# AN ESTIMATED 2001 TEXAS-OKLAHOMA PRE-SEASON PRICE SCHEDULE BASED ON MARKET HISTORY Jason Ward, Sukant Misra and Don Ethridge Cotton Economic Research Institute Department of Agricultural and Applied Economics College of Agricultural Sciences and Natural Resources Texas Tech University Lubbock, TX

# Abstract

Accurate price reporting in the cotton industry is important. The DPES preseason price schedule for Texas and Oklahoma is calculated each year to provide a means of examining the market history of quality premiums and discounts. This provides participants in the marketplace with access to a timely and reliable source of information that presents an accurate representation of the cotton market.

# Introduction

The Daily Price Estimation System (DPES) is a computerized, econometric price analysis system that is maintained and operated by the Texas Tech University's Cotton Economics Research Institute, Department of Agricultural and Applied Economics. The DPES uses sales of cotton from electronic cotton markets to estimate and report prices and quality premiums and discounts for various quality combinations in West Texas and East Texas/Oklahoma producer markets. This system uses a set of computer programs and established statistical procedures to estimate cotton prices and quality premiums and discounts on a daily basis (Brown et al.; Brown and Ethridge).

### **Pre-Marketing Year Price Discovery**

The Commodity Credit Corporation (CCC) loan program makes nonrecourse loans to producers based on a loan schedule that assigns loan levels for base quality with premiums and discounts for various quality deviations from that base. Over time, this loan schedule has come to be used for a variety of price determination purposes ranging from allocation of dividend payments to members of marketing associations to forward contract pricing. This schedule has also been used by the industry as a price discovery mechanism to determine cotton prices for the upcoming marketing year. As such, this demonstrates the importance to the industry of having a means of examining the price structure of the market before the season starts in order to facilitate a number of marketing functions.

# **DPES Pre-Season Price Schedule**

Based on market history, Texas Tech University has developed a method of estimating a price schedule for the upcoming marketing year. This schedule is meant to serve as an additional pre-marketing year price discovery tool. This schedule is an extension of the work started by Carr and Ethridge in which the loan schedule used by the CCC was combined with DPES annual crop estimates (beginning in 1989) to create a price schedule, which had been adjusted for the coming year using actual market history.

Beginning in 1989, a weighted average of prices by number of bales per region (West Texas and East Texas/Oklahoma) was taken for the first seven months of each crop year. These average prices were then averaged with the 1989 CCC loan schedule to derive the adjusted 1990 DPES pre-season price schedule. The following year, the 1990 DPES price schedule was adjusted using a weighted average of prices for the first seven months of the 1990 crop year to derive the 1991 DPES pre-season price schedule. This method was used to adjust the DPES price schedule for each successive marketing year up to the current crop year (2001), which is presented in Table 1.

Although it is not possible to accurately forecast cotton prices or price movements for any forthcoming marketing year, the DPES pre-season price schedule does provide a means of examining prices, premiums and discounts based on actual market history, which may be used to provide buyers and sellers with an overall picture of the spot cotton market in Texas and Oklahoma.

### **Conclusions**

Because of the importance of accurate price reporting to the cotton industry, participants in the marketplace should have access to a timely and reliable source of information that presents an accurate representation of the cotton market. Therefore, the DPES pre-season price schedule for Texas and Oklahoma is calculated each year and is distributed on a request basis to the cotton industry so as to provide additional price information to examine the market history of quality premiums and discounts. The pre-season price schedule is also posted on the Cotton Economics Research Institute web page, which can be accessed at (http://www.aeco.ttu.edu/DPES/).

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#### References

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Staple Length											
		26 - 28	29	30	31	32	33	34	35	36	37+
	11	-1002	-829	-625	-445	-266	-90	85	257	427	594
	21	-1002	-829	-625	-445	-266	-90	85	257	427	594
	31	-1017	-846	-697	-464	-287	-111	63	233	402	490
	41	-1061	-894	-697	-518	-343	-171	Base	168	333	490
С	51	-1177	-1016	-823	-653	-484	-318	-153	8	168	324
0	61	-1375	-1225	-1041	-926	-722	-564	-410	-258	-108	39
1	71	-1670	-1534	-1365	-1217	-1071	-927	-784	-646	-510	-377
0	12	-1137	-970	-773	-599	-427	-256	-87	79	243	403
r	22	-1137	-970	-773	-599	-427	-256	-87	79	243	403
	32	-1166	-1001	-857	-633	-462	-293	-125	39	201	285
	42	-1239	-1079	-887	-719	-551	-386	-222	-62	96	251
	52	-1374	-1221	-1036	-874	-713	-554	-398	-244	-94	55
G	62	-1572	-1430	-1255	-1145	-951	-801	-654	-510	-368	-230
r	23	-1297	-1138	-950	-784	-620	-457	-296	-137	19	173
а	33	-1337	-1180	-1043	-830	-668	-507	-347	-190	-37	45
d	43	-1424	-1271	-1090	-930	-752	-615	-460	-307	-158	-10
е	53	-1569	-1424	-1249	-1096	-945	-794	-647	-501	-358	-218
	63	-1769	-1635	-1470	-1366	-1183	-1042	-904	-768	-635	-504
	34	-1573	-1427	-1300	-1103	-952	-802	-654	-508	-365	-288
	44	-1673	-1533	-1365	-1217	-1071	-925	-782	-641	-503	-366
	54	-1826	-1693	-1531	-1389	-1268	-1112	-975	-841	-710	-580

 Table 1. 2001 DPES Pre-Season Price Schedule for Texas and Oklahoma.

 Color Grade and Staple Premiums and Discounts in Points/lb.<sup>a</sup>

Micronaire Diff	erences	Leaf Grade Diffe	erences	Uniformity Dif	ferences	Strength Differences	
Mike Range	Disc.		Prem./		Disc./		Disc./
<u>&lt;</u> 24	-921	Leaf Grades	Disc.	Uniformity	Prem.	Grams/Tex.	Prem.
25 - 26	-779	1	138	<u>&lt;</u> 77	-78	18	
27 - 29	-561	2	109	78	-60	19	-160
30 - 32	-339	3	71	79	-42	20	-140
33 - 34	-217	4	Base	80	-16	21	-120
35 - 49	Base	5	-103	81	Base	22	-92
50 - 52	-333	6	-234	82	16	23	-74
<u>&gt;</u> 53	-475	7	-390	83	40	24 - 25	-53
		Level 1 Level 2		84	45	26	-13
Bark		-274 -658		85	59	27 - 28	Base
Preparation		-1226 -1692		<u>&gt;</u> 86	72	29	10
Other Ext. Matter -856 -949						30	18
						31	31
						<u>&gt;</u> 32	39

<sup>a</sup>100 points = 1 cent