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RESEARCH AND ADJUSTMENT MARCH TOGETHER

By HENRY A. WALLACE

SECRETARY OF AGRICULTURE

THERE is supposed to be a conflict between agricultural science and the need to adjust agricultural production. Agricultural science enables farmers to increase crop yields per acre and increase the output of meat and milk per unit of feed consumed. As the users of agricultural improvements increase in number, output increases until prices fall. How can all this be reconciled with the need to make supply and demand balance?

This is an old puzzle, but often solved. Again and again people bring it forward as if the solution were unknown. With an air of drawing attention to an unperceived anomaly, a newspaper writer recently declared himself amazed that the technical branches of the U. S. Department of Agriculture should oper-

ate at full blast to perfect crop and livestock production, while the Adjustment Administration labored simultaneously to cut down the production of cotton, wheat, corn, hogs, tobacco and other products. Here, he said, we have futility on a scale worthy of a Greek tragedy.

What would happen were farmers to abandon science or even to use it with greatly decreased efficiency? They would have to continue plowing, sowing and reaping. But they would use poor machinery, poor technique and poor seed. They would allow pests and diseases to ravage their crops and would harvest inefficiently what remained. By so doing, they would certainly reduce the output. But they would do so at a cost ruinous to themselves. They

would increase their unit costs of production out of all proportion to any conceivable gain in prices.

From their beginnings, the U. S. Department of Agriculture, the state experiment stations and state extension services have promoted efficiency on the farm. Efficiency in the old sense of the word, however, is not enough. As farmers well know, profits can not be got just by improving plants and livestock, by fighting diseases and pests or by reducing the wastes of marketing. Ordinary technical efficiency reduces only the cost of production. Low-cost production may mean loss to the farmer if it is excessive production. Under present conditions it is necessary also to adjust the output to a changed world market.

Low cost per unit of production, when total production has been adjusted to effective demand, directly increases the farmers' net income. There is a definite limit to the volume of farm goods which can be disposed of under existing domestic and export consumption demands, at a price returning a fair income to the farmer. When this limit is reached, the only sound economic way in which the farmer can increase his actual income is by utilizing the efficient technique of production which lowers his unit cost and leaves him a greater share of the market price which he gets for his goods.

Action taken under the Agricultural Adjustment Act of 1933 enables farmers to plan their production. It seeks to transform blind competition into broad-vised cooperation and to correct the result of previous mistakes. Meantime scientists continue their research in various problems of farm production. These two kinds of departmental activity must march together.

Agriculture needs not less science in its production but more science in its economic life. It is possible to have a full science, embracing the distribution as well as the production of wealth.

In the last year our farmers have taken their first steps toward matching efficiency in production with

efficiency in economic adjustment. As they proceed along this path they will realize that the more they have of the one type of efficiency, the easier they will find it to achieve the other. The reason is plain. Efficient production is more dependable and therefore more easily controlled than inefficient production. By emphasizing economic and technical problems equally, and by indicating their interdependence, the department advances upon a logical path, in which its various activities are wholly consistent one with another.

We might just as well command the sun to stand still as to say that science should take a holiday. Science has turned scarcity into plenty. Merely because it has served us well is no reason why we should charge science with the responsibility for our failure to apportion production to need and to distribute the fruits of plenty equitably. That failure we must charge squarely to organized society and to government. We need economic machinery corresponding to our scientific machinery in precision, in power and in delicacy of adjustment. Science has done the first job, and done it magnificently. It has shown us how to produce. Now it must show us how to distribute what we produce. It must go forward and not back. To production science we must add economic science, without for a moment ceasing to advance the former. Because we have surpluses of certain things does not mean that we have too much wealth or too much power to produce wealth. To suppose that we have is to imply that man would be better off without means to make nature do his will.

To produce efficiently is to release time and energy for other uses, adding to the enrichment of life. Not to produce as efficiently as possible would be silly. Not to regulate the total volume of production, to relate it to consumptive demand, also would be silly. No factory is expected to fail, even when producing at less than capacity, to take advantage of new efficiencies. The same reasoning applies to agriculture.

WORK OF THE AMERICAN MUSEUM OF NATURAL HISTORY¹

By President FREDERICK TRUBEE DAVISON

My first year in the president's office, and entering upon its duties as a layman, have given me some very decided impressions. No one who has the privilege of measuring the influence of the museum at the present time could fail to be filled with admiration at the great accomplishments of my distinguished predecessor, Professor Henry Fairfield Osborn, who for twenty-five years exerted outstanding qualities of leadership in the scientific and educational worlds.

¹ Sixty-fifth annual report to the trustees.

His work was not confined to purely scientific or educational activities, but carried with it a great spiritual force which has left a real mark not only on the city, but on the entire nation.

Under his guidance, the museum has established a fundamentally sound policy in accomplishing its mission, which falls into two general parts—first, scientific, and second, educational. Professor Osborn gathered around him a group of men and women, each holding a fine position in his or her particular