

Cotton: Implications of an Industry in Change

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Production of cotton in the United States in 1970 will be less than it was in 1900, while production in the rest of the world will be up over 300 percent between the two periods (Table 1). The industry in the United States for the past half century has been characterized by lack of growth in total output, declining cotton acreages, increased yields per acre and per man-hour, and recurring conditions of overproduction. All these have occurred despite substantial assistance from the Federal Treasury, increasing total fiber consumption in the United States and the world, and despite relatively important breakthroughs in the technique of cotton production.

It is legitimate to ask, therefore,

what has happened both at home and abroad to place the U. S. cotton industry in the unenviable position it now finds itself. It is also both necessary and right to ask what can and should be done so that the people and resources involved in producing cotton and distributing cotton products might find a way out of a discouraging economic situation.

Cotton is perhaps the most studied, the most analyzed of all agricultural crops. One very significant and objective economic analysis is found in the study *Cotton and Other Fiber Problems and Policies in the United States*, Technical Papers, Volume 2, National Advisory Commission on Food and Fiber. This and other analyses such as this present analysis in *Progressive Agriculture* point to one un-

alterable fact: *United States cotton has not remained competitive in a world market fraught with change.* There are many, many reasons for this and neither this brief statement nor this analysis is designed to cover them all. We can, however, highlight the principal factors involved.

There has been a tendency to over-emphasize the effects of reducing production costs at the expense of giving proper emphasis to the demand for cotton fiber. Only nominal reductions in per unit costs have resulted from (1) capital-intensive production brought about by acreage limitations; (2) the attractiveness of cotton in comparison with alternative crops, due in part to government payments; and (3) from the almost total mechanization of the industry. Unfortunately, higher yields have not meant significantly lower per unit costs and there are many studies which show this."

While the United States has reduced acres and production, government policies abroad have encouraged cotton production by such procedures as below-cost fertilizer distribution to producers, direct producer subsidies, guaranteed prices and subsidized credit arrangements. Cotton production has increased in some countries even without subsidized programs because cotton has been more profitable than many alternative crops. Expanded cotton production abroad has resulted from policies which had as their objectives: the reduction of foreign

Table 1. Production of Cotton, United States and the World, 1900-1967.

Year	Production in 1,000 Bales of 500 lbs.		U.S. Percentage of World Production
	U.S.	World	
1900	10,123	14,800	68.4
1910	11,609	18,400	63.1
1920	13,429	21,350	62.9
1930	13,932	26,230	53.1
1935	10,638	27,515	38.7
1940	12,566	31,905	39.4
1945	9,015	21,410	42.1
1950	10,014	31,119	32.2
1955	14,721	43,688	33.7
1960	14,272	46,405	30.8
1965	14,973	54,025	27.7
1966	9,575	48,325	19.8
1967	7,455	47,649	15.6
1968	10,948	53,092	20.6
1969	10,080	51,299	19.6

Sources: U.S.D.A., Bureau of Agricultural Economics, Statistical Bulletin No. 99, Washington, D.C., June 1951.

Supplement for 1968 to Statistics on Cotton and Related Data 1930-67, U.S.D.A., E.R.S., Statistical Bulletin No. 417, Washington, D.C.

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**Starbird, I.R., and Brown, W. H. (1962). *Changes in Costs and Efficiency of Cotton Production. A Preliminary Report*, USDA, ERS, November, 1962; and, *United States Department of Agriculture, Economic Research Service, Costs of Producing Upland Cotton in the United States, 1964; Supplements, 1965, 1966, Agricultural Economics Report 99.*

exchange outlays for raw cotton and cotton textiles; the earning of foreign exchange from exporting raw cotton and cotton textiles; the provision for a leading cash crop in investment, employment and agricultural development programs; the replacement of a declining alternative crop; and the diversification of farm operations.

Another factor involved in the competitive situation with respect to United States cotton is the increasing direct costs to the Federal Treasury of cotton programs. A number of studies have shown that the contribution of payments and price supports to cotton farmers' incomes vary rather widely. They have been equivalent to 30 to 40 percent of gross returns nationally for the past few years. In some cases, however, payments from the government have been an exceedingly large share of net income. In Pinal County, 70 percent of the net income over operating costs is attributed to payments from the Federal Treasury.

How responsive to the Market cotton farmers can be under conditions of continued sluggishness of costs, increased foreign competition, and large federal payments is problematic.

The Foreign Market

The foreign market has always been critical to the United States cotton in-

dustry. United States exports of cotton have fluctuated more widely and decreased much more than domestic consumption since the beginning of production adjustment and price support legislation in the 1930s. United States net exports for selected years are shown in Table 2. During the

Table 2. United States Net Cotton Exports for Selected Years.

Year Beginning August 1	Exports 1,000 Bales
1930	6,757
1935	5,971
1940	1,112
1945	3,613
1950	4,108
1955	2,215
1960	6,632
1965	2,942
1969 ^a	2,731

^a Preliminary.
Source: United States Department of Agriculture.

nineteenth century and first third of the twentieth, exports typically accounted for 60 percent of the United States crop; the domestic market the rest. Today, these roles have changed, and the foreign commercial dollar market is declining rapidly.

Were it not for government programs, the United States would likely export far less cotton than we do. Since 1955, depending on the year,

government sales have accounted for from 22 to 68 percent of the cotton exported (Table 3). This assistance from government is given in the name of making United States cotton more competitive in world markets. What with the fact that all governments subsidize cotton production and sales in the same manner, it might be asked what is the effective demand for cotton in the world today; and whence will the industry go if continued help is not forthcoming.

The Cotton Dilemma

In summary, the overall problem of cotton in the United States as well as the world is that cotton is not being sold. Overemphasis on production cost reduction while markets were slipping away — in part, due to support prices which were held too high — has relegated the industry to a traumatic condition. In 1960, there was an opportunity for government to partially rectify the problem by keeping prices competitive in refusing to raise support levels. The decision, however, was to raise supports, the result of which was capitalizing the benefits of the allotment into land prices, thereby "building in" high costs in the industry.

Costs today are surely high for cotton producers. But producers should be reminded that cotton production "costs" are a dependent variable; one just does not assume it to be high independent of other economic phenomena. Judgments such as the capitalization rate for land valuation, the valuation of land for tax purposes, the assumptions as to machinery and other obsolescence, and the value of the acreage allotment all go into production cost calculations. Better management of resources also is an important fact of life in cost calculations.

Ultimately the big question for the United States cotton industry is, Who in the U. S. is going to produce the declining total bales of cotton? In what state? What individuals? A corollary but necessary question is, How will the cotton be sold? Under what conditions? Also, who is going to export the cotton entering foreign markets? At what price?

These are legitimate but tough questions with which all of us must deal.

Table 3. Value of U. S. Cotton Exports, 1955-67.

Year Beginning July 1	Value		
	Government ^a	Total	Percent
		(Million Dollars)	
1955	251.5	372.8	67.5
1956	407.6	1,115.6	36.5
1957	349.7	841.0	24.0
1958	253.8	412.7	61.5
1959	181.4	825.7	22.0
1960	266.0	936.8	28.4
1961	218.9	662.8	33.0
1962	227.3	491.4	46.2
1963	183.8	670.3	27.4
1964	192.0	584.0	31.2
1965	142.1	385.8	36.8
1966	242.1	542.4	44.6
1967	200.3	474.8	42.2

^a Government equals Mutual Security Act; Export-Import Bank; Public Law 480, Titles I, II, IV. (Barter is excluded.)

Source: United States Department of Agriculture, Economic Research Service, Statistics on Cotton and Related Data, 1925-1962, 1930-1967 and Supplements.