

COTTON GINNING, HANDLING, AND MARKETING  
IN THE TEXAS-OKLAHOMA ROLLING PLAINS

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Introduction

The Rolling Plains region encompasses 60 counties including 20 counties in Oklahoma and 40 in Texas. For purposes of this report and related work, the Rolling Plains is divided into Northern and Southern areas with each area being further divided into subareas A and B on the basis of cotton yield, acreage, and production (figure 1).

The Rolling Plains is typically the last area to plant and harvest cotton in the United States (other than some double cropped cotton after grain in Mid-Arizona and the Imperial Valley). Harvest typically peaks in mid-December and is nearly completed by February.

Primarily a non-irrigated region, rainfall patterns and amounts have a significant impact on planted and harvested acres, yield, and the quality of cotton produced in the Rolling Plains. For these reasons, there is relatively little forward contracting of cotton. In 1976, for example, about 25 percent of that crop was forward contracted by the first of August compared with 60 to 80 percent in the major Southern and Western cotton states. Contracting usually occurs after the crop is planted and growing well. Contract agreements cover a specific acreage with price being related to the loan values for quality premiums and discounts. Less than one-half of one percent of the Rolling Plains cotton acreage was placed under contract in 1974 and 1975.

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# ROLLING PLAINS AREA

## TEXAS-OKLAHOMA

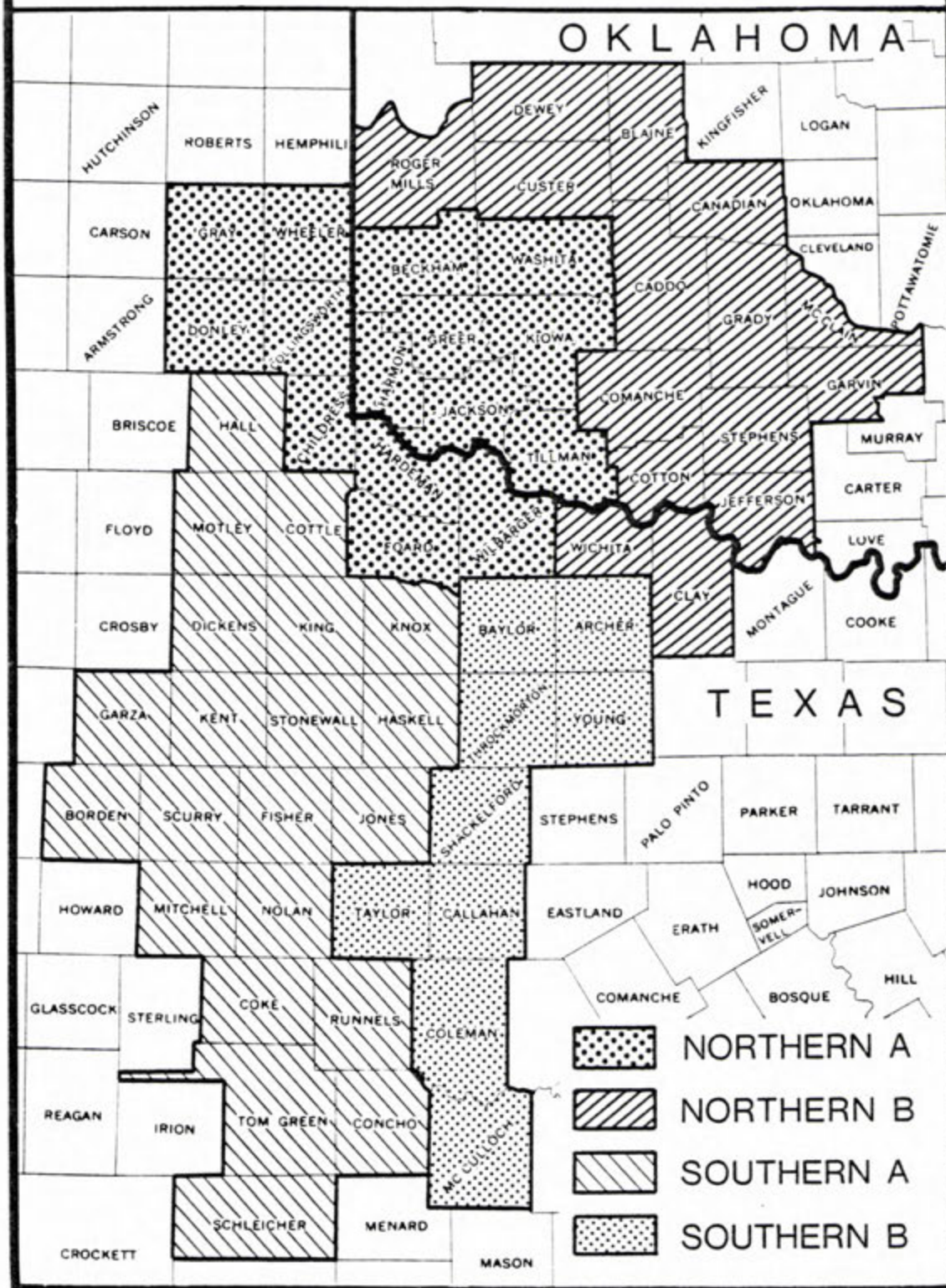


Figure 1.

Most cotton in these counties is composed of the Lankart and Lockett varieties. A small acreage of Western Stormproof, Blightmaster, Tamcot and other varieties is also planted in the Southern Rolling Plains. The predominant grade is Strict-Low-Middling (SLM) light spot with staple lengths of 31/32 and one inch. Fiber strength is typically good with a Pressley of 80 or higher. The cotton from this region usually falls in the 3.5 to 4.9 micronaire (mike) range. Quality varies considerably from year to year and among local areas in a given year mainly on account of rainfall and other weather factors.

Gins (acting as agents for merchants or mills), local merchants, belt-wide merchants, and Plains Cotton Cooperative Associations (PCCA) participate in merchandising cotton from the Rolling Plains.

#### Seed Cotton Handling and Ginning

Cotton producers in the Rolling Plains area assume responsibility for transporting seed cotton from farm to gin mostly in their own trailers. In the Texas Rolling Plains, approximately 20 percent of the gins own cotton trailers (an average of about 86 per gin) which are made available to producers as needed for hauling cotton. In Oklahoma, however, the State Corporation Commission classes gins as a public utility, and does not allow them to own or furnish cotton trailers to producers. Although on the books for some time, enforcement of this regulation was begun in 1973 because some gins were furnishing trailers without charge to entice producers to gin with them. In 1975, a few gins still owned trailers but charged for their use; by the 1976 harvest no gins owned cotton trailers for grower use. Oklahoma cotton growers were forced to purchase their own trailers, usually from the gins that were providing them.

Most trailers, both farmer and gin owned, tend to be in fairly good mechanical condition and to have a capacity ranging from three to five bales of machine stripped cotton. The newer larger trailers consist of all metal construction while older trailers, especially those in Oklahoma, are made of wood. Farm pickup trucks are used to tow trailers between farm fields and gin yards.

Adequate trailer and ginning capacity are available over most of the Rolling Plains. Virtually no seed cotton was rick or module stored in Oklahoma prior to the 1977 crop. A small amount of cotton is rick stored when trailers are in short supply in the Texas Rolling Plains. Several module builders are being used in the lower part of the Southern Rolling Plains.

The module handling system is increasing in use, especially in the larger gin communities and by the larger cotton producers. At least one gin moduled seed cotton at the gin yard in 1975 and 1976. In the Rolling Plains, as in other regions where seed cotton storage is a common practice, various rebates, cost-sharing, equipment ownership, and operating arrangements exist between gins and producers who store some seed cotton.

About 5,000 acres of irrigated machine picked DPL-16 cotton are grown in Jackson county Oklahoma. During the 1975-76 season, gins in Oklahoma required about 1,354 pounds of machine picked and 2,500 pounds of machine stripped seed cotton to produce a net weight bale of 480 pounds. Ginning charges are the same regardless of the method of harvest. Only a very few cotton pickers operate in the Texas Rolling Plains, harvesting only a fraction of one percent of the crop.

Trailer use in this region is similar to the Texas High Plains, probably not averaging over four or five trips to the gin per trailer per year. Ginning typically cannot keep up with the harvest during the peak of the season; thus, trailers are used for temporary storage as well as assembly of seed cotton.

Most growers in the more concentrated cotton areas are located within 10 to 15 miles of two or three gins. Much of the cotton is located within a five-mile distance of a gin. The average haul in the more concentrated cotton areas is about five miles; few hauls exceed 15 miles. In the less concentrated areas with only one or two gins in a county, growers usually have access to only one gin within a reasonable hauling distance. In a few cases cotton is hauled 40 miles to the nearest gin. Thirty-three of the 60 counties had three or fewer active gins in 1974.

Most of the gins are located a few miles apart; only in a few cases would one find two or three gins located side by side or across the road from each other. Gins are generally single plant operations; only a few cooperative gins operate more than one plant. Oil mill or line company gins abound in the Rolling Plains. West Texas Gins, Stamford Cotton Oil Company, Sweetwater Cotton Oil Company (Planters Gins), Anderson Clayton (Paymaster Gins), and Elk City Gins and Washita Valley Gins (departments of Chickasha Cotton Oil Company)--all are line companies. These firms together operate about 75 gins or 29 percent of the total plants.

The cooperative form of gin organization predominates in the Rolling Plains, accounting for 120 out of 263 (46 percent) of the ginning firms (table 1). Cooperatives are more common in Oklahoma, accounting for 55 percent of the gin plants compared to 40 percent in the Texas Rolling Plains. An estimated 75 percent of the Oklahoma and 60 percent of the Texas Rolling Plains crops are processed at cooperative gins.

The highest average number of bales per gin was 6,128 in 1973 for subregion A in the Southern Rolling Plains. The lowest average volume per gin was 838 bales in 1975 for Oklahoma subregion B in the Northern Rolling Plains. For the entire Rolling Plains, gins averaged 5,153, 2,703, and 3,060 bales for the 1973, 1974, and 1975 crop years respectively.

Table 1. Rolling Plains Area: Number of gins and volume ginned in the 1973, 1974, and 1975 seasons

Areas	Number of gins, 1974			Total ginnings			Average volume per active gin <sup>1/</sup>			
	Total	:Active	:Idle	:Coop.:	1975	: 1974	: 1973	: 1975	: 1974	: 1973
	Number			Bales			Bales			
NO Rolling Plains A	95	93	2	50	240,387	328,715	488,387	2,585	3,535	5,251
NO Rolling Plains B	39	38	1	17	33,090	86,791	103,643	871	2,284	2,727
Total	134	131	3	67	273,477	415,506	592,030	2,088	3,172	4,519
SO Rolling Plains A	126	119	7	48	515,984	282,184	729,245	4,336	2,371	6,128
SO Rolling Plains B	18	13	5	5	15,444	13,154	33,968	1,188	1,012	2,613
Total	144	132	12	53	531,428	295,338	763,213	4,026	2,237	5,782
Total - Rolling Plains A	221	212	9	98	756,371	610,899	1,217,632	3,568	2,882	5,744
Total - Rolling Plains B	57	51	6	22	48,534	99,945	137,611	952	1,960	2,698
Total - Rolling Plains	278	263	15	120	804,905	710,844	1,355,243	3,060	2,703	5,153
Texas:										
NO Rolling Plains A	35	33	2	13	97,131	107,938	183,472	2,943	3,271	5,560
NO Rolling Plains B	2	2	0	1	2,930	4,199	7,091	1,465	2,100	3,546
Total	37	35	2	14	100,061	112,137	190,563	2,859	3,204	5,445
SO Rolling Plains A	126	119	7	48	515,984	282,184	729,245	4,336	2,371	6,128
SO Rolling Plains B	18	13	5	5	15,444	13,154	33,968	1,188	1,012	2,613
Total	144	132	12	53	531,428	295,338	763,213	4,026	2,237	5,782
Total - Texas A	161	152	9	61	613,115	390,122	912,717	4,034	2,567	6,005
Total - Texas B	20	15	5	6	18,374	17,353	41,059	1,225	1,157	2,737
Total - Texas Areas	181	167	14	67	631,489	407,475	953,776	3,781	2,440	5,711
Oklahoma:										
Oklahoma A	60	60	0	37	143,256	220,777	304,915	2,388	3,680	5,082
Oklahoma B	37	36	1	16	30,160	82,592	96,552	838	2,294	2,682
Total - Oklahoma areas	97	96	1	53	173,416	303,369	401,467	1,806	3,160	4,182

Source: Cotton Ginning in the United States, Crop of 1974 and Crop of 1975; U.S. Dept. of Commerce, Bureau of the Census and 1975 Ginners' Red Book, Texas Cotton Ginners' Association, Dallas, Texas.

<sup>1/</sup> Based on active gins in 1974.

Ginning charges are normally based on a charge per hundredweight of seed cotton plus a bagging and ties charge. Competition on account of low volume, poor turnout, and lower seed prices in 1975, caused many gins in the Southern Rolling Plains to "gin for seed." This resulted in insufficient revenue to cover costs in many cases. In the Texas Rolling Plains, ginning charges were typically \$1.00 per hundred pounds of seed cotton plus \$7.50 per bale for bagging and ties in 1975. Additional charges included \$.40 for insurance, and \$1.50 per bale for warehouse transportation.

The ginning charge in Oklahoma, set by the State Corporation Commission, was \$1.00 per hundred pounds of seed cotton plus \$7.50 per bale for bagging and ties during the 1975 and 1974 seasons. Other grower charges included \$0.20 per bale for National Cotton Council dues and \$0.10 per bale for Oklahoma Cotton Research. Transportation to the warehouse from the gin ranged from \$0.85 to \$3.70 and averaged \$1.50 per bale.

Gins in the Rolling Plains tend to be small and old for the most part. The structure of the industry is very similar to the Northern High Plains gin industry. The Rolling Plains does not have as much blowing sand and dirt in the cotton as the High Plains; therefore, gins do not require quite as much maintenance and replacement of piping and other parts as on the High Plains. Rated capacity of gins in the Rolling Plains in 1974 ranged from 4.9 to 27.3 bales per hour and averaged 10.3 bales per hour.

The number of active gins has steadily declined over the past few years. Two used gins from the High Plains have been moved into the Southern Rolling Plains, one to a newly developed cotton producing area, the other to a location where the owner feels he can compete with existing operations.

Cotton ginning is the major source of revenue for gins, even though one-half of the gins on the Rolling Plains received revenue from activities



other than ginning. Selling gin trash was reported by 25 percent of the gins; other activities included merchandising cotton and other planting seeds, handling grain, feeds, farm supplies, and hardware.

Compared with other areas, gins in the Rolling Plains have been slow to install universal density presses. Two universal density presses operated in the Southern Rolling Plains in 1975 for the first time, a third press was installed for the 1976 crop. All other gins have modified flat bale presses. The gins with the universal density presses also have mechanical samplers which were the only two in the region in 1975. In the Northern Rolling Plains, three gins were equipped with universal density presses, one with flat bale press and the balance with modified flat presses. There were no mechanical samplers in 1975 or 1976.

For the Rolling Plains as a whole, approximately 83 percent of the bales were sampled at the warehouse, 15 percent at the gin yard and 2 percent by mechanical samplers in 1975 (table 2). In 1976, the number of both mechanically and warehouse drawn samples increased, accounting for 9 percent and 86 percent, respectively, with a 10 percentage point decrease in the number of bales sampled by gin employees. A small volume of cotton in the San Angelo area historically is not classed.

The members of each of the Oklahoma cooperative gins chose not to become part of the American Cotton Growers denim mill and TEXCOT Pool sales program. Five gins in Nolan, Scurry and Mitchell counties in the west central Southern Rolling Plains are members of the American Cotton Growers denim mill and TEXCOT Pool. This cotton is warehoused at Rolling Plains Cooperative Compress, Sweetwater, and if selected, it is shipped without compression to the mill at Littlefield, Texas.

Table 2. Origin of samples by classing office, Rolling Plains region, 1975-76 and 1976-77 seasons <sup>1/</sup>

Classing Office	Sampling method-bales				Sampling method-gins				Total gins
	Mechanical	Warehouse	Commer- cial	Gin Yard	Mechanical	Warehouse	Commer- cial	Gin yard	
Bales classed	Number	Percent of bales	Number	Percent of gins	Number	Percent of gins	Number	Percent of gins	Number
<b>1975-76 season:</b>									
Abilene, Texas	403,474	2	84	14	1	87	0	12	91
Munday, Texas	71,320	10	46	44	4	71	0	25	24
Altus, Okla.	201,441	0	88	12	0	80	0	20	104
Memphis, Texas	213,745	0	90	10	0	86	0	14	44
Combined	889,980	2	83	15	1	82	0	17	263
<b>1976-77 season:</b>									
Abilene, Texas	485,894	14	81	5	7	89	0	4	93
Munday, Texas	73,363	28	44	28	13	70	0	17	23
Altus, Okla.	201,149	0	100	2/	0	99	0	1	100
Memphis, Texas	215,257	0	100	0	0	100	0	0	44
Combined	975,663	9	86	5	3	93	0	4	260

<sup>1/</sup> Source: Origin of Samples-Western Region, 1975-76 Season and 1976-77 Season, Agricultural Marketing Service, Cotton Division.

<sup>2/</sup> Less than .5 percent.

Transportation, Warehouses and Compresses

Storage space in the Rolling Plains demands a premium when a large harvest, similar to that of 1973, occurs. Several cotton warehouses in Oklahoma have been closed, torn down, or converted to other uses since 1973. In years of a large crop, temporary outside yard storage is common in warehouses in the Rolling Plains. Bales are also moved to warehouses in the High Plains and Blackland areas, and occasionally to Gulf port warehouses.

Cotton bales are moved to warehouses from gin yards by commercial trucks in Oklahoma except in the cases of a very few gin owned trucks. Charges, which are not included as part of ginning or bagging and ties, ranged from \$0.85 to \$3.70 per bale in 1975 depending on distance. The average charge was about \$1.50 per bale. Texas gins which own trucks for hauling bales to the compress usually include this service as part of the ginning charge. Gins engaging commercial trucking firms usually pass the cost along to the farmer as an additional charge averaging about \$1.25 per bale.

Texas Railroad Commission regulated rates of \$1.00 per bale plus one cent a mile per bale on distances over 10 miles, with additional loading and handling charges permissible, must be charged by specialized carriers for transporting cotton from gin to warehouse. These charges became effective in August of 1976. However, a considerable volume moves under non-regulated rates, usually at slightly lower cost. An inbound freight allowance has been available in the past, but it was recently cancelled.

About 75 percent of the Oklahoma cotton crop is placed in warehouses at Oklahoma Cotton Cooperative Compress, Altus; this firm is part of Plains Cotton Cooperative Association, Lubbock, Texas, as is the Rolling Plains Cooperative Compress, Sweetwater, Texas, which handled about 160,000 bales

in 1975. Of this amount, about 50 percent came from gins in the Southern High Plains and 50 percent from gins in the Southern Rolling Plains. The Oklahoma Cotton Cooperative Compress handles cotton from 50 gin associations while the Rolling Plains Cooperative Compress handles cotton from 27 gin associations. The Chickasha Company operates compresses in Frederick and Chickasha, known as Oklahoma North American Compress and Warehouse, Guitar Compresses, Abilene, Exporters and Traders Compress and Warehouse company, headquartered at Waco, Texas (Brown and Dossett), and several independent and other corporation warehouses operate in the Rolling Plains (table 3). The two Plains Cotton Cooperative Association's (PCCA) affiliated compresses account for 33 percent of the total warehouse storage capacity in the Rolling Plains, making them the dominant operation in the region. All of the warehouses and most of the compresses, except for the two cooperative-owned operations, are old, outdated, labor intensive facilities using hand-trucks for handling bales. In most facilities, only small forklifts can be used and even then with limited efficiency because of design and construction limitations.

Charges for warehousing services are generally the same in both the Texas and Oklahoma Rolling Plains and are very similar to those for the same services in the Texas High Plains. Average per bale charges for the Rolling Plains during the 1975 season were \$1.50 for receiving plus \$0.25 for the boll weevil program in Texas, \$0.85 per month for storage, \$3.50 for compression, and \$2.00 for shipping. Additional charges are also made for miscellaneous services.

Approximately 25 percent of the shipments from warehouses are by truck and 75 percent by rail. These proportions vary from year to year and warehouse to warehouse depending on end use, and availability and cost of

Table 3. Cotton warehouses and compresses by location and capacity, Rolling Plains, 1975

Areas	Number of locations and capacity by ownership												Total	
	Cooperative		Guitar		Panhandle		Exporters and Traders		North American		Others			
	No.	Bales	No.	Bales	No.	Bales	No.	Bales	No.	Bales	No.	Bales	No.	Bales
NRP-A														
Compresses	1	210,000	2	75,500	1	22,500	2	59,500	2	59,500	6	367,500		
Warehouses							1	10,000	1	10,000	1	10,000		
NRP-B														
Compresses					1	22,500					1	22,500		
Warehouses														
Total NRP	1	210,000	2	75,500	2	45,000	3	69,500	3	69,500	8	400,000		
SRP-A														
Compresses	1	127,500	2	27,900	3	181,200	2	96,400	2	96,400	8	433,000		
Warehouses			1	8,450	2	23,500	2	35,000	5	94,700	10	161,650		
SRP-B														
Compresses							1	22,450			1	22,450		
Warehouses														
Total SRP	1	127,500	4	58,800	2	23,500	5	216,200	7	191,100	19	617,100		
RP Total														
Compresses	2	337,500	3	50,350	2	75,500	3	181,200	2	45,000	4	155,900	16	845,450
Warehouses			1	8,450	2	23,500	2	35,000	6	104,700	11	171,650		
Total	2	337,500	4	58,800	4	99,000	5	216,200	2	45,000	10	260,600	27	1,017,100

Source: Approved capacity by Commodity Credit Corporation (CCC) and visit to the area.

1/ NRP - Northern Rolling Plains.

2/ SRP - Southern Rolling Plains.

transportation services. Truck shipments are mostly to Gulf Coast points for export with domestic mill shipments being mainly by rail. The trend is for increased truck shipments to the ports.

Container use is increasing. Containers loaded at the warehouses are trucked to local rail yards for loading onto flat cars for shipment to Gulf ports. The mini-bridge is used to move cotton by rail container to West Coast ports from the Gulf ports. Very few containers are trucked direct from warehouse to Gulf ports and none to West Coast ports. Freight to Southeastern mills was about \$9.00 per bale by truck and \$9.50 by rail in 1975. Cost to the Texas ports amounted to about \$5.00 per bale.

#### Merchandising

Historically, 70 to 80 percent of the cotton from the Oklahoma and Texas Rolling Plains has gone into the export market, and 20 to 30 percent into the domestic market. However, these percentages were practically reversed in 1976, but this change was probably a deviation from normal market patterns on account of the tight supply of cotton. Rolling Plains cotton has desirable characteristics for denim production which may increase domestic demand.

Approximately 10 percent of the 1975 crop was merchandised through TELCOT by the Plains Cotton Cooperative Association. This percentage could increase in the future with the expanded TELCOT system. PCCA has marketed 25 to 30 percent of the Rolling Plains crop in recent years.

TELCOT and the merchants base producer prices on the "green card" (Form 1) class. Forward contracting is not a common practice in the Rolling Plains although 25 percent of the 1976 crop was contracted.

Merchandising Rolling Plains cotton is very similar to marketing High Plains cotton. PCCA influence is not quite as strong. Line gins are a

little stronger and more involved in buying cotton from farmers either for sale through their central sales office or as agents for other merchants. A few gins actually buy and sell small amounts of cotton as part of the ginning operation. Belt-wide merchants travel the High Plains and Rolling Plains out of their offices in Dallas, Lubbock, and Memphis, Tennessee. Merchants purchase from farmers on a local basis, but sales to domestic and foreign mill buyers usually take place at regional or home offices.

There are several prominent merchants in Abilene, two merchants in Ballinger, one in San Angelo, several in Haskell, Vernon, Munday, Paducah, and other cities across the area. Most of the local merchants buy for or resell to the beltwide shipper-merchant based on green card values.

There is a large integrated textile mill at Abilene that is owned by a New York firm. Raw synthetic fibers enter one side of the mill and completed knitted packaged garments for women come out the other side of the 18-acre facility. In early 1975, this mill began spinning some California cotton for the first time. It does not use any Texas cotton. This firm owned a cutting plant in Snyder, Texas which was recently sold to a Big Springs firm.

Burlington Industries' Postex mill at Post, Texas (Garza county, Southern Rolling Plains) produces sheeting from mid-south cotton and polyester. The Postex mill uses no West Texas cotton. Cloth from other Burlington plants is used for the finishing process. Postex sheeting goes to Memphis for sewing.

Royal Park Incorporated, a Dallas-based manufacturer of women's sportswear has a 15,000 pair per day capacity pant sewing and distribution plant at Tulia, Texas (Northern High Plains). It also has plants at Childress (North Rolling Plains A), Jacksboro and Bryson in Jack county just east of

the Rolling Plains, Dallas and Ennis in the Blacklands, and Fort Stockton in the SWIC region.

Cottonseed is purchased by the gin from the producer and sold to an oil mill. Most oil mills arrange for commercial trucks to haul seed from the gin; a few gins own and operate their own seed trucks. Seed from line company gins goes to their own oil mills scattered across the Rolling Plains. Cooperative oil mills are located at Oklahoma City, Lubbock and Pecos, all outside of the Rolling Plains.

#### Summary

Producers in the Rolling Plains harvest cotton with mechanical strippers, and haul it to a gin in pickup-towed cotton trailers holding three to five bales of machine stripped lint. Some gins in Texas own cotton trailers which are made available to producers; Oklahoma gins, however, are not allowed to furnish trailers for producer use.

Prior to 1977, rick or module handling of seed cotton was not practiced in Oklahoma on account of adequate trailer and ginning capacity and declining cotton production. Module handling and storage is increasing in the Southern Rolling Plains of Texas. Most seed cotton is produced within five miles of a gin; small amounts are hauled up to 40 miles. Most communities in the less concentrated producing areas are served by only one gin plant.

The cooperative form of gin ownership predominates in the Rolling Plains, accounting for 46 percent of the gin plants and 65-70 percent of the bales ginned. Oil mills or line company gins account for another 29 percent with the balance being independents, partnerships or corporation gins. Ginning volume varies considerably from year to year and area to area within the Rolling Plains, averaging from 2,000 to 4,000 bales.



Gins charged producers about \$30.00 per bale for ginning and wrapping in 1974, and about \$33.00 in 1975 because of greater amounts of seed cotton being required per bale of lint. Rolling Plains gins tend to be smaller and older than those in the Far West, averaging 10 bales per hour in capacity. Only five gins had universal density presses, and two had mechanical samplers in 1975. Additional universal density presses and mechanical samplers have been installed since that time. Cotton bales are moved to warehouses from gins by both gin owned and commercial trucks.

Even though cotton warehouse space demands a premium, several warehouses have gone out of business or converted to other uses since 1973. Additional cooperative warehousing space has been added by both Oklahoma Cotton Cooperative and Rolling Plains Cooperative Compress, the PCCA affiliated compresses. These cooperative compresses combined account for 33 percent of the total Rolling Plains warehouse capacity. Temporary outside yard storage at warehouses until cotton can be shipped is common in large crop years. Warehouse charges for three months storage, receiving, compression and shipping averaged about \$9.50 per bale in 1975.

Rolling Plains cotton is merchandised in a manner very similar to that of High Plains cotton. PCCA operates across the Rolling Plains with its TELCOT system. Five gins are part of the American Cotton Growers TEXCOT pool sales program. Belt-wide merchants traveling the Rolling Plains out of their offices in Dallas, Lubbock and Memphis, Tennessee along with many strong local merchants participate in buying the crop from producers on the basis of green card values. Forward contracting is not a common practice on the Rolling Plains.