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THE ROLE OF THE AGRICULTURAL ECONOMIST IN AGRICULTURAL ADVISORY SERVICES

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INTRODUCTION

Two phases in the development of agricultural advisory services in the R.S.A. can be distinguished. During the first phase most agricultural advisers were in the service of the then departments of agriculture, namely Agricultural Technical Services and Agricultural Economics and Marketing. Advisory services therefore initially had a strongly centralised basis although economic and technical advisory services were presented separately to a great extent. During the second phase advisory services were largely decentralised and co-operatives, control boards, financing institutions and several private bodies entered the field. At the same time the then departments of agriculture were combined to form the Department of Agriculture and Fisheries. This period was also characterised by rapid expansion in the need for agricultural economic services and the use of the computer.

After examining the agricultural advisory services and the role of the agricultural economist during these two phases, the role of the agricultural economist will be discussed in more detail. In the course of this conference papers will be presented dealing specifically with the role of the agricultural economist in agricultural management, financing, marketing, policy and development, and therefore advisory services of this type will not be discussed any further. Our discussion of advisory services will be confined to technical advice and advice on production economics and farm planning.

CENTRALISED ADVISORY SERVICES

During this first phase advisory services in agriculture were largely decentralised with the majority of the advisers employed by the Government departments. Advisory services to the farmer were generally technical in nature. The small number of agricultural economists concentrated mainly on determining production costs and calculating the financial results of technical planning and advice. Advice centred around the maximisation of production, frequently without taking the economic implications into account. There is no doubt that this advice could have made a considerable contribution to increasing production costs per unit of product and to the risk. As a result of the increase in the rate of development in agriculture and of changed economic conditions, the need for agricultural economic services started to increase. During the founding conference of the AEASA (1961) Mr S.J.J. de Swardt expressed the following opinion in his opening adress:

"It is generally realised and admitted today that the extension officer requires a thorough knowledge of farm management and agricultural economics in order to do his job efficiently." (Translation)

The task of the agricultural economist in future is seen as involving farm planning and direct advice, especially advice on agricultural and financial matters. The agricultural economist is described as someone with his feet in two camps, having knowledge of both agricultural economics and practical matters.

Further to this, according to Tomlinson (1961) greater priority should be given to the inclusion of more applied subjects such as Pastoral Science, Agronomy, Soil Science etc. in the training of agricultural economists. The purpose would be to give the agricultural economist a broader agricultural orientation, enabling him to become acquainted with the agricultural industry as a whole and with the problems to which his specific field of specialisation should be applied. In Agricultural Economics, therefore economics and other subjects are combined to form an integrated whole, and indication of the co-ordinating role the agricultural economist should play.

According to Dr J.C. Neethling (1961), the task of the agricultural economist includes giving advice to individual farmers on the most effective utilisation of the production factors available to them. He emphasises the importance of the physical sciences and the inter-dependence of the various subjects. He mentions large surpluses, losses on exports as a result of fixed prices and the challenging task of the agricultural economist, who has to make rational recommendations in these conditions.

During the more recent past agricultural economists (Tomlinson and Groenewald) have played a leading role in the acceptance of the principle of optimal land use as the policy of the Department of Agriculture. The Department of Agricultural Technical Services was partially re-organised to fit in with this approach.

Similarly agricultural economists had a major share in the introduction and establishment of the subject Agrarian Extension at post-graduate levels. The first few doctorates in Agrarian Extension were awarded, their promoters coming from the field of agricultural economics. This is another clear indication of the agricultural economist's involvement in advisory services. During this period

frequent reference was made to the fact that agricultural economists were eminently suited to play the role of co-ordinators between the various fields of specialisation in advisory services.

DECENTRALISED ADVISORY SERVICES

The second phase is characterised by a more rapid increase in the development of the agricultural industry, general economic conditions of high inflation rates and more recently high interest rate levels as well. These gave rise not only to an increase in the farmer's capital needs and the risk involved in farming but also to an enormous increase in the need for economic advisory services.

Together with the fact that existing advisory services were generally inadequate, this increased pressure on agricultural co-operatives, control boards, financial institutions, agricultural enterprises and private bodies to enter the field of agricultural advisory services; consequently there was a high degree of decentralisation.

During the 1983 AEASA conference "Future directions in agriculture" the role of the agricultural economist was frequently touched upon. "We as agricultural economists, with our broad specialised knowledge, are eminently suited to play a leading role, a key role, in the application of the principle of optimum land use. We must accept the challenge because without our intensive co-operation and our contribution optimum land use cannot succeed in practice." (Tomlinson 1983) (Translation).

According to Hoogenboezem (1983) it is the agricultural economist who has to play the role of innovator and develop new ideas with regard to the use of the computer in agriculture. The emphasis has tended to shift to advice to the individual.

According to Basson (1983) the function of the agricultural economist is to act as a link with other disciplines, to express the physical input-output relations in financial terms and to determine the implications for the production system. To discharge this task succesfully the agricultural economist needs to be well grounded in other production disciplines and it is necessary to guard against devoting too little time to these other disciplines in the course.

In the AEASA memorandum to the Committee of Inquiry into the Practice of Agriculture (1982), Agricultural Economics is described as an integrative discipline. It should also be mentioned that there is a fairly general feeling among agricultural economists that they have never been accorded their rightful place in fields such as farm management and extension. It should also be mentioned that existing agricultural economic services are generally thinly spread, inadequate and extremely limited in comparison with technical advisory services. These shortcomings are ascribed chiefly to the shortage of trained manpower, and to inadequate liason and co-ordination as a result of shortcomings in the present organisational structure for service to agriculture.

In the course of a recent survey by the Directorate of Agricultural Production Economics on services to White agriculture, the following main groups were identified:

Department of Agriculture

(a) Directorate of Agricultural Production Economics*

Nature of services: Generation of farm management survey and surveys on agricultural production economics in general

(i) Design and computerisation of the records system

(ii) General farm management advisory services with regard to mail-in records

(iii) Short courses on farm management for farmers and extension officers

(iv) Courses on Agricultural Economics at colleges

(v) *Ad hoc* advice upon request

(b) Extension arm of the Directorate of Technical Services.

Nature of services: Extension programmes and general extension to farmers (chiefly technical in nature)

Agricultural co-operatives and control boards

Nature of services: Record keeping
Economic and/or technical extension
Farm planning
Financial planning
Short courses

Banks

Nature of services: Advice upon granting credit
Individual financial planning
Training courses for members of staff
Short courses

Universities

Nature of services: *Ad hoc* advice to farmers and agricultural institutions upon request
Formal training of students

Other

Nature of services: Financial accounts
Farm analyses
Development of computer systems
Income tax
Estate planning
Farm management advisory service
Project studies
Court cases and claims

*It has been clearly stated on several occasions that it is not the function and responsibility of the State to undertake individual agricultural economic extension, with accompanying complete or partial service (Hattingh, 1982).

As a result of the rather large number of bodies involved in advisory services in agriculture, there have been pleas for co-ordination in respect of agricultural advisory services on several occasions over the past few years. In the memorandum to the Committee of Inquiry into the Practice of Agriculture the AEASA referred to this as one of the problems and the assertion was made that this state of affairs gives rise to the incorrect utilisation or under-utilisation of the limited number of agricultural economists. Tomlinson (1983) refers to the need for a study of advisory services in agriculture by one of the academic departments of agricultural economics. The possibility of an agricultural advisory board of one kind or another, with independent thinkers, headed by an agricultural economist, was mentioned.

Several working groups were established, owing to the need for greater co-ordination. The working group for financial and management record keeping arose spontaneously following a seminar by Professor Al Meuller and persons from various interested bodies and specialised fields co-operated on this group. This working group laid down certain minimum standards and basic guidelines in respect of financial reporting in agriculture. It was, however, in no way the intention of the working group to draw up or enforce absolute rules. The Advisory Committee on Agricultural Economic Research (ACAER) gave attention to agricultural economic terminology.

The agricultural economic working group (OFS) investigated the availability of agricultural (computerised) data banks, the extent of farm management services and the identification of shortcomings in current services. The lack of co-ordination was again pointed out and it was recommended that a management development unit should be created within the Department of Agriculture or at a university.

During the period when advisory services were decentralised a greater degree of co-operation between the various specialised disciplines developed. This is reflected by the fact that agricultural economists are often in control of or form an integral part of extension sections in most bodies. In the case of the Department of Agriculture, technical advice to the individual is seen as the State's responsibility but economic advice appears to be the responsibility of other bodies.

OTHER SERVICES

It appears from various publications that agricultural economists in many countries constitute an integral part of the extension service. Agricultural economists are responsible, in particular, for the training of extension officers and farmers in the application of economic principles. Furthermore, agricultural economists are often consulted in more complicated cases.

In Israel's departmental advisory services agricultural economists chiefly provide support to other sections of the advisory service. Extension officers specialise and obtain assistance from agricultural economists to enable them to provide advice on economic matters.

Furthermore, agricultural economists are responsible for supplying management information to farmers, developing new techniques as management aids and training extension officers and farmers through courses and publications (Marom, 1982).

In England and Wales knowledge of agricultural economics is transmitted to extension officers by means of training programmes so that they can provide both technical and management advice. The agricultural economist does provide direct advice in the case of more complicated problems (Dancey, 1982).

Agricultural economic services are also provided by a large number of private bodies and the agricultural economist is directly involved in the inclusion of the computer in advisory services.

THE FUNCTION OF THE AGRICULTURAL ECONOMIST

In a market-directed capitalistic system agricultural economics is an integrative discipline. At micro level this applies particularly to farm management and planning. By the nature of his training the agricultural economist is generally well equipped to fill this co-ordinating or integratory role in respect of agricultural advisory services. At the same time the agricultural economist is also dependent on inputs from other disciplines before he is able to play his part. The policy of optimum land use does not refer to land as the only production factor, it postulates that each individual farmer make the optimum use of all available production factors.

It is necessary for the agricultural economist to play a leading part in the development of systems to improve or facilitate record keeping, analysis, planning and management. The inclusion of the computer can be very important here. It is therefore necessary for the agricultural economist to co-operate very closely with his colleagues in the computer field.

Another function of the agricultural economist relates to the assembly and processing of financial and economic data. This information has to be transmitted to extension officers and farmers in a meaningful way.

The agricultural economist is also responsible for the identification of shortcomings and for making recommendations where necessary, in co-operation with other disciplines. Owing to differences in the situation of farmers in the same area it is impossible to draw up draft or guideline plans. Each branch of farming has to be separately studied in planning. It is necessary, however, that each branch of farming is not seen in isolation but that the enterprise is also evaluated as a whole. The

computer can make an enormous contribution to farm planning because it enables the agricultural economist to apply several planning methods. In the past some of these methods could only be applied on a very limited scale.

The agricultural economist should also play a big part in the training of extension officers and farmers. This will partly relieve the shortage of trained agricultural economists. The extension officer can then supply some of the basic advice himself and the agricultural economists can concentrate on more complicated cases. These training programmes should be thoroughly planned and presented in a co-ordinated manner.

Agricultural advisory services should also be far more market-orientated. An example of the inclusion of marketing information in agricultural advisory services is the planting guidelines for deciduous fruit for fresh consumption, canning and drying that were drawn up and distributed from 1983 onwards. Marketing advice is still extremely limited, however, and it only reaches a small number of farmers and cannot yet be regarded as an intergral part of advisory services to agriculture.

If agricultural economists were fully integrated in the agricultural advisory services and honoured their moral obligation to be objective and realistic at all times, advice would not only lead to increases in production but would also boost the farmer's profitability and/or reduce risk.

In my opinion there are several reasons why agricultural economists are not yet playing their rightful part in agricultural advisory services.

(i) Firstly, the existence of two separate departments of agriculture, namely Department of Agricultural Technical Services and Department of Agricultural Economics and Marketing has been largely responsible for the fact that technical and economic extension have developed as separate and independent sections. Economic advice to individual farmers is not regarded as the State's responsibility.

(ii) Another possible contributory factor is training. There is a tendency in agricultural economic training to specialise more and more in economics even at the undergraduate stage. In the past there have been several pleas for greater priority to be given to the inclusion of other agricultural subjects directions in the undergraduate course. At the same time agricultural economics should form an integral part of other agricultural courses. In this way students would come to the conclusion during their training that economic and technical factors cannot be separated. Unfortunately students who have followed the more agriculture-orientated B. Agric. degrees in farm management are not acceptable to the Department of Agriculture, although other bodies have found that good use can be made of the services of these students, especially in respect of agricultural advisory services.

(iii) Some agricultural economists appear to be unwilling to liaise with people directly involved with technical extension. By way of illustration, note the number of agricultural economists involved in the agricultural advisory services in comparison with the small number who are members of the South African Association for Agricultural Extension. Before agricultural economists make a determined effort to become involved and accepted they will not come into their own in the advisory services.

(iv) Basson (1983) pointed out that agricultural economists will have to learn to stick their necks out. It is not good enough to point out various alternatives. Specific recommendations will have to be made.

With regard to the co-ordination of the advisory services, I feel that agricultural economists who are attached to various bodies or who function on their own, should always be allowed the necessary freedom and latitude to present their advice in such a way that, in their opinion, the best end result will be obtained. It is the right of individuals and it is also in the interests of our profession to make our own decisions, without unnecessary restrictions and measures that limit the freedom of the individual and damp his initiative. Nevertheless, I am convinced that the time is ripe for a degree of co-ordination and for certain minimum requirements to be laid down. How this co-ordination should take place is, I feel, a subject that can be fruitfully debated during discussion time. I am convinced that there are sufficient experts present to take the lead in this regard.

SUMMARY

By the nature of his training the agricultural economist is generally well equipped to play a co-ordinating or integratory role in respect of agricultural advisory services. This function will increase rapidly with the inclusion of the computer in agriculture.

As decentralisation of advisory services took place and several other bodies became involved, agricultural economists began to fulfil this function to a greater degree. However, several factors will still require attention before we can refere to an integrated economic and technical advisory service to agriculture.

Together with decentralisation there has been some degree of fragmentation and it is necessary for attention to be given in future to co-ordination, without impairment of the freedom and initiative of the individual.

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