## Present and Future Surpluses—Trends and Solutions from the Standpoint of Supply

By Sherman E. Johnson

Viewed from the standpoint of total output, there are two parts to the present surplus situation: (1) the excess of current production over market demand and (2) the accumulated stocks (the excess production of past years).

I fully recognize that stocks do limit actions that can be taken to balance current production with market outlets. But if we can achieve substantial balance between current production and market outlets, both in total and for key commodities, the excess stocks can be disposed of some way. I shall, therefore, confine my discussion largely to problems relating to current and prospective production in relation to outlets.

But there are two parts even to the production question: (1) total output in relation to total market demand and (2) balance between production and markets of key products—wheat and corn, for example.

Rex Daly's paper indicates a fairly close current balance between total output and total market outlets (including the special disposal programs). Let us not forget, however, that we do have special disposal programs at the present time, and that current production of wheat, cotton, tobacco, rice, and peanuts is restricted by acreage allotments and marketing quotas. We are not holding corn down very much.

Our biggest problem in looking forward is one of adjustment of shifting production from surplus crops to products with better prospects for market expansion.

Now let us consider the cause of the present situation. This calls for an examination of the forces which stimulated farmers to produce at high levels, with special attention to the surplus products; and why high production continues under less favorable cost-price relationships.

I would put first the momentum provided by the emphasis on production to meet war and rehabilitation needs. How else do we explain a 58 percent increase in wheat acreage (31 million acres) from the low point in 1942 to the peak in 1949? Four-fifths of this increase took place in the ten Great Plains states. This was accomplished by reclaiming abandoned land and by breaking more native

sod in high-risk areas. Farmers could market all they could produce at favorable prices.

But why do farmers continue production at high levels? Once farmers had made the investments in breaking new land, buying new equipment, etc., those capital outlays became fixed costs. The result is that the individual farmer cannot gain by reducing output. He cannot even cut down on variable expenses without reducing gross income more than costs.

How did farmers achieve the higher output? Not by using more total cropland, or more hours of labor. In 1955 total farm output was 48 percent above the 1935-39 average. In 1956 it may be about the same. This output is being produced on about the same acreage of land and with 30 percent fewer hours of labor. But measured in current dollars, farmers' investment capital is three times as much as in prewar years, and their cash outlay for nonfarm goods is four times as much. Even when measured in constant dollars, it is quite evident that farmers use much more capital: (1) in adopting yield increasing practices, (2) in plowing up the range, (3) in irrigating more land, and (4) in utilizing other available technology to increase output.

Also tremendous improvement has been made in managerial and technical skills. Neither technical advances nor development of managerial and technical skills occur spontaneously. Technical advances are the product of research. And widespread adoption is the result of improvement in basic and vocational education, in extension and other programs, which prepare farmers to use the new techniques. The prospect of increased income is a strong incentive.

We researchers and educators, therefore, have some responsibility for creating the surplus "Frankenstein," the overabundance, or whatever we wish to call it. This means that we can also take part of the credit for the production increase which helped to win the war, and helped to feed a hungry world in the rehabilitation years.

We do not need to take the blame for the second breaking of the Plains. Most of us inveighed against it without avail. Rain and price incentives did that. But what about cotton? Do you remember 1950? How every mother's son with any interest in cotton preached more cotton for 1951, with the price at 40 cents a pound. And we got more cotton — the wrong way, unfortunately. Now we are burdened with overexpansion. With a different type of program the needed increase could have been achieved on a selective basis.

We researchers and extension workers have a responsibility for

trying to guide adjustments toward a better balance of production and prospective markets.

We might as well recognize that research and extension work which results in adoption of new technology frequently does increase output. Some improvements save labor or capital investment without directly increasing output, such as the experiments to reduce tillage operations in the growing of cultivated crops. But most improvements in crop and livestock production do result in greater output. And if they are adopted under present market conditions, the result is likely to be either a price decline or, in the case of price-supported crops, additional surpluses.

If research and extension are indicted on the charge of aggravating the surplus problem we should recognize that some other publicly supported activities are also suspect — reclamation and conservation, for example. All of these activities, including research and extension, may need to be examined realistically to see if they can serve farmers more effectively in the years ahead.

We are dealing here with an apparent conflict between progress and income stability. Is it an irreconcilable conflict?

The Lancashire weavers tried to destroy the power looms in the early years of the industrial revolution in England. They were not successful. But the transition to new methods caused untold misery to more than one generation of British workers. Why? Because no effective steps were taken to cushion the shock of transition.

The lesson for agriculture from this experience as well as many others is clear. Research, extension, and other programs that promote efficiency in agriculture should not only be continued; they should be expanded for the following reasons:<sup>1</sup>

- 1. Agriculture must keep pace with both technical and economic progress in the rest of the economy in order to provide income opportunities that will attract and retain capable persons in farm occupations. This will require both development of new technology and technical and management skills to utilize it. The alternative may be a static peasant type of agriculture.
- 2. Technological advances are necessary to compete effectively in world markets, and with nonagricultural products in domestic markets.
  - 3. Basic research must be undertaken now to provide informa-

<sup>&</sup>lt;sup>1</sup>Adapted from Report of Department of Agriculture Committee on Research Evaluation, October 1956.

tion for adequate production of food and fiber at low cost in future years.

- 4. Much production-increasing activity is needed to protect the gains already made.
- 5. The margin between scarcity and abundance is relatively narrow, and "know-how" should be a part of our reserve capacity to meet emergencies such as severe drought or international crises.
- 6. Improvements that lower costs are profitable to farmers who first adopt them and, even if all or part of the gain later is shifted to other groups through a decline in prices, the general economy benefits from more efficient production.

Because the benefits of technical advances in agriculture often tend to be shifted to other groups, the national interest seems to require programs to improve the incomes of those who suffer substantial hardship as a result of changes beyond their control. In recent years we seem more and more to have recognized as a welfare principle the need for cushioning the shocks to income and security that are beyond individual control. In industry we have unemployment insurance and severance pay. There is some discussion now of providing retraining for workers displaced by automation.

Are analogous measures suitable for application to agriculture? What about training of young workers and retraining of those somewhat older who are not needed in agriculture? Could measures analogous to severance pay and unemployment insurance be adopted for them? Or, do we believe in adjustment through competition and survival of the fittest? This is an implicit assumption if no assistance is provided. If we favor a "let alone" policy, we should also consider the agricultural structure that might emerge from it.

I should hasten to add that public opinion on this subject has supported ameliorative legislation. It probably will continue to support aids of some kind for agriculture as long as wide income disparities persist. Therefore, the question is not whether we have programs to deal with problems of transition in agriculture, but the kinds of programs and their effectiveness.

Experience with present programs indicates that production control through acreage restriction is only partially and temporarily effective. Can output of farm products be controlled by direct measures? I would say yes, for specific commodities, but only if farmers and those who speak for farmers are willing to support a sufficiently rigorous program. This probably would mean quantity allotments as well as other restrictions. Such restrictions are objectionable and

raise another question. Can other types of guidance be provided for achieving better balance with market prospects? The following considerations are pertinent in this connection:

- 1. It seems likely that fewer total resources will be needed in agriculture for several years.<sup>2</sup> Adoption of known technology is likely to continue at a fairly rapid pace, even under present cost-price relationships.
- 2. But over a longer period we should gradually move into closer balance with markets on an over-all basis. The biggest problem, therefore, will be one of shifting resources to production of commodities with the most rapid market expansion potentials livestock, fruits and vegetables.
- 3. Currently the shrinkage in production resources should take place in the surplus sectors.
- 4. Can use of less resources be encouraged temporarily? Most important in this connection is the shifting of human resources in the following ways when better income opportunities are available:
  - a. Nonfarm employment full time.
  - b. Part-time farming.
  - c. Sale of farm to neighbor who needs it for enlargement of family operations, and shifting to nonfarm employment or retirement (social security is important here).
  - d. Partial retirement of older people who can afford it. Conservation reserve will help by providing assistance in shifting land to grass or tree cover.
  - e. Less intensive farming with less hired help, even at sacrifice of income. Again this applies to farmers who can afford to take things a little easier and also reduce risks.
- 5. Can we also slow down the use of land and other capital resources?
  - a. By reducing investment of capital resources for production increasing improvements, especially for public developments.
  - b. By shrinking the land base, e.g., shifting to grass and trees the 40 million acres which are considered unsuited for continued arable farming. Build up reserve capacity in this way for drought or other emergency.

<sup>&</sup>lt;sup>2</sup>"Farm Output—Past Changes and Projected Needs," Agriculture Information Bulletin No. 162, August 1956. See Table 11, p. 34.

What can economists do to help develop such a program? The national interest requires a nation-wide educational program to provide an understanding of the problems and the effects of alternative lines of action. You workers in extension are exploring the possibilities through: (1) your policy and public affairs activities and (2) in your farm development programs.

If we are to carry forward a bold program for technical advances in agriculture, we surely need a companion program of cooperative economic research:

- 1. To detect the emerging changes and to analyze their potential impacts.
- 2. To appraise alternative ways of achieving better balance between production and prospective markets.
- 3. To discover the major obstacles to needed adjustments and to seek ways of overcoming them.
- 4. To develop alternative ways of cushioning the transition for those most disadvantaged by changes, and to aid them in improving their income position.
- 5. To appraise the structure of agriculture likely to emerge from pending changes, and to suggest alternative measures for modification if changes seem desirable.

So far our economic studies from a production standpoint have been sporadic — with respect to both time and geographic coverage. We need an area-by-area study that can be summarized from time to time and compared with prospective markets. The results can be used for farm and home development and other local educational work as well as for area and nation-wide comparisons. The needed effort is comparable to that under way in the natural sciences. We have made a good beginning on the price and marketing aspects, but a similar effort is needed on economic problems of production if we are to be successful in helping farm people to share fully in the benefits of progress.