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## FARM MANAGEMENT ADVISORY SERVICES IN ENGLAND

P. C. DRUCE\*

*Principal Economics Research Officer*

1. SUMMARY
2. INTRODUCTION
3. AGRICULTURAL RESEARCH AND ADVISORY SERVICES  
National Agricultural Advisory Service
4. FARM MANAGEMENT ADVISORY SERVICES  
The Role of the Farm Management Liaison Officer  
Farm Management Survey  
Farm Management Advisory Techniques
5. APPLICATION OF THE BRITISH APPROACH TO NEW SOUTH WALES

### 1. SUMMARY

It is only in very recent years that there has been any widespread recognition in Australia of the need for farm management research and advisory services. Most State Departments of Agriculture and some universities are now interested in farm management research and extension and a few are actively engaged in farm management research. However, there is not, as yet, any organised State-wide farm management advisory service in Australia.

This position is in marked contrast to the situation which exists in the United Kingdom, in most of the States in the east and middle-west of the United States and in New Zealand. In these and several Continental European countries, farm management advisory services have been developed quite extensively in the post-war period. In some States in the United States the development came much earlier.

The position in the United Kingdom is likely to be of particular interest to agricultural economists and to those concerned with agricultural administration in Australia because it provides an example of the manner in

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\* The author wishes to record his appreciation of the assistance given by officers of the undermentioned organisations during his visit to the United Kingdom in 1958:

Ministry of Agriculture, Fisheries and Food, London (including the Economics Branch and the National Agricultural Advisory Service);  
Department of Agriculture for Scotland, Edinburgh;  
Cambridge University—Farm Economics Branch, School of Agriculture;  
University of Leeds—Department of Agriculture, Economics Section;  
University of Nottingham—School of Agriculture, Department of Agricultural Economics, Sutton Bonington;  
University of Bristol—Department of Economics (Agricultural Economics), Newton Abbot;  
University of Oxford—Agricultural Economics Research Institute;  
University of Reading—Department of Agricultural Economics;  
National Agricultural Advisory Service—field offices in (a) Cambridge;  
(b) Gloucester;  
Imperial Chemical Industries Limited—Economic Intelligence Unit, London.

which a farm management advisory service was grafted on to an existing technical advisory service which was broadly similar to the agricultural extension services provided by State Departments of Agriculture in Australia.

In this article the development of the present farm management advisory service in England is outlined and discussed. The article is based primarily on observations made during a short tour of investigation in the United Kingdom in 1958.

During this period farm management research and advisory work was discussed with representatives of the Ministry of Agriculture, Fisheries and Food, most of the major English Universities, the National Agricultural Advisory Service (both in London and in provincial centres), and the Department of Agriculture for Scotland.

The administration of farm advisory services in Scotland differs somewhat from administration in England and Wales. However, the differences are not vital; in this article attention is confined to the position in England.

Since 1946 farm advisory services in England and Wales have been provided by the National Agricultural Advisory Service (NAAS) of the Ministry of Agriculture, Fisheries and Food; very limited services are also provided by universities and by a few large commercial organisations.

NAAS functions on a county and provincial basis and while in its general structure it is somewhat similar in organisation to the New South Wales Department of Agriculture the administration is far more decentralised.

The organisation of its advisory services is, however, quite similar to New South Wales in many respects, particularly in so far as there are general advisers (district officers) whose responsibilities appear to be very similar to those of this Department's district agronomist; these generalists are supported by specialists at the county and provincial level (there being eight provinces in England and Wales).

As its name implies, NAAS is primarily an extension organisation; however, it does carry out some experimental work and it also conducts some farm demonstrations but it does not engage in any fundamental research.

The advisory services provided by NAAS differ in one important respect from the services provided by this Department. Since 1950 farm management, or what is sometimes referred to as "the whole farm approach", has become a fundamental part of the advisory service.

Since it was decided that NAAS should provide advice on farm organisation and management in addition to its technical advisory services there has been an extensive programme of in-service training designed to equip *all* NAAS advisory officers to deal with problems of management and farm organisation. In the past seven or eight years all NAAS field personnel have received some basic in-service training in the elementary principles and techniques of farm management. Quite a number of British research and advisory personnel have also visited the United States for periods of about six months each to study American research and extension methods and several experienced American agricultural economists have spent a year at one of several British Universities to assist with the training of British personnel.

In contrast to the position in New South Wales, where advisory officers have no basic training in farm management techniques and where no advice on management problems *per se* is provided, all NAAS advisory personnel are now equipped—in some degree at least—to advise on farm management and organisation—on the business management of farms, as well as on technical problems of agriculture.

The extent to which individual officers do in fact provide management advice varies greatly, as might be expected in the relatively early stages of the development of this new advisory approach. However, it would appear that the general consensus of opinion, not only in NAAS itself, but in other sections of the Ministry and in the Universities is that this new approach by the farm advisory services has resulted in a marked improvement in the standing which NAAS enjoys in the eyes of the farming community.

Farm management advisory services can be provided only if reasonably adequate economic data—information on costs and returns, inputs and outputs—are available for different types and sizes of farms and farm enterprises.

A mass of such information is available in the United Kingdom; this is derived mainly from the Farm Management Survey and associated costing work, conducted by the Provincial Agricultural Economics Service on behalf of, and largely financed by, the Ministry of Agriculture, Fisheries and Food.

The Provincial Agricultural Economics Service is comprised of the agricultural economics departments of eight universities (ten centres) throughout England and Wales and although these universities obtain certain economic information for the Ministry of Agriculture, Fisheries and Food and are partly financed by the Ministry, they are largely independent of the Ministry.

To provide a satisfactory economic advisory service NAAS must have the closest possible liaison with the organisations which provide the basic economic data on which management advice to farmers must be based. To provide for this, a farm management liaison officer has been appointed to each of the provincial agricultural economic centres and it has been the function of these officers to train NAAS personnel in the techniques of farm management and to provide NAAS with the essential economic data required to implement a farm management advisory service.

In providing farm management advice NAAS relies largely on two basic techniques. The first and most widely used is the comparison of the performance of the farm being examined with standards or “measures of performance” for farms of the same type and size in the same district. This comparative method, it is claimed, enables the adviser to pin-point weaknesses in the organisation and management of the farm being studied. It is, almost universally, the initial approach used by NAAS and, as such, has a definite value. But unless it is followed up with more refined methods of analysis its value is somewhat limited.

The second management technique commonly used by NAAS—although perhaps not as widely as it might be—is the well-known one of budgeting. Where this is applied it helps the farmer and his advisers to formulate improved organisation which should lead to increased profitability of the whole farm enterprise.

In summary it may be said that the farm management advisory service which has been and still is being developed by NAAS is a promising experiment which, despite some deficiencies in respect of techniques used, shows every prospect of being successful.

My observations of the farm management advisory service as operated in England and Wales by NAAS has strongly reinforced my opinion that a service of a similar nature would prove most valuable to the farming community in this State.

## 2. INTRODUCTION

Before describing the organisation of agricultural advisory services, and farm management advisory services in particular, in the United Kingdom, it may be worth defining the term *farm management* for those readers who may be unfamiliar with the meaning attached to this term by agricultural economists.

To the economist the term *farm management* refers to a body of knowledge and principles which has been developed to the stage where it can validly be described as an applied science. The science of farm management has been developed during the past sixty years, and particularly during the last thirty years, primarily in the United States of America and much more recently in Europe.

“Briefly and positively stated, farm management from the general agricultural viewpoint is the *act of managing a farm* or farm properties; from the viewpoint of education, it is *giving organised instruction* about the management of farms; from the viewpoint of research, it is *gathering, systematically recording, analysing and interpreting data relating to the details of organising, managing and operating specific farm units or properties*. In each of these areas of activity the focal point is, or should be, the individual farm unit or a group of farm units individually operated . . . Farm management as an economic function consists essentially of planning and directing the operations of an individual farm from the viewpoint of maximum returns to the operator.”<sup>1</sup>

In a recent report by a group of European experts entitled *Farm Management in the United States* it is stated that:

“. . . the term ‘Farm Management’ has a special significance. It relates to the business decisions which farmers have to make in order to achieve a balanced and profitable farming system. It concerns not only the technical aspects of growing crops and producing livestock, but also the selection of these enterprises and how big they shall be. Each of these aspects will be important for determining not only the net income of the farmer, but also the productivity of all resources within any country which are devoted to agriculture.

“Farm management is concerned with the basic information and techniques for interpreting it, which will indicate the merits of the various alternative ways of operating any particular farm. It is an aid to the farmer and his advisers in making wise decisions.

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<sup>1</sup> Andrew Boss and George A. Pond, *Modern Farm Management* (Saint Paul: The Webb Publishing Company, 1949), pp. 8-9.

“ . . . farm management must also be the framework within which all agricultural teachers and advisers, whether specialists or generalists, who are to be successful must fit the advice they offer.”<sup>2</sup>

“Farm management involves a different type of study from the other fields of agricultural science. First, it is a practical study in a way in which the other fields are not. Instead of simply dealing with the facts of agricultural science, it shows how to put these facts to work on the farm; in short, farm management alone is interested in *profitability*.

“ . . . farm management is not only the practical field in agricultural science; it is also broader than the other fields, and must consider the findings of each in reaching its own conclusions. It takes the position of the individual farmer and considers the farm as a whole.”<sup>3</sup>

“Farm management, as the subdivision of economics which considers the allocation of limited resources within the individual farm, is a science of choice and decision making, and thus is a field requiring studied judgment.”<sup>4</sup>

Farm management involves the application of economic principles to the individual farm business. The farm management specialist, whether he is a research worker or an extension officer, is fundamentally an economist. Farm management, as it is known to-day, is in essence a branch of economics.

### 3. AGRICULTURAL RESEARCH AND ADVISORY SERVICES

To appreciate the part played by farm management research and extension in British agriculture it is necessary to have a picture, at least in broad outline, of the structure of the administrative, scientific and advisory services in agriculture generally.

The administration of agricultural policy in England and Wales is the responsibility of the Ministry of Agriculture, Fisheries and Food. The Ministry is also responsible for the application of research i.e., for the provision of advisory services. Extension activities of a very limited character are also carried out by several universities while a few commercial organisations also provide special advisory services. Responsible primarily for policy administration and extension, the Ministry has relatively limited responsibilities in the field of agricultural research. There are, however, a large number of institutions engaged in various branches of agricultural research; these include universities, various agricultural research institutes and units (some of them attached to universities and some independent) and commercial organisations. Some experimental and demonstration work is carried out by the Ministry.

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<sup>2</sup> *Farm Management in the United States* (Paris: The European Productivity Agency of the Organisation for European Economic Co-operation, 1958), p. 11.

<sup>3</sup> Heady and Jensen, *Farm Management Economics* (Englewood Cliffs, N.J.: Prentice-Hall, 1955), p. 1.

<sup>4</sup> *Ibid.*, p. 6.

### **National Agricultural Advisory Service**

In 1946, the Ministry of Agriculture, Fisheries and Food established the National Agricultural Advisory Service (NAAS) to enable the Ministry to fulfil its responsibilities in advisory work. Prior to 1946 advisory services were carried out in a relatively unco-ordinated manner by provincial universities, agricultural colleges and local government authorities.

With headquarters in London, NAAS is a highly decentralised organisation. It works on four levels—district, county, province and headquarters. The district advisory officer (who is a general agricultural adviser and whose functions are very similar to those of this Department's district agronomist) occupies a key position since it is he who is the main contact between the service and the farming community. District advisory officers are grouped under a County Agricultural Officer who also has, as assistants, specialist advisory officers in livestock, poultry, milk production, horticulture, and, in larger counties, farm machinery. All of these officers have direct contact with the farming community. The County Agricultural Officer is the chief officer of the County Agricultural Executive Committee which has farmer representation.

Science and husbandry specialists are located at the provincial centres, of which there are eight, while there are farm management liaison officers in each province but they are not always located at the provincial centre.

The provincial staff as a whole—and also the county staffs within the province—are the responsibility of a Provincial Director assisted normally by a Deputy Provincial Director; in some cases the Deputy Provincial Director is stationed at a sub-centre within the province.

The NAAS staff in London is restricted to the Director, three Senior Advisory and Education Officers who are responsible for the science, husbandry and horticulture groups respectively, and a few other technical officers including a Chief Farm Management Adviser.

### **4. FARM MANAGEMENT ADVISORY SERVICES**

On its establishment NAAS absorbed almost all agricultural advisory officers previously employed by provincial universities, agricultural colleges and local government authorities. However, the agricultural economists attached to the provincial universities throughout England and Wales, and who comprised the Provincial Agricultural Economics Service, were one of the few groups who did not join NAAS.

These agricultural economists, while engaged primarily on research and investigational work, were responsible for some advisory service in agricultural economics and farm management. They were the only advisers in this field at the time NAAS was established. One of the factors influencing the decision that they should remain with the universities rather than transfer to government service was that, as university staff, it was believed they would be entirely independent of government pressures; it was considered that they would be in a better position to interpret in an impartial manner the research material which they obtained and it was believed they would be better able to advise farmers impartially if they owed no direct allegiance to government or to government policy.

For a short period, in its very early years, NAAS provided little, if any, advice of an organised nature on farm economics or farm management. However it soon became apparent that if the service was to operate in the most efficient manner possible farmers needed to be able to obtain advice not only on technical aspects of agriculture and livestock management but also on the organisation and control of the whole farm as a business entity.

NAAS found in its early years that there was a growing demand for advice on farm organisation and farm management, and as a result, it was decided, about four years after its establishment, to make a major change in the emphasis of NAAS advisory work.

In 1950 it was decided that all NAAS officers employed on advisory work should receive in-service training to equip them to deal satisfactorily with problems of farm organisation and farm management.

It was recognised at that time that this aspect of advisory work was not entirely new in the United Kingdom as the following quotation from the official *Report on the NAAS—The First Eight Years, 1946 to 1954* indicates.<sup>5</sup>

“... even before the war [World War II] some of the more experienced advisory officers advised farmers on farm organisation and the probable implications of any changes proposed in their farming systems. Generally speaking, however, advisory officers have not received in their undergraduate training as much instruction in farm management as in husbandry and the sciences. Most of the work on farm management, based as it must be on economic and financial data collected from a large number of farms, was carried out by the Provincial Agricultural Economists and their staffs at universities and agricultural colleges.

“During and since the war, the Provincial Agricultural Economists have had their duties and responsibilities increased in various directions, and the universities have not wished to develop and expand the advisory work in management at the farm level that they were doing before 1939, but have preferred to develop along the lines of collecting additional data on management problems and elaborating new techniques offering more specialised forms of advice. Having regard to this, and to the fact that the D.O.'s of the N.A.A.S. are the advisers in closest contact with the farmer, it was decided that they should be responsible not only for the technical but also for the economic aspect of advisory work in their districts.”

Before discussing the ramifications of this new policy one or two comments on the foregoing statement might be appropriate. As indicated later in this article, a very great deal of the “research” carried out in agricultural economics in the United Kingdom particularly before World War II and even after, has been devoted to investigating production costs, and it would appear to the outside observer that the results of much of this work have been hardly commensurate with the effort and the resources which have been put into it. Particularly prior to World War II most of the resources of the agricultural economics departments attached to the provincial universities were devoted to this type of investigation and the

<sup>5</sup> *Report on the National Agricultural Advisory Service: The First Eight Years, 1946-1954* (London: Her Majesty's Stationary Office, 1955), p. 21.



relatively little advisory work that the provincial universities did carry out was based to a large extent on this costing work. While, therefore, it is true that, as indicated in the statement quoted, some advisory work on farm organisation and management was carried out prior to World War II, this work was apparently of quite a restricted character.

The second comment worth making on the foregoing quotation is that the statement that "advisory officers have not received in their undergraduate training as much instruction in farm management as in husbandry and the sciences" is about as much of an understatement as it would be if it were applied to Australian agricultural advisers at the present time. In other words, many, probably most, of the technical agricultural advisory officers employed by NAAS had, prior to 1950, virtually no academic training in farm management or agricultural economics.

When the question of extending NAAS advisory services to include advice on farm management was under consideration a well-known American agricultural economist—Sherman E. Johnson—was invited to the United Kingdom to report on the establishment of farm management advisory services. Unfortunately his report is not available. However, following his visit to Britain it was arranged that a number of British agricultural economists should visit the United States to study farm management research and extension in that country, and in the intervening years upwards of 30 agricultural economists from the United Kingdom have spent periods—usually of about six months—in the United States studying methods used in that country. More or less concurrently with these earlier visits to the United States by British workers it was arranged that six American agricultural economists should spend a year working with British agricultural economists at different university centres in the United Kingdom. There can be no doubt that these arrangements have had a most beneficial effect on agricultural economic research in the United Kingdom.

The decision that NAAS was to provide advisory services in farm economics, farm organisation and farm management meant:

- (i) that its advisory officers had to be given some in-service training in farm management methods; and
- (ii) that there had to be a very close liaison between NAAS and the agricultural economics departments of the provincial universities. (The Provincial Agricultural Economics Service.)

The second of these requirements was met by the appointment of a Farm Management Liaison Officer to each of the provincial universities. Funds for the appointment of these officers were provided by the Ministry. However, in practice the farm management liaison officer attached to each of the provincial universities appears to have the freedom generally associated with a university appointment. Further reference to the responsibilities and activities of these officers is made later in this article.

The problem of providing NAAS farm advisory officers with in-service training in farm management has been tackled by providing a series of short courses in farm management and it is claimed that all NAAS advisory officers throughout the United Kingdom have now attended these courses. The courses, which are usually of a three-day duration, vary from province to province being the responsibility of the farm management liaison officer in each province. Nearly all NAAS advisory officers have attended at least two such courses and some have attended three. The courses have provided

instruction in the principles of farm records and farm management, the use of the farm analysis worksheet (referred to later) and farm budgeting. Thus it can be said that all technical advisory officers in agriculture in England and Wales have, in the past seven years, received at least the basic minimum of instruction in the more important practical techniques of farm management.

The concensus of opinion in both official and university circles is that the new emphasis on the farm management approach to extension has resulted in a marked increase in the status of the farm advisory worker in the eyes of the farming community. The British farmer is frequently faced with extremely complex organisational problems, and the gradual realisation by the farmer that its technical advisory officers are now equipped, at least in some measure, to give him advice on his organisation and management problems has, it is widely claimed, greatly increased the respect with which both the individual advisory officer and NAAS generally is held by the farming community.

### **The Role of the Farm Management Liaison Officer**

Almost all of the basic economic data which is essential to the operation of the farm management advisory service is provided by the staff of the Provincial Agricultural Economists in each of the ten universities situated in the eight provinces referred to in the earlier part of this report. (There are two agricultural economics centres in two provinces.) Farm management advisory work is, of course, impossible to carry out in most of its aspects unless there is detailed information available on costs, and on input/output relationships under various specified conditions and for various types of farming and various localities. This sort of information is obtained and published by the Provincial Agricultural Economics Service primarily, but by no means entirely, arising out of the Farm Management Survey carried out by the provincial universities on behalf of the Ministry of Agriculture, Fisheries and Food. This survey is dealt with in some detail in a later section of this article.

As already stated the link between the Provincial Agricultural Economists and the National Agricultural Advisory Service in each province has been provided through the appointment of an experienced agricultural economist at each university who is fully engaged on farm management work and who acts as a liaison officer between the agricultural economics department of the university and NAAS. This arrangement, it is claimed, "is working efficiently and considerable work is already being undertaken in some counties jointly between the advisory officers and the liaison officers. Mention should also be made of the provincial farm management liaison committees, which are representative of the N.A.A.S. and the Provincial Agricultural Economics Service. They have been established to act as a kind of 'forum' where all aspects and problems of farm management work can be reviewed and discussed. The liaison officer also acts as a channel by means of which the more specialised farm management problems may be referred to the Provincial Agricultural Economist."<sup>6</sup>

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<sup>6</sup> *Loc. cit.*

The functions of the farm management advisory officer may be classified as follows:

- (i) To provide advisory officers with information on costs, input and output, etc., collated by the staff of the Provincial Agricultural Economist;
- (ii) To train NAAS advisory officers in the fundamental principles of farm management;
- (iii) To carry out research in farm management and to help co-ordinate other research activities in farm management carried out by the staff of the Provincial Agricultural Economist; and
- (iv) To deal with more complex farm management advisory problems received by NAAS and occasionally to provide direct farm management advice to members of the farming community.

From the foregoing it will be apparent that the farm management liaison officer is, in effect, an "adviser's adviser" rather than a farmer's adviser. He is engaged to only a relatively minor degree in providing farm management advice direct to the individual farmer. Most of his advisory work is carried out through the medium of the technical advisory officer, whether that officer is a generalist or specialist.

The functions of the farm management liaison officer are gradually altering. In the early stages of his appointment his main function was to train technical advisory officers in the elements of farm management techniques. This very necessary function has now been largely completed thus releasing a considerable proportion of the farm management liaison officer's time for other activities. He is, therefore, now in a position to engage in more research into farm management methods with a view to providing more refined basic material for use by advisory officers than he was originally able to do.

As time has gone by it has also become less necessary for the farm management liaison officer to spend time on individual problems of management submitted to him because, as they gain experience, technical advisory officers are becoming more proficient in dealing with problems of organisation and management. While, therefore, circumstances vary very greatly with individuals, it is the general concensus of opinion that as the service develops the farm management liaison officer should be required to deal personally only with quite complex advisory problems, leaving the more routine problems to the technical advisory officers who, with some exceptions, now have adequate knowledge and experience to cope with such problems without reference to a farm management specialist.

### **Farm Management Survey**

No study of the development of agricultural economics and farm management advisory work in the United Kingdom would be complete without some reference to the Farm Management Survey. In fact, to the outside observer it would appear that this survey has had a profound and sometimes unfortunate influence on the development of agricultural economics in the United Kingdom and even on the farm management advisory techniques used.

The farm management survey has been in operation for a period of almost 30 years but it is only since World War II that the vast amount of data arising from the survey has been co-ordinated and put into a form which is useful for farm management advisory work. The survey is conducted by ten provincial universities in England and Wales for the Ministry of Agriculture, Fisheries and Food; similar information is also obtained in Scotland and Northern Ireland. The Agricultural Economics Departments of the universities concerned are partially financed by the Ministry on the understanding that approximately half of the time of the provincial economics staff is devoted to the farm management survey and other work, mainly of a costing character, for the specific use of the Ministry. The universities are free to use any of the data obtained from the farm management survey or the various enterprise costing studies carried out for the Ministry but the prime purpose of the work is to provide the Ministry with information which can be used in connection with the annual agricultural price review and for other policy determinations. The material obtained from the Farm Management Survey and associated studies provides the Ministry with impartial factual information on costs and returns in agriculture and on developments in the farm economy generally.

The Ministry asks each of the various universities to provide the same basic information on costs and associated factors (although different enterprise cost studies are done at different universities) but it is left to the universities themselves to determine precisely how the information is obtained. There are over 2,000 participating farmers each year in the farm management survey, each university obtaining information from between 200 to 400 farms. Some universities depend entirely on the survey method of collecting the information while others rely solely on records kept by co-operating farmers; others combine the survey and the record method to obtain the information required.

At the University of Cambridge, for instance, a survey of approximately 400 farms is carried out each year using a form of analysis sheet designed to enable the recording officers to obtain all the information necessary to ascertain detailed costs and returns. This form was patterned on a form used originally at Cornell University in the United States and has remained basically unchanged since its introduction by Cambridge in 1930.

Cambridge does not rely on supervised farm records as a source of information for the farm management survey, preferring the field survey system using the prepared questionnaire already referred to.

In contrast the University of Bristol at its centre at Newton Abbot relies solely on a system of supervised farm records to obtain cost records from about 300 farms each year. The University supplies farm account books to those farmers who desire to use them but it does not insist that co-operating farmers use the University's own farm account book, being content to have them use commercial account books as an alternative if they prefer to do so. Of the provincial centres visited, Cambridge and Newton Abbot represent the greatest contrast in the methods used to collect the basic farm management survey material. Not only does Newton Abbot rely exclusively on farm accounts for the preparation of its material but it also prepares taxation returns for about 150 of its 300 co-operating

farmers; Cambridge on the other hand relies exclusively on the survey method and does not assist co-operating farmers with taxation returns at all.

Most of the other universities visited combined the survey method as used at Cambridge and the farm account system as used at Newton Abbot but in no case did any other university provide a taxation service such as is provided at Newton Abbot. While it is difficult to make an accurate assessment of labour requirements for the farm management survey work owing to the fact that most officers concerned do other work in addition to the farm management survey project it would appear that the survey method is more economic of labour resources than is the farm account system. It is doubtful whether any slight increase in accuracy resulting from the use of the farm account system is worth the additional resources used. As already indicated, in addition to the farm management survey, each provincial university carries out several enterprise costing studies each year for the Ministry of Agriculture, Fisheries and Food. These studies, the aim of which is to obtain detailed costing information for particular farm enterprises, are usually carried out by a combination of the survey method, supplemented with limited records of labour and other costs; generally each university aims to obtain information from 50 to 60 farms for each type of enterprise studied.

From the point of view of the farm management advisory worker, the net result of the farm management survey is that there is a vast amount of information available on the financial position of different types and sizes of farms in many parts of the United Kingdom. Detailed information is available on the cost of various factors of production per acre, per livestock unit, per £100 of gross income and net income, etc. In recent years this information has been classified and published by the Ministry of Agriculture, Fisheries and Food for use by extension workers. As a result farm management advisory workers in the United Kingdom probably have more basic economic data available to them on costs, inputs, and outputs, etc., than any similar workers except those in some of the eastern and mid-western States of the United States.

### **Farm Management Advisory Techniques**

There can be little doubt that the current techniques used in farm management advisory work in the United Kingdom have been influenced quite considerably by the relatively long history of farm accounting in the United Kingdom and by the Farm Management Survey in particular. It is probably true to say that up to the beginning of World War II 90 per cent of what might be termed "research" in agricultural economics in the United Kingdom was devoted to farm costing. Although the emphasis has been changing in recent years, in many universities at least 50 per cent of the professional agricultural economists' time is still devoted to costing work of one kind or another.

The large amount of detailed costing information obtained through the farm management survey and the various associated enterprise costing studies has made it possible for agricultural economists in the United Kingdom to draw up a series of standards or "measures of performance" for various types of farms and various farm enterprises which it is claimed

enables the farm management advisory worker to assess the relative efficiency of any given farm (provided certain basic information is supplied by the farmer) and to pinpoint weaknesses in its organisation and management.

The standards or measures of performance which have been derived from data obtained from the farm management survey and associated studies provide the framework and the basis for the Farm Management Advisory Service. The standards have been derived for different types and sizes of farms and for different enterprises in various parts of the country.

Some of the basic standards have been published by the Ministry of Agriculture, Fisheries and Food in a book entitled *The Farm as a Business*.<sup>7</sup> This book is sub-titled "A Handbook of Standards and Statistics for Use in Farm Management Advisory Work". It was prepared originally solely for the use of NAAS advisory officers but in view of the widespread interest that it generated it has been made available for general sale and has created considerable interest in the farming community. The booklet provides instruction on how the standards are derived and how the individual farmer may compare his results with results of farms of a similar type and size. However, it is doubtful whether standards as published in this book can be satisfactorily applied to a great many farms in the United Kingdom as the standards are of a rather general character whereas there is a tremendous variation in farm type and size, fertility, etc. in different parts of the country. If standards are to have any real value they must be specific not only as to type and size of farm but to a particular area. With this in view supplementary standards are provided by each of the provincial universities for NAAS advisory officers in each province.

It is stated in *The Farm as a Business* that the purpose of the "measures of performance" or standards is:

"(a) to show what economic success is being achieved as compared with farms of a similar type and size in the locality, (b) to uncover whatever weaknesses there may be in the present organisation of the farm and (c) to suggest ways in which greater financial success might be achieved."<sup>8</sup>

The extent to which the application of these measures of performance by farm management advisory workers is successful in achieving the foregoing objectives will be discussed later.

No attempt will be made here to deal in detail with the various standards used but an indication of the type of standard or measure of performance used can be seen by reference to Table I. It is taken from *The Farm as a Business*.<sup>9</sup>

When a NAAS advisory officer is asked by a farmer for advice on a management problem the usual procedure is for the adviser first to make a routine analysis of the farmer's business. He does this by examining whatever accounts and records the farmer may have and he uses these

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<sup>7</sup> *The Farm as a Business*, a handbook of standards and statistics for use in Farm Management Advisory Work (London: Her Majesty's Stationery Office, Second Edition, 1957).

<sup>8</sup> *Ibid.*, p. 16.

<sup>9</sup> *Ibid.*, p. 69.

TABLE I  
Lowland Dairy Farms—Production Standards

	0-50 Acres		51-150 Acres		Over 150 Acres	
	Average	High Profits	Average	High Profits	Average	High Profits
Gross Output per acre .. .. .	£ 71.0	87.8	55.5	62.8	56.6	67.4
Net Output per acre .. .. .	£ 34.6	47.4	32.2	41.1	35.7	40.8
Gross Output per £100 Costs* .. .. .	£ 99	116	106	124	119	127
Gross Output per £100 Labour* .. .. .	£ 428	532	417	458	476	571
Net Output per £100 Labour* .. .. .	£ 208	287	242	300	300	346
Gross Output per £100 Labour and Power* .. .. .	£ 272	355	271	303	301	355
Net Output per £100 Labour and Power* .. .. .	£ 133	192	157	199	190	215
Livestock Output per L.U. .. .. .	£ 84	89	81	95	81	86
Cattle and Mill Output per Unit—Cattle .. .. .	£ 88	96	83	97	85	93
Sheep Output per Unit—Sheep .. .. .	£ ..	..	25	26	30	28
Pig Output per Unit—Pigs .. .. .	£ 88	..	99	115	92	98
Poultry Output per Unit—Poultry .. .. .	£ 89	78	84	94	86	95
Livestock Output per stock acre .. .. .	£ 66	87	52	61	53	61
Livestock Output per feed acre .. .. .	£ 31	37	31	38	33	36
Stock acres per livestock unit .. .. .	1.3	1.0	1.6	1.6	1.5	1.4
Feed acres per livestock unit .. .. .	2.7	2.4	2.6	2.5	2.5	2.4
Acres, grass per unit grazing stock .. .. .	1.4	1.1	1.5	1.4	1.5	1.3
No. of Cows per 100 stock acres .. .. .	43	46	35	40	31	30
Milk—Gallons per cow .. .. .	787	935	751	805	793	921
Gallons per stock acre .. .. .	340	430	262	322	245	276
System Standard .. .. .	86	103	70	71	63	65

\* Includes value of farmer's manual labour.

records and other information that he can obtain from the farmer to prepare a standard Farm Analysis Worksheet. Provided he can obtain all the basic information required he then compares the performance of the particular farm in question with the established standards of performance for other farms of a similar type and size in the same district, where such information is available. The objective is to pinpoint weaknesses in the farm organisation or in its operation. In some cases there is immediate *prima facie* evidence of managerial weaknesses, such as, excessive labour costs per acre or excessive feed costs per livestock unit. Where this type of apparent weakness is revealed as a result of the analysis the particular matter is examined and discussed with the farmer with a view to determining whether savings cannot be effected or whether more efficient use cannot be made of the particular factor which appears to be unduly costly.

Of course, it does not always follow because one particular cost factor is high relative to the "average" farm of the same size and type that this is due to unsatisfactory farm organisation or inefficient management; there may be special circumstances on the farm in question which result in a high cost level for this factor, circumstances which are beyond the control of management. Furthermore, where the farm under examination is atypical in any important respect some and perhaps all the standards will be inapplicable to that farm and any attempt to apply standards to it may prove quite misleading.

The standards evolved by the Ministry have their uses and they have undoubtedly proved valuable to farm management advisory workers, but it must be recognised that they also have their limitations.

The extent to which the budgeting technique is used by advisory officers appears to vary greatly. This variation seems, in practice, to be due more to the particular inclinations and interests of the advisory officer than to the needs of the particular case. In some areas, advisory officers have received more training in farm budgeting than in others and in some cases the senior advisory officers appear more interested in budgeting than others; where these latter circumstances prevail budgeting is likely to be more widely practised than in other areas where training has been more superficial or where there is lack of interest in the technique at the higher levels.

It would appear that the general consensus of opinion amongst both agricultural economists and technical agriculturists in the United Kingdom is that the system of comparing farm performance with standards for the district has been particularly valuable in training technical personnel to think of farming as a business and in helping them to look at the farm as a whole. However, it is recognised that there are dangers in relying too heavily on the system of comparative standards, particularly where the persons applying these standards have only limited training in agricultural economics and farm management.

There is no doubt that preparation of similar standards for use in New South Wales would be of some value in future farm management advisory work but it would be unwise to devote anything like the same proportionate time and resources to the preparation of such standards as has been given to this work in the United Kingdom. It is, of course, absolutely essential, if farm management advisory work is to be developed in this country—and it should be, that basic economic data on costs and returns, inputs and outputs,



be accumulated and be available to farm management workers and to farmers generally. However, the main value of this type of information will be in the preparation of budgets and possibly to a more limited extent in linear programming rather than in the drawing-up of standards such as have been devised in the United Kingdom.

### **5. APPLICATION OF THE BRITISH APPROACH TO NEW SOUTH WALES**

The United Kingdom farm management advisory service should be of interest to agricultural economists and agricultural administrators in Australia because it has demonstrated quite clearly that it is possible to successfully superimpose quite a comprehensive farm management advisory service on to an existing technical advisory service and to do this in a relatively short space of time.

It is perhaps too early to make any final assessment of the success of the NAAS farm management advisory service but it is quite clear that NAAS has succeeded, in a matter of a few years, in training a significant proportion of its technical advisory staff to the point where they are capable of giving sound farm management advice using recognised techniques such as farm budgeting. Furthermore, many of the technical advisory officers (whether generalists or specialists) after a short period of training and some experience have proved capable of giving this type of advice without the necessity to refer to farm management specialists for assistance, except where problems of particular complexity arise. Many of them have proved able to do this in an entirely satisfactory manner after fairly restricted in-service training in farm management even though they have had, in their academic training, little, if any, formal work in agricultural economics and farm management.

It is true that some officers have proved much more proficient in the farm management advisory field than others. In fact, although all NAAS advisory staff have had a certain minimum of in-service training in farm management, some of its staff do not engage seriously in farm management advisory work despite the board policy laid down to the effect that all NAAS advisors should advise on management problems when requested to do so. That this is the case in only to be expected. While there are exceptions, of course, it would appear that it is generally the younger field officers who have encompassed the farm management work most successfully.

It will be obvious that in establishing its farm management advisory service NAAS had one considerable advantage which we in New South Wales do not possess. This was the immense amount of basic data on costs and returns, inputs and outputs, derived from the Farm Management Survey and associated costing work.

Whatever the defects of the United Kingdom Farm Management Survey and the enterprise costing work associated with it, it does yield, as a by-product, data which is essential to any farm management advisory programme. Only very limited data of this type is, as yet, available in this country.

However, the lack of the necessary input-output data does not present an insuperable or even a serious barrier to the establishment of a suitable farm management advisory service ; it does mean, though, that a comprehen-

sive service such as has been established in the United Kingdom, probably could not be set up and operated quite as quickly as was done there.

Further investigational work is needed before and during the development of a comprehensive farm management advisory service to provide advisory officers with the necessary economic data. In addition to economic surveys and investigations experimental programmes need to be modified and possibly expanded to ensure that, where applicable, experiments are designed to obtain data of value to the farm management adviser.

While there are some quite significant differences in the administration of agricultural advisory services in the United Kingdom and in this country there can be no doubt that the pattern of farm management advisory services now adopted in the United Kingdom could be adapted, on a State basis, to existing conditions in Australia.