

diversion (up to 30 percent of the allotment) is down from 10.78 cents to 6 cents per pound. The price support payment is up from 11.53 to 12.24 cents per pound or the projected yield of the domestic allotment (65 percent of total allotments). The rules for counting acres occupied by cotton in various skip-row patterns will be returned to the less restrictive basis of 1965.

The changes in the 1968 program and the large market premiums for cotton in 1967 would seem to indicate a reduction in diverted acres in 1968, but when adequate consideration is given to the uncertainty of the market premiums and last season's effects of insects in raising production costs and/or reducing yields in relation to generally high projected yields the best course of action is far from obvious. Each grower must give considerable study to determine expected results from alternative rates of diversion and varieties of cotton.

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IMPROVING THE MARKET FOR ARIZONA COTTON

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The Problem

Cotton growers in Arizona and other cotton growing areas in the United States are facing tough competition for markets, both at home and abroad. Competition in the United States is with the manufacturers of man-made fibers. In markets abroad, competition is from two sources - foreign cotton producers and foreign producers of man-made fibers.

The extent that man-made fibers and foreign-grown cotton have made inroads into the markets for U. S. cotton is shown in the accompanying charts. In 1940, cotton accounted for 80 percent of the textile raw material used by U. S. mills. By the late 1960's cotton's share had declined to 51 percent, and man-made fiber's share had risen to 43 percent (Figure 1).

In absolute terms, total mill consumption of all fibers in the U. S. increased from 6.5 billion pounds in 1960 to 9.0 billion pounds in 1966 (Figure 2). However, total consumption of cotton in the U. S. has remained fairly stable at about 4.0 to 4.5 billion pounds annually for the last twenty years.

Since noncellulosic fibers entered the picture in the early 1950's the per capita consumption of rayon and acetate has fluctuated between 6 and 8 pounds (Figure 3). In contrast, the per capital mill consumption of cotton declined from 31.6 pounds in 1951 to 21.3 pounds in 1963. The per capita consumption of cotton in 1963 was the lowest since the depression years of the early 1930's! The per capita mill consumption of noncellulosic fibers was about 12 pounds in 1965, almost triple the use in 1960. Losses of potential markets for U. S. Cotton in foreign outlets is evident from the

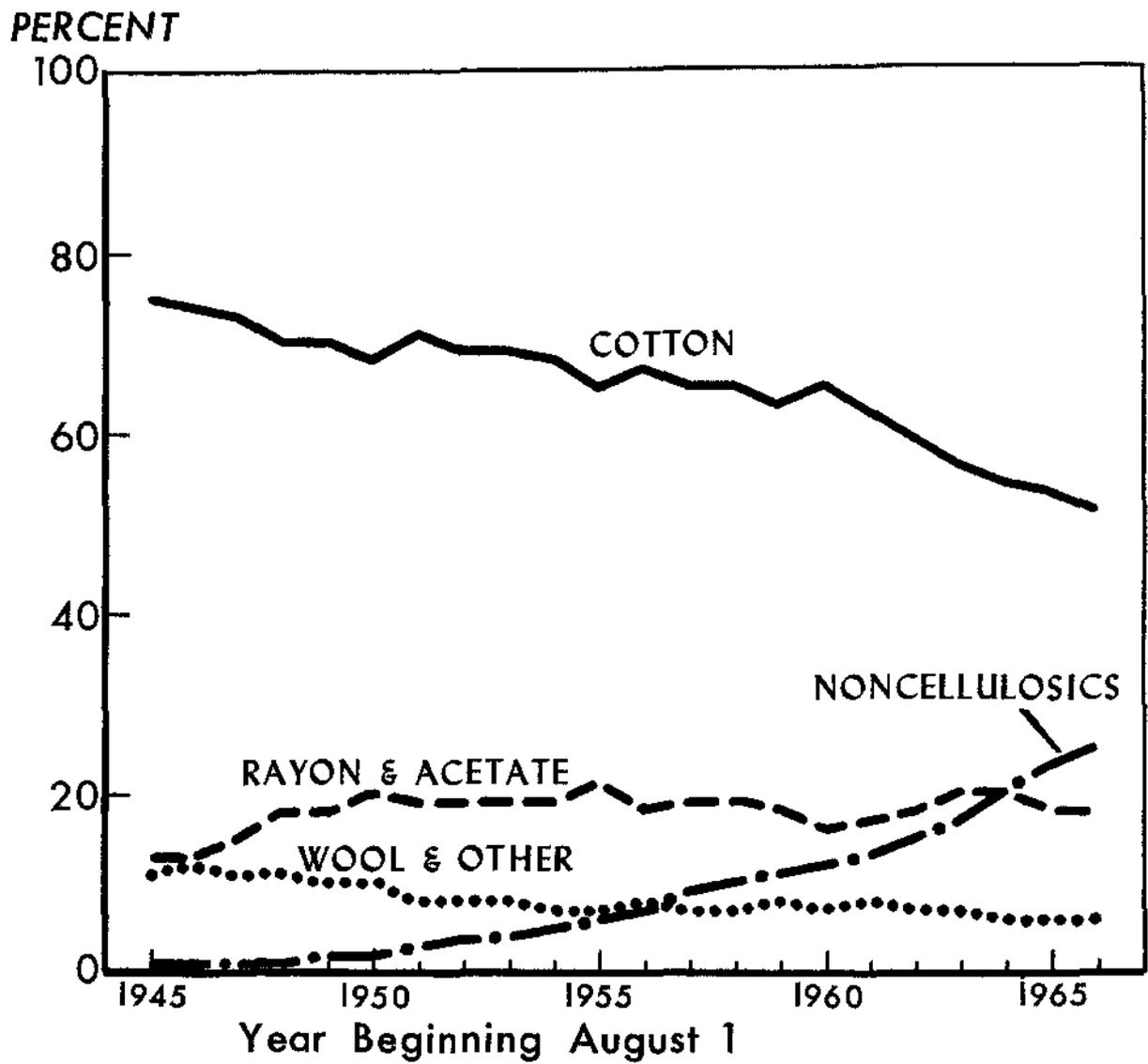


Figure 1. Percentage Distribution of Fibers Consumed by U.S. Mills, 1945-1966.

BILLION
POUNDS

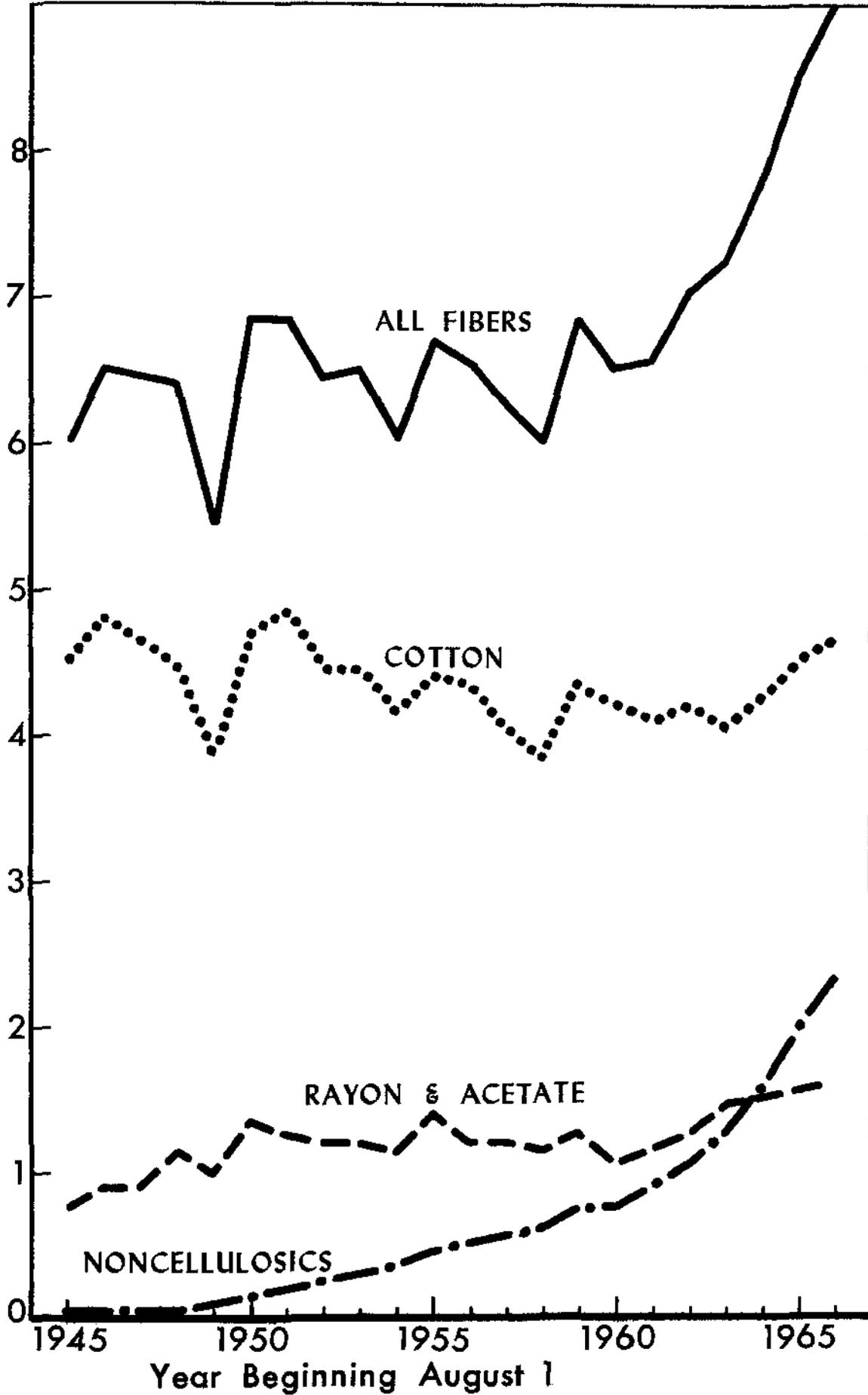


Figure 2. Total Mill Consumption of Fibers, United States, 1945-1966.

POUNDS

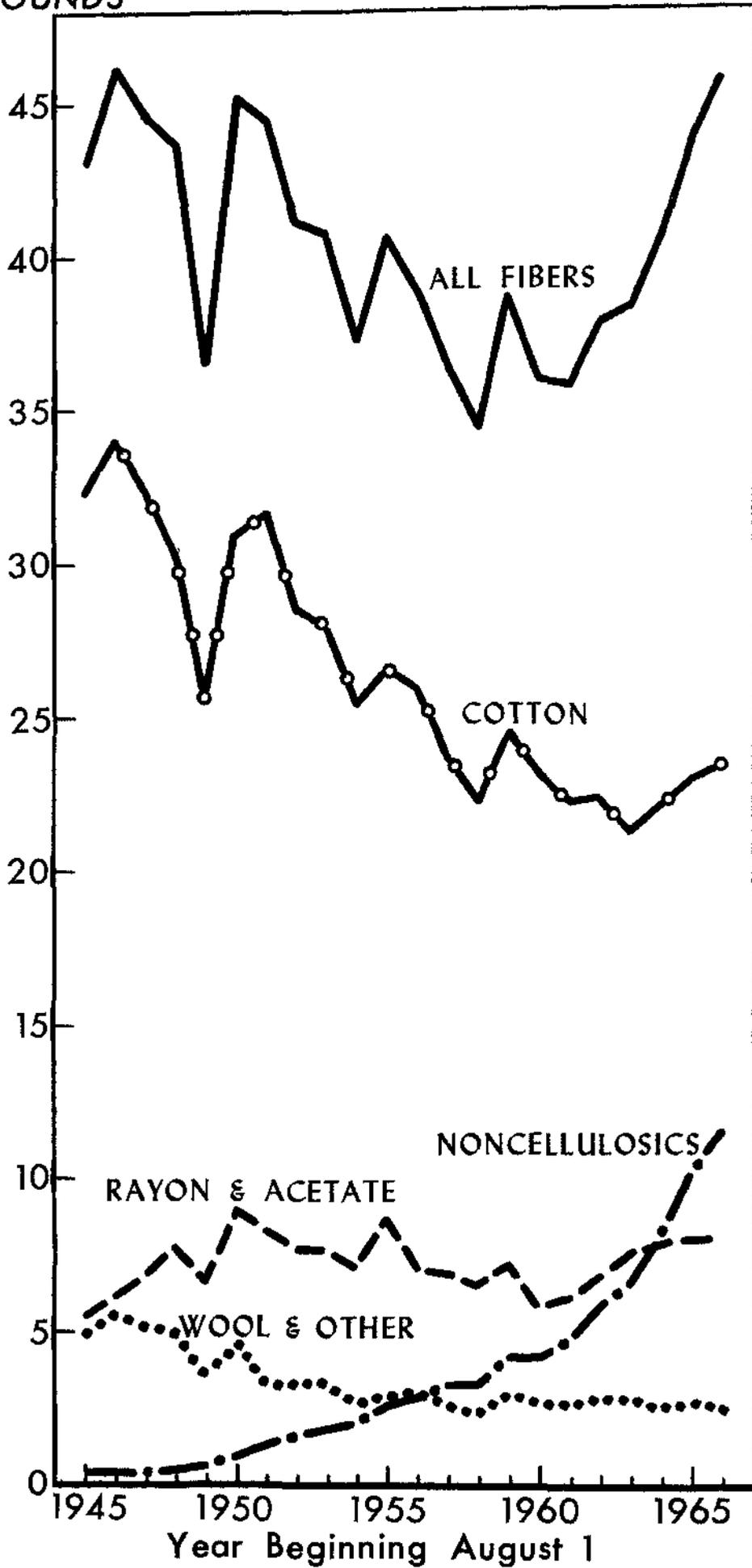


Figure 3. Per Capita Mill Consumption of Fibers, U.S., 1945-1966.

comparative trends in U. S. and foreign exports shown in Figure 4. During the most recent decade, from 1956 to the present, the trend in U. S. exports has been decidedly downward, and there have been violent fluctuations from year to year. In contrast, the trend in the combined exports from other cotton producing countries has been definitely upward, at a fairly steady rate, from 5.3 million bales in 1945 to 13.7 million bales in 1965.

Purpose of Study

Because of the obvious decline in markets for U. S. cotton, an analysis of the future prospects for U. S. cotton was undertaken in 1967, with emphasis on Arizona cotton. The findings of a survey of U. S. textile mills with respect to the qualities of cotton desired was summarized, and the extent to which Arizona cotton meets these qualifications was analyzed. The results of this research are summarized in University of Arizona Bulletin A-52, October 1967.

Major Findings

U. S. textile mills desire to (1) produce a quality product for which there is a large consumer demand, and (2) operating their textile plants efficiently and at a low cost. For many end products, cotton and man-made fibers may be substituted for one another. For these uses, the choice of alternative fibers depends upon the (1) comparative cost of the fibers, (2) cost of processing, (3) management's projections with respect to consumer acceptance and demand for the finished product, and (4) price that can be obtained for it.

Textile firms are just as interested in increasing their sales of yarns and fabrics as cotton growers are in increasing their sales of cotton. However, there is one significant difference between textile firms and cotton producers. Cotton growers must sell their cotton - there is no on-farm use for it. However, for many end-products, textile firms do not have to use cotton! They will use cotton if it possesses the desired fiber properties, and if it can be purchased at a favorable price!

Arizona producers should concentrate on producing cotton which possesses all the fiber properties desired by mills. For most cotton products made by mills, the mill mix must be satisfactory with respect to the entire bundle of cotton quality characteristics. For example, length alone does not assure the mill that the cotton will run efficiently in its plant.

Fiber strength, fiber length, length uniformity, and fiber fineness are major properties, in addition to the traditional grade and staple length evaluations, that mills use in buying and using cotton. For the past six years Arizona producers as a whole have not produced the quality of cotton for which mills are willing to pay a premium. If Arizona cotton growers are interested in increasing their total dollar sales from cotton, they must put as much emphasis on quality as they have on yield per acre. Price per pound is determined by quality, and it takes both price and quantity to produce the most NET DOLLARS PER ACRE! And, it must be remembered, quality includes the whole bundle of fiber properties. Premiums are not paid for just strength, or length, or micronaire alone. Cotton must possess the desirable range for each and all fiber properties if it is to command a high premium price!

MILLION
BALES

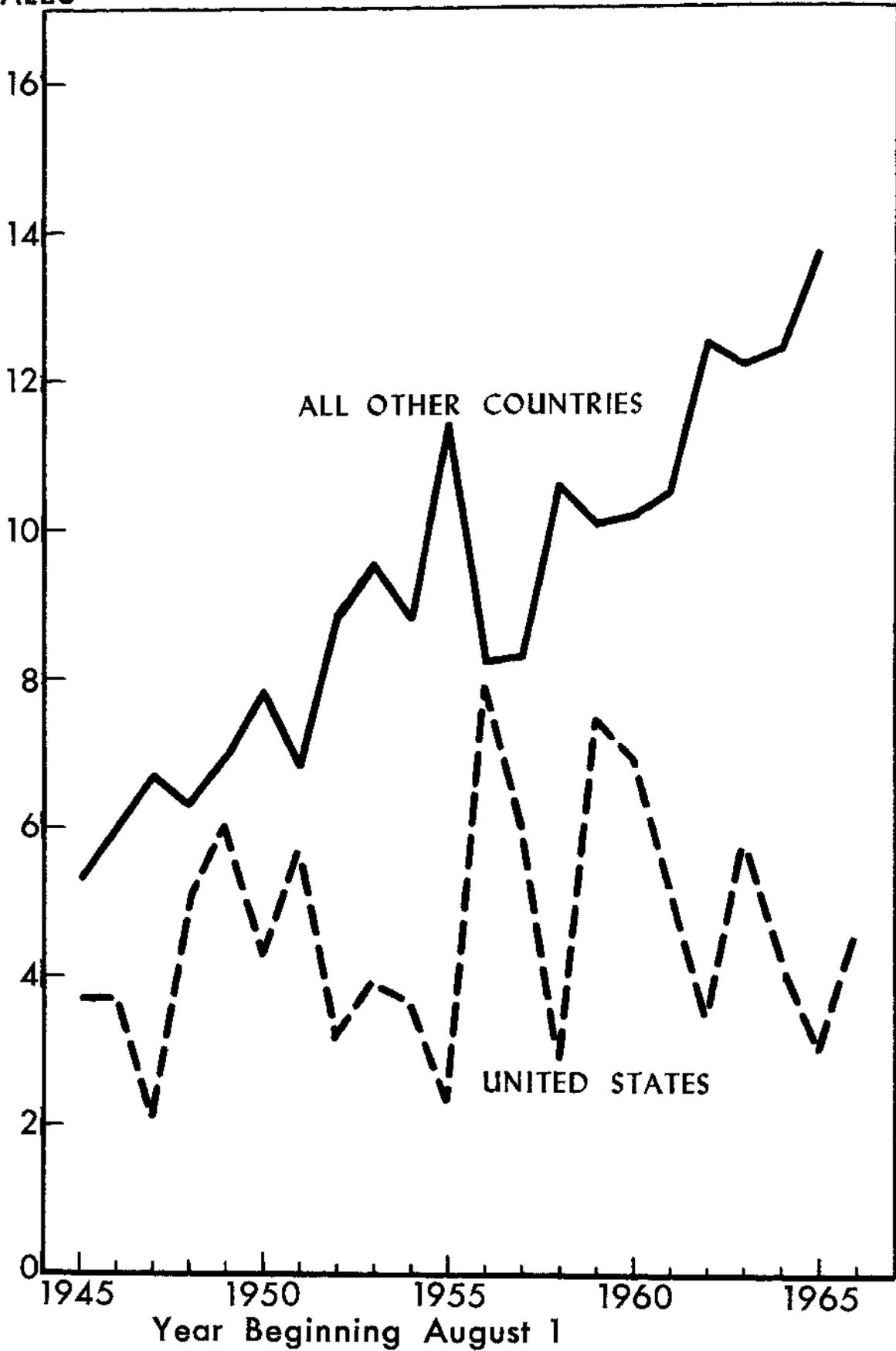


Figure 4. Exports of Cotton from U.S., and From All Other Producing Countries Combined, 1945-1966.

Arizona cotton growers should emphasize group action, as well as individual action, to improve the quality of cotton that they produce! Failure to take action now could put many Arizona cotton growers at a greater disadvantage in the competitive struggle for markets than they have experienced during the past four to six years!

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ECONOMIC MODELS FOR COTTON GINNING-WAREHOUSING COMPLEXES

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Total cost for assembling seed cotton; ginning, baling and packaging lint cotton; transporting baled cotton to warehouses; and warehouse-receiving services has steadily increased during the past two decades. Under the present marketing system for cotton, these four producer-marketing services must be performed before a majority of producers can sell their cotton.

For the Cotton Belt as a whole, assembling seed cotton at gins is performed by individual producers, and they assume the total cost of this service. The other three services are performed or arranged for by ginners and warehousemen. The cost of ginning, which greatly exceeds the combined costs for the other three services, is borne directly by producers in the fees they pay for this service. The costs for transporting baled cotton to warehouses and for warehouse-receiving services are also borne directly by growers in the form of charges paid for these services, or indirectly in the form of lower farm prices for cotton.

Since the costs of these four marketing services are as important as production and harvesting costs in determining net returns from the cotton enterprise, cotton producers are becoming increasingly interested in possible means of reversing or at least checking the ever-rising cost of getting cotton ready to enter commercial trade channels. Among the various possibilities for reducing marketing costs, it is essential that ginners and warehousemen achieve greater efficiency and thereby reduce the charges for their services.

The need for increased annual volume per gin plant, so as to keep pace with rising investment costs, has been a chronic condition of the ginning industry for several decades. However, because of the large increases in investment and operating costs during the past few years, it is very likely that break-even ginning volumes will become considerably greater during the late 1960's and future years, and that charges for the ginning service will continue to rise. Plant volume, as one of the keys to greater efficiency and lower ginning costs, will be more significant for the remainder of the 1960's than at any time in the recent past.

However, the traditional practice of locating gin plants throughout the production area, even though the number may decline substantially, no longer appears to be a satisfactory means of attracting sufficient volume to counteract the rising cost of ginning inputs. Thus, firms that are providing ginning