sales closing date of 28 February, 2004. The CRC price election and the high and low price factors are announced on 18 February, 2004. At this time a more accurate premium quote and coverage estimate can be obtained from RMA's website (*www.rma.usda.gov/tools/* – "Calculate Premiums"). Insurance agents can also be located from this site using the "Agent Locator" to obtain official quotes.

## Relationship of DSW spot price realized to net cash price received after accounting for government program and potential CRC claims

Realized DSW Spot Price	38.0	44.0	48.0	52.0	56.0	60.0	64.0	68.0	72.0	78.0
Loan Value	14.0	8.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AWP versus DSW Spot	6.8	6.8	6.8	6.8	2.8	0.0	0.0	0.0	0.0	0.0
Net Production Price <sup>1</sup>	58.8	58.8	58.8	58.8	58.8	60.0	64.0	68.0	72.0	78.0
"Decoupled Payments" (DP)										
Fixed Payment	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Counter Cyclical Payment	11.6	11.6	11.6	8.8	5.5	2.1	0.0	0.0	0.0	0.0
Net Price after DP <sup>2</sup>	76.0	76.0	76.0	73.3	69.9	67.7	69.6	73.6	77.6	83.6
CRC Value Net Price after DP & CRC <sup>3</sup>	15.1 <i>91.1</i>	9.2 <i>85.2</i>	5.3 <i>81.3</i>	1.4 74.6	-2.5 67.3	-4.7 63.0	-4.7 64.9	-4.7 68.9	-4.7 72.9	-4.7 78.9

<sup>1</sup> Loan value reflects the loan rate of 52¢ less the DSW (DSW 31-3/35) spot price. The Adjusted World Price (AWP) has averaged 6.8¢ per pound less than the DSW spot for the five marketing years of 1998 to 2002.

<sup>2</sup> The fixed payment of 5.6¢ is based on a 1,338 lb. Production Flexiblity Contract yield (weighted average for Pinal and Maricopa counties) and 1,350 lb. actual yield. Counter Cyclical Payment rate is based on the DSW spot being 2.85¢ (1998 to 2002 average) less than the average U.S. price and on an updated Farm Service Agency yield of 1,338 lbs. <sup>3</sup> Crop Revenue Coverage (CRC) assumes a 1,350 lb. insurable and realized yield for Maricopa County with an 85% coverage level, \$0.68 price election, and a high and low price factor of 0.07. Price election and factor values for CRC cotton will be announced on 18 February, 2004 and will be available from RMA's website (www.rma.usda.gov).

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