Discussion of Congressional House Committee Report of the Investigation of the Federal Crop Reporting Service

We are devoting this issue of Agricultural Economics Research to papers delivered at one of the sessions of the recent Chicago meeting of the American Statistical Association, which was jointly sponsored by the American Farm Economic Association. This session, organized partly as a result of suggestions coming from the Bureau, was devoted to a discussion of the recommendations contained in the report on crop estimating and reporting methods made by a Special Subcommittee of the House Committee on Agriculture, which was released last June.

In publishing this material, we are expressing neither agreement nor disagreement with the conclusions reached or points raised by any of those who appeared on the program. As a matter of fact, there are several places where I am sure that our statisticians would disagree—for example, the question of how to devise and put better sampling methods into use is certainly important, but we would not, I think, be willing to agree that this is the only or one all-important problem facing the Crop Reporting Board. At the same time we would also argue that some materials which are sometimes considered as forecasts by those outside the Bureau—as for example the March Intentions to Plant materials—are not forecasts in the sense in which that word is ordinarily used. But these matters are beside the point. Here is a series of papers prepared by an able group of speakers, all of whom are outside the Bureau. They do represent the kind of viewpoints which some well-informed persons outside the Bureau hold, and they are a serious effort to analyze the recommendations of the recent House Subcommittee report on Agricultural Estimates and should, it seems to me, be of interest to practically all professional personnel in the Bureau.

O. V. Wells

Introduction

By Charles F. Sarle

Agricultural Statistics issued by the United States Department of Agriculture serve as a highly important and fundamental function in the operation of our national economy. The greater the accuracy of these official forecasts and estimates, the smaller the element of risk that must be borne by the buyers and processors of agricultural products, and the smaller the price margin between farmers and consumers. Accurate estimates of agricultural production are essential to the smooth functioning of our national economy,
whereas statistics of less than attainable accuracy create economic friction. They act as sand thrown into the complicated gears of our system of distribution. They may even adversely affect employment of labor in the processing industries, as was the case with the estimates of the 1951 cotton crop.

Deviations (usually spoken of as errors) between preliminary estimates or forecasts of crop production and the final estimates may be divided into three major groups:

1. Deviations due to the methods of sampling and estimating used by the Department.
2. Deviations caused by actual changes in crop production, or acreage prospects, between the date to which the forecast relates and the time when the crop is harvested.
3. Deviations resulting from policy decisions, such as the nonuse of weather and other information concerning current crop prospects between the time when the crop correspondents mail their questionnaires and the day when the crop report is issued. In the case of cotton reports, this policy decision is specified by Congressional action.

The purpose of our discussions is to consider, primarily, the first of these causes of deviations and to make suggestions as to methods of sampling and estimating that could be expected to result in an increase of the accuracy of national forecasts and estimates of the major crops and kinds of livestock. The recommendations of the House Committee Report 1 were not limited to the cotton crop reports.

In view of my long, but somewhat intermittent, association with the Crop and Livestock Estimating Service since the early 1920's—first, as the Federal-State Statistician in Iowa and later as a member of the Crop Reporting Board—and because of my active participation in methodological research involving probability sampling and weather-crop relationship studies extending over several years, I was especially interested in the House Committee Report. I feel that this report, which Mr. Heimburger summarizes, is an excellent and nontechnical presentation of crop-reporting problems. Most of the Committee's recommendations appear to be basically sound and practical. Some need amplification and a few would probably contribute little or nothing to increasing accuracy; they might even be harmful. These are points that are touched upon in our discussion.


Discussion of Subcommittee's Recommendations

Summary of Remarks by John J. Heimburger

The House Agriculture Committee approached the subject of the crop reporting service from a nontechnical viewpoint, in the hope that its findings would have the double effect of arousing general public interest in the improvement of the crop reporting procedures, and of focusing on those procedures the attention of technical experts who are competent to make affirmative suggestions for improvement. Mr. Heimburger said that the action of the American Statistical Association in taking up the report was therefore directly in line with the objective the committee had in mind. He expressed his own hope that the association might appoint a permanent committee on the subject or take some similar continuing interest in the improvement of agricultural statistics.

The committee's study dealt in detail only with the crop estimating and reporting procedures in regard to cotton, and specifically with estimates and reports of the 1951 crop. But it was the understanding of the committee that the procedures relating to cotton are enough like those for other crops so that its comments and recommendations would apply generally to the crop reporting and estimating program.