Advent of Mechanical Cotton Picker Foreshadows New Labor Problem for South

The mechanical cotton picker may, within 5 or 10 years, displace upward of a half million cotton pickers of the South. The resulting increased pressure on the industrial labor market of the South may be further accentuated by the fact that the large scale use of recently developed and improved mechanical cotton pickers may also tend to reduce the number of tenants and share croppers, stimulate the use of tractors and improved machinery in other phases of cotton culture, result in a geographical shift of cotton producing acreage to areas best suited for mechanized tillage and harvest, and increase the size of cotton farms. The foregoing conclusions are embodied in a report prepared by the National Research Project of the Works Progress Administration and made public today by Works Progress Administrator Harry L. Hopkins.

The report, entitled "Changes in Farm Power and Equipment - Mechanical Cotton Picker," is one in a series of reports on changes in technology and labor requirements in the United States since 1909. In transmitting the report on the Mechanical Cotton Picker, Corrington Gill, Assistant Administrator and head of the Division of Research, Statistics
and Records, states that "since agricultural labor is excluded from the benefits of the State unemployment insurance laws, any displacement of cotton-farm tenants and sharecroppers that may result from the mechanization of cotton picking will be of immediate concern to agencies dealing with problems of economic security and relief. The tenancy and sharecropping system of the Cotton Belt provides large numbers of hand laborers now needed for peak operations in the production of cotton. Mechanization of cotton picking would substantially reduce the labor requirements during the harvesting season and would thus free the cotton crop from dependence upon large numbers of tenants and sharecroppers who, with their families, supply the major portion of that labor. The likelihood that the introduction of a successful mechanical picker will result in an acceleration of the shift from animal to tractor power, as well as in a tendency toward the mechanization of preharvest operations, further accentuates the problems of adjustment which may be anticipated for a large share of the working population of the South."

In conclusion the report states that "in the areas suited to mechanization, a successful picker would tend to bring about an increase in the size of cotton farms and also to encourage an expansion of acreage devoted to cotton. In marginal areas unsuited to mechanization cotton acreage would tend to be reduced.

"The repercussions of a successful mechanical picker would not be confined within the limits of the United States. A mechanical picker would encourage significant increases in cotton acreage in Australia, Brazil, and Argentina, as well as in this country. The future international trade policy and the domestic agricultural policy of this country will have a bearing on the prospects of the mechanical picker;
so also will changes in the uses to which cotton is put and the extent
to which synthetic fibers displace cotton."

The study was made by agricultural economists and engineers
and is based upon a canvass of available information and first hand
observations of the experimental mechanical cotton pickers operating in
the fall of 1936. They evaluate the economic prospects for the 1936
machine as follows: the single-row machine would make three pickings per
year on 80 acres of cotton, the early models would last only 5 years, 5
percent of the lint and seed would be left in the field and the market
value of the cotton picked would be lowered 12 percent by trash and dis-
coloration. The overhead of the mechanical picker was assumed to amount
to $3.62 per acre. The operating costs based on 60 cents per hour for the
tractor and 30 cents per hour for each of two operators, are set at $4.80
per acre.

On land yielding 300 pounds of lint cotton per acre the loss
resulting from 5 percent of cotton left in the field would thus amount
to $1.80, at 12 cents per pound. In addition, an estimated loss of 30
pounds of seed at $35.00 per ton amounts to $0.52. The loss from lowered
value of the recovered 285 pounds of lint cotton, because of trash and
discoloration, is estimated at 12 percent, or an additional $4.10 per
acre. This amounts to a total cost of $14.84 per acre charged to the
mechanical picker. At a ratio of three to one by weight between seed and
lint cotton, the cost of machine picking would then be $1.65 per 100
pounds of seed cotton. In 1936 the cost of hand picking the same amount
of cotton in the Mississippi Delta was about $1.00. Hence the report's
conclusion that "the mechanical picker in its present stage of develop-
ment is not likely to take the Cotton Belt by storm."