



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

REPORT ON SHORTCOMINGS OF AUSTRALIAN FARM FINANCIAL STATISTICS AND DESIRABLE IMPROVEMENTS*

F. H. GRUEN
K. O. CAMPBELL
SIR JOHN CRAWFORD

Introduction

In February 1962 the Council of the Australian Agricultural Economics Society appointed a sub-committee to report on the present state of farm financial statistics in Australia and to recommend desirable improvements. The aims in calling for this report were twofold:

(a) Members of the Society have long felt the need for more comprehensive economic information about Australian agriculture. The adverse movement of prices of farm products in Australia during the last decade has increased the urgency to obtain such data.

(b) In view of the possible reorganisation of various statistical series, it was felt that the Society — whose members are major users of farm financial statistics — should outline its views on desirable improvements in this field.

The Society's concern in this matter is not the result of any decline in the quantity of data published by the various statistical agencies, but is due rather to the rapid growth in the demand for more comprehensive coverage and increased accuracy.

The Present Position

The major agencies of the Federal Government publishing agricultural statistics and estimates are the Commonwealth Bureau of Census and Statistics and the Bureau of Agricultural Economics. The Bureau of Census and Statistics obtains its basic statistics of farm acreage, production, livestock numbers, etc. from an annual self-enumerative census of all rural landholders. The census is called "self-enumerative" in the sense that each landholder is supplied — either by mail or personal contact — with a census form which is filled in by him without the assistance of enumerators or trained interviewers. The statistics, and the estimates of the gross and net value of rural production which are derived from them are published annually in the *Primary Industries Bulletin*. In addition the Bureau publishes a variety of supplementary bulletins such as *The Wheat Industry* and *Wool Production and Utilisation* which are based in part on other sources of data and which present more detailed and more frequent information on various rural industries. Lastly the Bureau has since 1950/51 published estimates of farm income as part of the annual estimate of national income.

The Bureau of Agricultural Economics for its part, publishes the

*This report was prepared by a sub-committee of the Australian Agricultural Economics Society. The Commonwealth Statistician, Mr. K. M. Archer, has commented on the report at the invitation of the sub-committee. These comments are included in this issue of the Journal.

results of many *ad hoc* sample enquiries into economic conditions of certain groups of primary producers. However, these are often not continuous and this detracts from their value as indicators of changing economic conditions. The most important continuous data published by the B.A.E. are firstly the series on prices farmers receive for their products and the prices they pay for goods bought; secondly, the regular forecasts of value of production, exports and farm income and thirdly the information relating to its continuous sheep industry survey.

An Assessment of the Present Position

We are here concerned primarily with social and economic data relating to Australian agriculture. In this field our statistics compare relatively unfavourably with those of other English-speaking countries such as the United States of America, Canada or the United Kingdom.

Official statisticians in this country have often pointed with pride to our annual census of agricultural and pastoral holdings as providing us with many annual data — on a small area basis — which in many other countries are collected only every five or ten years. On the other hand the existence of this annual census has restricted the range of economic and social information obtained. It has been generally believed that information on economic items cannot be obtained on a form which is filled in by the farmer without the assistance of an enumerator. As a result information of this type is generally not obtained in Australia whilst it is an important feature of the five or ten year censuses conducted overseas. The agricultural statistics of Australia have been held in high regard abroad, but we are in danger of losing this reputation if we do not broaden the scope of our estimates and publications in keeping with modern trends.

From an economic point of view perhaps the most important statistical estimate published for the rural sector is that of farm income. This estimate was made originally by the Bureau of Census and Statistics not primarily to provide more data on the economic well-being of the farm sector of the economy, but because it was necessary to fill a gap in the overall estimation of national income. In view of the importance of the farm income estimate as a basic indicator of economic trends in the rural community the following criticisms of the present situation seem appropriate:

(a) The mere provision of a statistical estimate without publication of the methods of estimation used is of limited value. The pioneering account of the methods used in the estimation of farm income in Australia was published by an officer of the Bureau of Census and Statistics, Mr. D. V. Youngman, ten years ago. This was in the form of a paper to the 1952 ANZAAS Conference and is not generally available. Methods of estimation should be published regularly as part of the normal output of any statistical estimating agency. In the United States for instance, the Department of Agriculture published a detailed report on its estimating techniques in 1949 (*USDA Miscellaneous Publication* No. 703). This was followed by a nine-volume work in 1957 (including one volume dealing entirely with gross and net farm income — *USDA Agriculture Handbook* No. 118).

(b) Estimates for individual cost items such as fertilisers, depreciation, rent, wages, etc. are published regularly in the United States, Canada and the United Kingdom. In Australia broad aggregates of cost are sometimes released for publication on an *ad hoc* basis (for

instance in the course of wage enquiries) but no definite undertaking exists to publish these on a regular basis.

(c) As Youngman pointed out in 1952, the main shortcomings of the present farm income estimates are "those occasioned by lack of adequate information about farm costs" and there is little evidence that this defect has been remedied in the intervening decade. In the United States and Canada periodic sample surveys are conducted to obtain more adequate information on farm expenditure. In the United Kingdom an annual examination of 3,600 actual farm accounts provides statisticians in the U.K. Ministry of Agriculture, Fisheries and Food with one check on their estimates of farm expenses.

(d) One particular item of cost which requires special mention is depreciation. The present estimate of depreciation does not attempt to measure capital consumption but seeks to approximate the allowances for depreciation which are granted by the Commissioner for Taxation. Since accelerated depreciation allowances have been introduced expressly to encourage investment and bear little relation to rates of capital consumption, variations of depreciation deductions from gross farm product are produced by changes in income-tax legislation as well as by changes in capital consumption. (This point is going to be of increasing importance in national income calculations since the recent re-introduction of special depreciation allowances for non-rural enterprises). It is true that there are considerable practical difficulties involved in estimating capital consumption, both in industry and in agriculture. This is little excuse for using a patently wrong conceptual basis for the magnitude being estimated.

(e) Another conceptual problem — of relatively less importance — concerns the practice of ignoring changes in livestock numbers in estimating net farm income. This is unlikely to bulk large in farm income calculations in "normal" years but could give a grossly misleading picture in years of major drought.

(f) Apart from the B.A.E.'s income series for different kinds of wool-producing properties, no information is available on historical changes in incomes for different groups of farmers — e.g. dairy farmers, sugar producers, etc., and by broad regional areas. However, estimates of *changes* in farm income by States have been published in recent years.

We should also draw attention to the lack of other farm financial statistics in Australia. No estimate is published of total capital investment in Australian agriculture. In recent years a series of expenditure on certain classes of farm machinery has been published. But little is published on other components of agricultural capital formation. Changes in the rate of capital formation in agriculture are important indicators of likely future trends in farm output; they also provide some evidence of trends in producers' expectations and of their responses to changing economic conditions. Nor does the Statistician provide any information on levels of farm indebtedness (though aggregate data for some important types of farm indebtedness are available from other sources).

For purposes of comparison we might contrast the position in this country with the farm financial statistics available in Canada. In Canada the Dominion Bureau of Statistics regularly publishes estimates

of the net farm income for Canada and constituent provinces. (No state or other regional breakup is available in Australia). Farm operating expenses are published in regular bulletins; information is available on 17 different cost categories including interest on indebtedness, tractor costs, electric power, machinery repairs and building repairs. (In Australia four groups of farm operating expenses are sometimes made available i.e., marketing costs, wages, depreciation and cash costs). Farm operating expenses, subdivided as above, are also available for individual provinces in Canada. Canadian national income bulletins provide estimates of business gross fixed capital formation separately for agriculture and other individual industries. Furthermore annual series are published in Canada giving capital and repair expenditure in agriculture separately. This is further split up into expenditure on machinery and expenditure on buildings and construction. The only series of this kind available in Australia are firstly the capital expenditure on certain types of machinery and secondly the capital and repair expenditures on various types of buildings for New South Wales. This latter series has not been published in recent years because it is regarded as too unreliable. We have no interest in encouraging the publication of series regarded as unreliable, but want to point to the fact that official statisticians in many countries have found it possible to reconcile the demand for reliability with a much wider publication programme than Australian statisticians.

Some Suggestions for Desirable Improvements

The areas of Australian agricultural statistics and estimates where additional economic information is most urgently needed are: (i) absolute levels and trends in farm expenditures, including both current and capital expenditures; (ii) absolute levels and trends in capital consumption. Such information is required not only for public policy and research, but also as a guide to firms supplying farmers with industrial products (e.g., fertilisers, machinery, building materials and chemicals).

Since Australian statisticians believe that it is difficult to obtain accurate and reliable information on the value and volume of farm expenditure (including investment) through the present techniques of data collection, serious consideration should be given to the introduction of periodic national sample enquiries to obtain such economic data as farmers' expenditure, investment and indebtedness. An additional source of data which seems to be less fully utilised than is perhaps possible is the information obtained by the Commissioner of Taxation in the course of his duties.

Sample surveys of farmers and the increased use of tax data would provide not only more accurate and reliable information on farm costs and levels of farm investment, but would also enable the publication of an informative breakdown of information concerning the farm sector (e.g., according to farm size and for separate regions or states). The usefulness of information of this type for the three main classes of users — governments, private businesses and research workers — should be obvious.