SOME EFFECTS OF FEES FOR SERVICE ON AGRICULTURAL EXTENSION

BY

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A Thesis submitted to the University of Melbourne
in partial fulfilment of the requirements
for the degree of
Master of Agricultural Science
Abbreviations

The term advisory officer has been used throughout this study synonymously with extension officer. This is because a recent re-organisation of the Tasmanian Department of Agriculture promoted a similar change.

The respondent groups have been abbreviated as follows:

Group 1 - Farmers who have purchased advisory officer services from the Department of Agriculture;

Group 11 - Traditional users of advisory services who to date have not purchased any services;

Group 111 - Traditional non-users of advisory services.

The Department of Agriculture often has been abbreviated to D of A in the interests of space economy within tables.

Unless otherwise stated, Department of Agriculture refers to the Tasmanian Department of Agriculture.
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Abstract

Agricultural extension involves catalysing the interchange of ideas and information between farmers and other sources. Australian farmers traditionally have had the opportunity to obtain information and various advisory services without incurring direct costs.

Economic pressures, changing government philosophies and changing consumer demands suggest such services cannot continue indefinitely without attracting user charges.

This study reports the results of a survey of one hundred and eighteen Tasmanian farmers who are operating with a fee charging extension service.

The business world has accepted the imposition of fees for provision of information resulting in the development of a whole new service industry - information broking. The results suggest that farmers too are prepared to accept some of the costs associated with receiving information particularly if it is tailored to fit their specific individual situations.

The literature review shows there is a vast difference between charging for information and charging for information facilitation; thus it is suggested that organisations must make it quite clear what their fees represent.

The results indicate that fees for service has not changed the composition of the extension audience. However, it has acted to reduce the frequency of contact between farmers and advisors and to promote contact by impersonal means.
(iii)

Many have feared that associating fees with agricultural extension will lead to a complete demise of the extension process. The results suggest that this may not be so provided a sensible balance can be obtained between free services and those attracting a fee. Some of the consequences of fees for service for the extension process are discussed.

The study concludes that under a system of fees for service advisory officers must adapt to fulfill a joint role - providing a free general service aimed at benefiting the whole community and providing a detailed individualised service for a fee.
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Introduction

Agricultural extension in Australia once again is confronted with change, this time due to policy decisions concerning fees for advisory services. Although Tasmania is the only Australian state where such decisions have been widely implemented, reports from other states (Richardson, 1983) suggest such proposals are receiving widespread and serious consideration.

It therefore seems an appropriate time to examine agricultural extension in a context of fees for service. In the following pages we will review the various philosophies which underlie agricultural extension, examine the role of government in agricultural extension and discuss the subject of farmers and fees for extension services mainly from an historical view. The concept of paying for information and its facilitation, as well as some of the peculiar characteristics of information as a marketable good, then are discussed.

The final sections of the thesis are concerned with the presentation and discussion of results gained from a survey addressing the question of fees for extension services in Tasmania.
Section 1

Definition of Extension and Fees for Service

There have been many attempts to define agricultural extension, most of which can be categorised according to their underlying philosophies. In this section a number of definitions are cited as representative of the various extension philosophies, and an attempt is made to see how the imposition of fees for service fits in with them.

The first definition is that proposed by the Food and Agricultural Organisation of the United Nations (Williams 1968). It says agricultural extension is:

"An informal out-of-school education service for training and influencing farmers (and their families) to adopt improved practices in crop and livestock production, management, conservation and marketing. Concern is not only with teaching and securing adoption of a particular improved practice, but with changing the outlook of the farmer to the point where he will be receptive to, and on his own initiative continuously seek, means of improving his farm business and home."

This broad traditional definition regards extension as changing the thoughts and practices of the farmer. This "change agent" or "doing to" (Blokker et al. 1977) philosophy of extension is also alluded to by Doherty (1967) who refers to "channelling the thoughts of the community". Hartridge (1967) attributes the lack of adoption of a new management system to the farmers not realising their own goals, despite his survey clearly indicating they have them. The Australian extension worker is clearly seen as a manipulator of his clients by McNee (1970) who states that the aim of training advisors is for them to "recognise the social forces that exist .... and utilise these forces to his advantage".

The morality and appropriateness of the "change agent" philosophy to extension often has been questioned, particularly in studies of adult learning (Tough 1978).
The writings of Paulo Freire (1974) contrast with the "change agent" approach to extension. Despite Freire's Marxist background, and experiences mainly centered in developing countries, his advocacy of two-way flow of knowledge between two people discussing a "knowable object" is closely related to recent ideas of extension in industrially developed countries. Salmon (1980) describes extension by means of a resource model (fig. 1) which takes into account the large number of information sources which can contribute to information flow within the community.

The basis of the resource model is a pool of agricultural knowledge which is contributed to and stored by all organisations and individuals (farmers, Department of Agriculture, machinery and produce agents) related to the industry. Thus farmers are part of the extension process as much as Department of Agriculture advisors.

Salmon defines the extension process as "the skills required to shift knowledge within the pool and to help others integrate this knowledge into their own practices." The resource model, as do the ideals of Freire, emphasises the need for two way flow of information and sets extension in the context of an information network rather than as the work of any one organisation.

Extension as a process involving two way flow of information between client and extension officer may breakdown or be substantially weakened under a system demanding fees for service. In such a situation the clients with whom the extension officer can share information would be restricted to those who are prepared or able to pay for it. This effect has been recognised by the Green Report (1974)\(^1\) which also suggests that inequality and reduced opportunities would result.

\(^1\)Prepared by a working group convened by Dr. S. Harris.
Fig. 1. The Resource Model of Extension
Clients (farmers) may remove extension officers from their knowledge pool or be reluctant to provide them with information. Knowledge may be provided to the extension officer on condition that it be kept confidential, thus restricting the extension officer in his role as a "shifter of information".

Proposition

Fees for service has resulted in clients wanting any technical information they pass on to advisors to be kept in confidence by them.

Unobstructed flow of information is an essential characteristic of extension as demonstrated by Harvey (1964) who says "a great deal of my work is relating one person's success with a particular technique to other properties".

Proposition

Fees for service has resulted in farmers being less willing to pass on information to Department of Agriculture advisors.

In the absence of consumer resistance to fees for service the extension process would be expected to continue as it has in the past and thus can be described adequately by the resource model.

Farquhar's (1963) definition of extension represents the process as being institutionally orientated, saying that extension is: "A service or system which assists farm people, through educational procedures, in improving farming methods and techniques, increasing production efficiency, bettering their levels of living and lifting the social and educational standards of rural life."
Historically, the majority of organised extension in Australia has been performed by government sponsored institutions providing a free service. Patterson (1978) reports that most private agricultural consultants in Australia depend upon overseas work as their main source of income. Imposition of 'fees for service' may see a lessening of the hold on extension by Government-funded bodies and increased involvement of the private sector.

Proposition

Since fees for service were introduced farmers are decreasing the frequency of consulting Department of Agriculture advisory officers and are increasing their use of sources providing free advice.

Proposition

Introduction of fees for service has not caused the circumstances or situations that induce farmers to contact Department of Agriculture advisory officers to change.

Proposition

Farmers regard Department of Agriculture advisory officers as being important to the farming community, despite fees for service.

Proposition

When fees have to be paid for advice, Department of Agriculture advisors are sought in preference to private consultants.

Proposition

Farmers consider that the Department of Agriculture should not advertise the services it has for sale.
Proposition

Farmers consider that the Department of Agriculture, in charging for its advisory services, should not compete with private enterprise providing similar services.

The work of Bardsley (1982) with farmers in the Wimmera district of Victoria supports the concepts of "farmers as self directed learners" and suggests that a wide range of information sources are used, the choice being dependent upon the subject in question.

Imposition of fees for service provided by Government extension organisations may well act to accelerate diversification of knowledge sources, thus leading to a much less institution-orientated extension process.

Avery (1963), attending the same extension conference as Farquhar, proposed a definition of agricultural extension which focused on the individual rather than the farming community as a whole. He says that the objective of extension is: "To communicate to individual members of the community advice and assistance with respect to knowledge and methods of technical agriculture, with due consideration of the economic and social circumstances of the individual and other people collectively."

Although group methods have been widely used (Pathmanathan and Weston 1981) in agricultural extension it is the author's experience that there is a significant need to provide a service able to give individualised attention. Imposing fees for individual consultation may result in emphasis being placed on group extension methods and force clients to interpret general information to fit their specific individual situation.
Proposition

Fees for service has caused farmers to consult Department of Agriculture advisors by "least-cost" means.

Proposition

Fees for service has resulted in farmers preferring to employ advisors under specific defined terms.

From the discussion above it is evident that the imposition of fees for extension services would be contradictory to many of the definitions of extension and their underlying philosophies. One of the aims of this study is to determine some of the effects that fees for service will have on the traditional approach to agricultural extension.
Section 2

The Role of Government in Agricultural Extension and Fees for Service

According to Farquhar (1962), the first grant made to agricultural extension from public funds occurred in England during the late 1870's.

Agricultural extension in Australia has always been supported primarily by governments using public funds. Although the various State Departments of Agriculture have been responsible for providing the actual service, until recently the Commonwealth Government contributed significantly in the form of financial support.

Commonwealth funding of extension in Australia began in 1948 through the Commonwealth Dairy Industry Extension Grant. The Commonwealth Extension Service Grant (C.E.S.G.) was established in 1952. This grant enabled the states to expand their existing agricultural services and to undertake new programs.

As promised by Sir Robert Menzies, 1963 marked the beginning of expanded Commonwealth funding for agricultural extension. This enabled the states to improve their extension aid equipment, staff numbers and the services offered. The C.E.S.G. was revised in 1966, resulting in removal of restrictions which previously excluded support for projects concerned with industries such as wool and tobacco which already were supported from industry funds.

Commonwealth financial assistance to agricultural extension continued until 1981, at which time it was completely withdrawn.

As alluded to in the Green Report (1974), there have been no adequate studies on the productivity of extension services which can provide information on the cost effectiveness of Government expenditure on agricultural extension. The absence of such information may well have contributed to the loss of C.E.S.G. funding.
A report by the United States Department of Agriculture (1980) indicates significant marginal rates of return result from Government investment in agricultural research and extension activities. The report shows that each $1000 invested in agricultural extension in a given year yields benefits of $1086 in the first following year, $543 in the second year, and $271 in the third year. Although difficult to obtain, similar evaluative data are desperately needed in Australia.

Funding of agricultural extension in Australia now is primarily the responsibility of the individual states, although some industry funds are available.

The present economic climate demanding restraint and careful use of public money makes the questions posed by Williams (1968) even more pertinent than they were then. His two questions were -

Can one justify the use of public funds to provide educational services which convey technical and economic information to farmers?

Why should not farmers finance these services themselves?

In the past one of the strongest reasons supporting public funding of agricultural extension has been the economic importance of agriculture, particularly in regard to exports. The importance of manufacturing and mining as contributors to export earnings in recent years have increased at a substantially greater rate than agricultural products, which are now assuming a position of relatively lower economic importance.

Statistics recorded in the Year Book (Year Book Australia, 1982) indicate that employment in agriculture and the proportion of the population residing in rural areas are both declining. As a result a smaller agricultural labour force is now producing a larger output of farm products. The consequence of agriculture's declining economic and social importance (Harris 1977) is decreased political importance, with the result that economic policies are less likely to be shaped specifically to the needs of the rural sector.
Despite the declining influence of agriculture, the Balderstone Report (1982) considers there is justification for a continuing element of public funding in extension. The same report however, does see scope in some areas for charging users the direct costs of extension services received from Government extension institutions.

Proposition

Farmers consider all Department of Agriculture advisory services should be available free of charge.

The agricultural industry differs from most others in that it is comprised of a large number (in excess of 172,000 in Australia) of individually controlled autonomous units mostly based on the family. As recognised by the Green Report (1974), each of these individual producers do not have the resources available either to keep abreast of, or to assess the wide variety of research findings continuously becoming available.

Makeham (1963) adopts the view that the farmer, being the short-run beneficiary of new technology, should bear the cost of sifting and incorporating it into his business. He agrees that the individual farmer is unlikely to spend enough to ensure maximum social benefit, and suggests that society, being the long term beneficiary, should provide some funding to help transmit and adapt information.

Spence (1974), arguing from an economic view, suggests that since the results from investing in information (doing research) are uncertain, underinvestment in research and development is likely because people are adverse to risk.

Few rural holdings exist in isolation such that activities performed on one have no effect on a neighbouring property. Common examples of
such activities include chemical use, plant and animal diseases, pest and erosion control. Blaxter (1973) appears to be an ardent campaigner for Governments providing free advice on community issues such as those outlined above.

There are many situations (property evaluation, enterprise management, and sample analysis) as suggested by MoArthur (1982) in which the information is a private good and of use only to the person requesting it. Under these circumstances it is suggested that the imposition of a service fee is appropriate.

Arrow (1961) believes that information should be available free of charge so as to ensure optimal utilisation. Such a system provides little incentive for investment in research. The dilemma surrounding distribution of resources to research rather than extension is summed up by Rogers (1971) who says: "It is clear that research alone is not enough to solve most problems; the results of the research must be diffused and utilised before their advantages can be realised."

It was suggested by the Green Report (1974) that the imposition of fees would allow Government extension organisations to integrate the supply of advisory services more closely with demand.

Advisory services, dependent upon the availability of suitably trained people, would find it difficult to respond to changes in demand, as would research since results often take some time to generate.

The need for an independent advisory body has often been suggested (Balderstone 1982) as a means of justifying the existence of government supported extension services. The independence of such bodies would not be expected to be jeopardised by the imposition of fees, although

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2 Chairman of the working group reporting to the Australian Government.
reliability may be affected due to reduced access to knowledge and information.

The question of government extension services imposing fees is a very complex one. The outcome is very much dependent upon whether it is tackled from a social or business view. The compromise situation, in agreement with many of the writings reviewed, suggests imposing fees to help meet the costs involved with transmitting information that is for the exclusive benefit of a single client.

There are no documented accounts describing the effects of government extension organisations imposing fees for the provision of information, thus from a practical and research viewpoint the area is very much unchartered.
Section 3

Farmers and Fees for Extension Services

The primary objective of private consultants or businesses engaged in extension is to make money. This can be achieved either directly from charges levied for provision of information and advice or indirectly associated with the sale of equipment or supplies accompanied by advice.

Australian farmers began paying for extension services through the medium of farm management clubs, the popularity of which spread to most mainland states. The clubs consisted of about forty farmers who employed an advisor for their own exclusive use. The services provided by the advisor were centred on the individual client through property visits and reports. 'Usually a regular general information bulletin was also sent to club members. Reeve (1963) claims that such clubs were originally formed in response to farmers' inability to obtain whole farm management advice from the government extension service. The demand for individual client service, which at that time could not be supplied by the government service, is postulated by Schapper, Beal and Roberts (1963) as being one of the main reasons for the establishment of such clubs.

Farm management clubs disappeared from the Australian extension scene almost as quickly as they entered it. A variety of reasons have been postulated to explain this, including lack of suitably qualified staff (Farquhar 1966), lack of job security (Schapper et al 1976) and the trend for farmers to favour private consultancy on a fee basis (Patterson 1978).
The number of private agricultural consultants operating in since the early 1960's has gradually increased to the present number of about 200 (Patterson 1982). This represents about one consultant for every 900 rural holdings, suggesting either that the demand for private consultants by farmers is low or that the farming community is being adequately served by other organisations.

The fees charged by consultants appear to be one of the main factors inhibiting their widespread use by farmers. Patterson found that 12% of farmers surveyed did not employ consultants because they considered fees were too high. The same survey indicated that 45% of farmers who terminated the employment of a consultant did so because of the cost. Patterson found that farmers regarded the cost of consultants as non-essential. Hence during times of economic stress when such costs had to be reduced, this was achieved either by completely avoiding use of consultants or by limiting their use to a casual basis.

Fairnie (1978) found a similar situation with regard to private veterinary practitioners. The Green Report (1974) recognises that some extension activities of private consultants may be non-profit making and suggests that government funds be provided to support them.

Fluctuations in the demand for consultants has forced them, as predicted by Rickards (1970) and Sloane (1977), to seek work outside their traditional farmer clientele in order to remain viable. Patterson's survey of private consultants found them to be engaged in work commissioned by a variety of organisations including overseas countries, governments, business firms, industry and real estate agents, as well as serving a small farmer clientele.

It has often been suggested that information is more likely to be accepted and used if a cost has been incurred to obtain it. Two consultants have expressed opinions in this vein.
Makeham (1963) claims his advice to farmers was more readily heeded when he was employed as a farm management advisor than when fulfilling the role of a departmental officer offering free advice. The type of information being presented may have changed as well as Makeham's role. McGowan (1963) noted that one of the most rewarding aspects of private consulting was the readiness with which paid advice was accepted, while free advice often was regarded as of little value.

Another group of authors (Wilkening, Tully and Presser 1962) from outside the consulting profession suggests that farmers are more likely to seek information from a person whose services they pay for than from someone offering free advice. The only documented research evidence found to support such assertions comes from McKenna (1981) whose survey indicated that if farmers were required to pay a commercially realistic price for Agnote Kits (prepared by the Victorian Department of Agriculture), then they placed more value on the information contained and they used them more frequently.

Proposition

Farmers place a greater reliance on and are more willing to follow information or advice for which a fee was paid than if it was received without cost.

Proposition

Fees for service has resulted in farmers expecting more from advisory officers and the services they provide.

There appears to be a contrast between farmer willingness to purchase written extension information and consultants' time from which only a verbal report may result. Just over a year after the Victorian Department
of Agriculture began releasing the Agnote series, McKenna found that at least 10% of the state's farmers had purchased them. Many of these subscribers were found to have had no previous history of associating with the Department of Agriculture.

Proposition

Fees for service has resulted in clients requesting more formal reports from advisors.

Continued survival of the many weekly rural papers supports this hypothesis, although they cover considerably more topics than traditional extension information.

Private industry in the form of sales agents often provides advice to farmers in their bid to sell merchandise or equipment. Superficially this advice is free (there may be hidden charges), but as Williams (1968) points out, it may not always be independent.

Whether or not government agencies require fees for their advisory services they are potentially competing with private enterprise.

The work of farm management consultants, as described by McGowan (1973), includes giving advice on technical, financial, management and economic matters. Personal experience as a government extension officer and discussions with counterparts indicates that State Departments of Agriculture offer advice in similar areas. Schapper (1971) states that the main difference in the services offered by the public and private sectors is that private consultants concentrate on giving individual advice, whereas government advisors work more with groups. Again, personal experience indicates that in reality this division is not as clear as it sounds.
It is not known to what extent farmers are prepared to pay for advisory services since a system offering free advice always has been available as an alternative to paying.

Shelley (1967) and the Balderstone Report (1982) accept the need for private consultants to have access to information and research results generated by Government institutions, and both believe the two services could complement each other. The Balderstone Report does not indicate whether private consultants, as clients, should pay for such information, but does agree that: "an element of healthy competition between the various extension providers is likely to be of benefit to farmers."
Section 4

Payment for Information and its Facilitation

Articles with titles such as, 'To Pay or Not to Pay' (Broward 1978), 'To Charge or Not to Charge' (Garrow 1978), 'What Price Information?' (Epplin 1978) and 'Todays Challenge Tomorrows Choice: Charge or be Charged or the Doomsday Scenario MK2' (Lewis 1980) are commonplace in the information science literature over the past few years. Such titles conjure up thoughts of payment for information, but upon closer analysis the reader finds their main concern to be centred on payment for facilitation of information rather than the information itself. This distinction is very important, leading to the highlighting of two separate issues.

4.1 Payment for Facilitation of Information

The issue of imposing fees for the provision of information appears to have been awakened by two important developments.

Firstly, the advent of computerised information services has meant that large amounts of information can be quickly and easily retrieved. The availability of such services requires large scale investment in both human and mechanical expertise - an expense which individuals would find difficult to meet or justify.

Secondly, government funded bodies are being forced to survive on diminishing budget allocations, and therefore are looking toward ways of recouping and reducing service costs.
The arguments surrounding the issue of fees for facilitation of information are divided, as might be expected, according to whether or not the concept is supported. The following paragraphs are an attempt to examine both sides of the issue.

The main area of concern for the imposition of such fees is that of the public library which traditionally has facilitated transfer of information without charge. Many of the views expressed concerning the introduction of fees into the public library system tend to be extreme. Blake and Perlmutter (1974) insist that free access to information via the public library is a fundamental right, and any encroachment upon it is seen as destroying the tradition and political ideology of the profession. Conversely, Garfield (1979) claims that free information organisations should not be permitted in activities except where there is no way they can be performed by the private sector.

Broward (1978), expressing a more balanced view, although committed to the provision of free public library services, says a mixed economy of free, cost recovery and profit making services is needed in order to be able to meet the demands of all users.

This agrees with Swanson (Wilson, 1972) who suggests that a basic free information service available to everyone does not prevent provision of extra services for a price.

Maranjian and Boss (1980) document the Charter of Inform, a research service offered by the Minneapolis public library, as "The purpose of Inform is to offer, on a fee basis, an information service to everyone contracting for the service. The objective of Inform is to provide the user with access to library resources and professional skills to a degree not available through an ordinary reference service."

The existence and success of Inform and similar schemes in many other American libraries demonstrates the compatibility of the free
library concept and a fee based information service. This reinforces and supports Broward's beliefs.

Such reports suggest a degree of optimism for the successful incorporation of "for free" and "for fee" services within publicly funded organisations that traditionally have provided all their services without cost.

Esplin (1978) sees the introduction of fees for the provision of information as the only means of maintaining service quality and survival of organisations entirely reliant on government funding. In relation to the Commonwealth Scientific and Industrial Research Organisation (C.S.I.R.O.), she warns that, unless as many as possible of the costs of providing information can be defrayed the organisation will be, "overwhelmed by numbers, overtaken by technology and the quality of our service and more importantly the quality of the technical information given must inevitably decline".

Esplin suggests that such publicly funded organisations must be committed to achieving a balance between giving the customer "a fair go" for his taxation dollar and keeping service standards as high as possible.

Wilson (1972) and Broadbent (1981) argue that imposition of charges for the provision of information may be a means of eliminating casual enquiries that overload staff. Such a statement requires careful consideration, particularly in relation to publicly funded institutions. Charges may increase the demand for access to information due to the belief that a paid service is better than one available without cost. This hypothesis is subject to investigation in the latter part of the thesis.

White and Wilkinson (1981) propose five reasons in support of paying
for the provision of information. They are:

1. The need for a one stop information service. It is claimed that quick access to a large amount of information on a particular subject can be gained by making a single contact, usually by telephone. The authors claim that such a service is not available nor could be expected without incurring an appropriate fee. The experiences noted by Garvin (1979), President of the New York Information Service, Find, "that people need their answers 'yesterday' and cannot afford to wait for library service" supports this claim.

2. Information services requiring payment of fees are said to be very flexible in that they adapt to the nature of the inquiry rather than the inquirer having to consider all of the contacts that may have relevant information. Professional information seekers would be expected to have access to all information avenues pertinent to a particular topic.

3. Access to specialised services. Although some public libraries will carry out limited "on line" bibliographic searches, some information may only be available from more specialised data banks. Access to such banks usually requires high subscription rates beyond the capabilities of any free or subsidised service, let alone an individual.

4. Confidentiality and conflict of interest. Publicly funded institutions cannot easily refuse to carry out a request for information. Thus, the authors suggest that there is always the danger that one client is compromised. The professional information service is said to be in an easier position (should it so desire) to turn away work that may result in a conflict of client interest.

5. Provision of a continuous monitoring service. A common information need of business is said to be for a continuous, current awareness service on a specific subject. Rarely can public libraries offer such a comprehensive service.
White and Wilkinson believe that companies and individuals must realise that information is not always available free. They see the costs associated with obtaining it as being small compared with the potential profits associated with the successful exploitation of the information. This argument is further developed by Vagianos (1973) who suggests that because information traditionally has been available free, users have no concept of its cost and therefore of its value to them as a product of service. Along more provocative lines, Garfield (1973) counsels that "charge and your services are better appreciated", and stresses that "anything you get for nothing is worth nothing, or at any rate valued at nothing." These assertions will be subject to further investigation and verification later in the thesis.

A further advantage of employing information facilitators is expounded by Davenport (1979) who says, "people don't mind paying a fee for information because it is cost effective."

Maranjian and Boss (1980) expand upon this argument by suggesting that organisations imposing fees for information services may become more aware of the need to provide a cost effective service and to establish efficient ways of gathering and disseminating information.

The main arguments opposing charges for access to information are based on fears of exploitation and widening of the gap between those with and those without resources.

Broward (1978) fears the introduction of information access charges could result in libraries and other bodies seeking out only paying customers. Ultimately, the result of such a practice could be the tailoring of the organisation so as to meet only the needs of paying customers.
Proposition

There is a positive relationship between farmer attitude toward fees for service and farmer characteristics (area managed, farming experience, main farm enterprise, gross farm receipts, education level, age and reason for farming).

The view held by Kostrewski and Oppenheim (1980) and Strigler (1961) that information (knowledge) is power suggests that restricting access to information through access charges can lead to an accumulation of power by those able to afford such fees.

Lewis (1980) predicts that the present day information officer and library worker gradually will be replaced by "electronic devices and wizardry" as we move towards a paperless society. The major disadvantage of such innovations, as seen by Kostrewski and Oppenheim, is the simple ability to restrict the flow of information to those able to operate them and who can afford the required fees. It does not seem unreasonable to suggest that, as such systems gain wider acceptance and popularity, individual access costs will decline, thereby making them within financial reach of more people. It is worth noting that in today's society most of our common information transmission media (print and electronic) have a consumer cost associated with them, whether it be direct or indirect.

Blake and Perlmutter (1974) claim that access to information can have both personal and societal benefits. They fear that, because it is impossible to separate personal and societal benefits at the time of acquiring information, imposition of charges for access may result in a depression of society's productivity and development.
4.1a Fee-Based Information Services

A number of terms have been used to describe organisations and individuals engaged in the occupation of providing information for a fee. The conglomeration of terms include; information broker, information specialist, information scientist and free lance librarian. The functions of fee-based information services have been described as:

- "One who collects a fee for acting as an intermediary in the information transfer process" (Broward, 1978);
- "A friendly expert who collects and packages information for a fee in response to the needs and demands of information clientele" (White, 1980);
- "An organisation that undertakes research and provides information on demand for a fee" (Maranjian and Boss, 1980).

White and Wilkinson (1981) list a number of services commonly available from fee-based information services. They include literature surveys, on-line computer searching, document delivery, market research, newsletter publication and patent searching. According to Maranjian and Boss (1980) the clientele of such organisations ranges from large corporations through government agencies to individuals, but more importantly, there is a high percentage of repeat business.

Maranjian and Boss claim that fee-based information services have experienced a rapid growth rate in the United States since the early 1970's to number more than three hundred in 1980. According to White (1980), the fee-based information industry in America turns over more than ten million dollars annually.

Various computer on-line information systems such as Viewdata in Britain and Antiope in France are prominent 'for profit' information
sources in Europe, according to Maranjian and Boss.

These statistics support the premise that there is a need, at least in areas with a high population, for services specialising in provision of information for a fee and that some elements of the community are prepared to accept the necessary charges.
4.1b Extension Officers as Information Brokers

The definitions above of fee-based information services with the fee requirement removed, closely resemble those often used to describe the work of agricultural extension officers. The definitions cited imply that the information broker is purely a facilitator of information and does not have an interpretation role with regard to specific client needs or individual operation. This contrasts with the role of most agricultural extension officers and consultants. Maranjian and Boss (1980) quote the results of a British study by Birks (1978) who concluded that the fee-based information services have a bright future if they include analysis, research and consultancy services with their basic information provision work. Incorporation of such services into the function of fee-based information organisations would bring the present roles of extension personnel and information facilitation businesses even closer together.

Traditionally farmers have had access to an information service unique to their industry. In theory, and disregarding any political and other considerations peculiar to agriculture, it seems possible that Government-sponsored agricultural extension services easily could become information brokers. If the thoughts of Esplin (1978), Broward (1978) and Swanson (1972) are heeded it should be possible to develop a workable system whereby everyone gets a 'fair go' for their taxation dollar, but at the same time is forced to accept responsibility for meeting the cost of the more intensive, detailed services, should they be required.

Disregarding private consultants, there appears to be no documented studies of the provision of 'fee based' information services to farmers. Acceptance of the principle by other sectors of the business community
suggests a degree of optimism in the rural community. 'Fee based' information services for farmers therefore is the basis of the study reported in this thesis.

4.1c Pricing Information Facilitation

Information facilitation is concerned with the use of tangible, physical resources directed so as to move information between a source and receiver. Despite the possibility of using a wide variety of resources ranging from human to electronic, a cost easily can be placed on their use to achieve such a task. As we shall see later, it is very difficult, if not impossible to achieve a similar objective with information itself.

Broadbent (1981) suggests that charges for information facilitation can be based on organisational objectives or on market structures. Depending upon the charter of the fee for information organisation charges can be levied either to make a profit, recover total costs or to cover the variable costs associated with the particular assignment.

Market incentives, achieved by keeping the price artificially low, may be used when introducing a new service to the market or to encourage a large number of customers. Conversely, market disincentives may be used to discourage demand due to overloaded facilities or temporary shortages.

According to Broadbent, information-providing organisations have little information about operations, limited rationality in decision making and conflicting goals. Consequently it is argued that pricing policies are commonly based on the elements of market structure, being cost, demand and competition. A pricing structure based on vendor costs plus additional charges to cover overhead is divorced from demand, and
hence does not take advantage of the users when they are most in need. Such a philosophy has been used by Griffiths (1982) when setting fees for the provision of veterinary services.

The survey of Maranjian and Boss (1980) indicates that fees for the provision of information commonly are based on criteria such as:

- Staff time, ranging from U.S. $15-$75 per hour depending upon the complexity of the task;
- Computer time based on the quantity of information (in terms of computer signals), plus access to data bank and printing charges;
- Photo-copying based on the number of pages copied.

It may often be difficult to attribute fixed costs accurately between the various services offered by an organisation.

Demand orientated pricing sets the price according to demand for the service. An example would be charging a higher rental for books on the best seller list. Broadbent (1981) claims for this type of price setting to be successful the market must be segmented into groups with different demand intensities, minimum correspondence between them so as to avoid resale between groups, and little chance of a competitor under selling. Competition orientated pricing reflects the collective wisdom of the industry in that prices are set according to what others are charging. Broadbent gives examples of information dissemination organisations that have adopted the various pricing options described above.

4.2 Payment for Information

The possibility of charging for information itself poses a number of questions to which there appear to be no easy and totally acceptable answers. The issues surrounding this question will be examined in the following sections.
4.2a Characteristics of Information

Information has a number of unique characteristics which distinguish it from any other resource or commodity. There is no obvious unit with which to quantify information, and it is extremely difficult to define one. Such a characteristic means that there is no unit by which to package information and offer it for sale. This is in contrast to resources used to facilitate information transfer. Boulding (1971) states that any measure of information would need to take into account its significance. He says "that such a scale would weigh for instance the gossip of a teenager rather low and the communications over the hot line between Washington and Moscow rather high". Urquhart (1976) points out that information is a unique commodity because it can be transferred from A to B without A being any poorer (discounting transfer costs), and unless B has some use for the information, B is no richer. Further to this argument, Garrow (1978) states that information does not lose or gain value with use.

Possession of information, unlike physical objects such as land and machinery, is not exclusive. As Spence (1974) points out, even though A sells it to B the result is that both A and B now have the same good.

Another of the distinctive features of information is referred to by Spence who notes that it is not produced by a few monopolistic industries or individuals but rather can be generated by virtually anyone in the economy. This means that the same information could be developed simultaneously by a number of individuals, thus posing the question of ownership. Both Spence (1974) and Garrow (1978) comment on the use of patent laws to determine ownership of information. They point out that such laws can only provide the discoverer of the information
with control over the uses to which it is put rather than over the information itself. It would be both a nightmare and an impossibility to devise and police laws to control the flow of information. In the absence of legal protection Arrow (1971) claims that the 'owner' of information cannot sell it on the open market because any one purchaser can destroy the monopoly as it can be reproduced at little or no cost. Arrow suggests that the only effective monopoly on information use is for only the original possessor to use it. This will neither be socially efficient nor much use to the owner unless that person is able to exploit it as efficiently as others. Any productive use of information will reveal all or at least part of it.

4.2b The Economics of Information

The economics of information appears to be a very complex area of debate. The branch of economics referred to as 'information economics' despite its name, offers little clarification. Many of the writings in this field, including Feltham (1968), Flowerdew and Whitehead (1974), are concerned with economics of information systems and market information rather than information as a distinct commodity.

Information frequently will have an economic value in the sense that anyone possessing it can make greater profits than otherwise would be the case. In order for information to be a good of trade some means of determining its value must be devised. This is a critical need of producers of information who can no longer supply it free. The obvious solution suggested by Wilson (1972) is to let the market place determine the value of information, but potential buyers and sellers are both faced with similar problems, some of which are discussed below.

The value of information to the purchaser is not known until that
person has the information, by which time it has in effect been acquired without cost. This could be overcome to some degree by the seller retaining property rights over the use of the information. The benefits derived from use of information are both difficult to measure after the information has been used and to predict prior to its use. This is particularly true in relation to agricultural information because of the large number of variables (ranging from climatic to user attributes) that have the potential to influence the outcome of applying information. Urquhart (1976) claims that generally information cannot be valued by considering its value in use because it is impossible to know when any one piece of information will have no further use.

In theory the consequences of such a predicament are that purchasers base their decision to purchase on sub-optimal criteria resulting in reduced demand for information (non-optimal purchase). It is also predicted that less than optimal use will be made of the purchased information (non-optimal allocation). Flowerdale and Whitehead (1974) reflect these sentiments by suggesting that unless information can be valued there is a danger that decision makers will underestimate its importance. This suggests that if it is desirable for information to be used to the fullest extent it needs to be freely available.

Phillips (1968) expounds some theoretical considerations (summarised in Figure 2) with respect to the relationship between the supply and demand for information. As the quantity of information increases, the demand decreases until a point $Q_1$ is reached at which there is no further demand for increased information. That is, either no one is prepared to buy more than quantity $Q_1$ of information or $Q_1$ is the largest quantity of information required. As the quantity of information increases the supply price for it also increases eventually reaching price $P_1$ above which no buyer is prepared to pay. This means that at
prices greater than \( P_1 \), the cost of obtaining additional information is greater than the expected returns from that information, (marginal cost greater than marginal return). It could mean also that as new information on a subject becomes scarcer the cost of providing additional information increases, and the more information available the less useful is each additional 'piece' of information.

Fig. 2. Supply and Demand for Information

The preceding discussion based on Phillip's (1968) thoughts at best provides a conceptual aid to understanding the problem, but unfortunately none of the supply curve parameters are measurable in reality. Urquhart (1976), casting doubts on the well established concept that demand creates supply, sums up the attempts at economic research into information transfer by saying "the information man is substantially different from economic man. Undoubtedly he lives in a world where supply can create demand." At our present stage of economic knowledge it appears impossible to place a meaningful value on information. Any attempt to treat it as any other commodity in the market place will be severely hampered by this and its other unique characteristics.
4.3 Clarification and Future Questions

The discussions above centered on information sale and information facilitation support the premise that information is a public good, whereas services associated with providing and using information for the benefit of an individual are a private good.

An example may clarify this important distinction. Research provides the piece of information that a soil phosphate level of P units is necessary for optimum plant growth - this is public information, and as Garrow (1978) points out, science advances on the freely available information from the past. The determination of a soil phosphate level for a particular farmer, its interpretation based upon the above information and local experience is considered to be a service which is a private good. Whether or not the farmer is required to pay for that private good or service depends upon the charter of the organisation from which it is requested.

Such a service as given in the above example can be valued by the individual and would be expected to be purchased until such a time as the cost of purchasing it exceeds the returns from its use (marginal cost greater than marginal return). Lucy (1981) suggests that user fees are easiest to implement when each unit of service can be attributed to a specific user. He suggests public utilities, public transportation and some recreation and library services most readily lend themselves to user charges. Lucy warns that numerous administrative obstacles inhibit applying the concept of user pays to non-individual specific services like streets, police and neighbourhood parks.
Acceptance of the above premise poses a number of questions, including:

--How much money should be spent on research acquiring information?

--Should research be restricted to providing information which can be used immediately or should it have a futuristic component?

--Who should pay for research - direct beneficiaries or the whole community benefiting indirectly from the flow on of applied information?

--Who should pay for interpretation and facilitation of information?

The solutions to these questions are not simple or readily available and will depend to a large extent on the specific industry as well as political considerations.

However, one thing is certain, that increasing economic pressures and emphasis on improving the efficiency and effectiveness of resource use will ensure that these and other questions are considered with accelerated zest. This thesis aims to shed a little light on the latter questions in relation to agriculture.
Section 5

Focus of the Study

It has been stated above that both Governments and society as a whole are beginning to examine the economic and moral issues surrounding the provision, dissemination and interpretation of information. Such questions as those stated above are of particular interest to farmers who traditionally have had access to information, advice and many services without incurring any direct costs. In October 1982, the Tasmanian Department of Agriculture began charging for many of the services it provides. The effects of such a decision on the rural community and extension service are largely unknown. This is a complex and virtually uncharted area of study as there appears to be no documented results from other studies, probably because such a situation has not previously arisen.

This study is aimed at elucidating some of the consequences from the farmer-client and extension officer view of a Government extension organisation introducing fees for some of the services it provides. More specifically, the objectives of the study are:

1. To determine the willingness and circumstances under which farmers are prepared to pay for agricultural information and advisory officer services;
2. To determine the type of information and services for which farmers are prepared to pay and the preferred manner of acquiring them;
3. To determine some of the effects of charging for information and other advisory officer services on extension activities.
Each of these objectives alone could form the core of a separate study. The more general approach of the present investigation was adopted for two reasons. Firstly, the system of "fees for service" has only been operating in Tasmania for just over a year, which is not a very long period to allow trends and patterns to develop. Secondly, to the author's knowledge no similar previous studies have been conducted. Hence it was considered appropriate to obtain initial basic information which can be built upon in later studies.
Section 6

Research Method

6.1 The Survey Method

It was decided that the objectives of the study would best be satisfied by conducting a personal interview survey. The merits and demerits of the numerous techniques that could be used to gain information from a population are well documented by Parten (1966).

The personal interview approach was adopted in this project in preference to a mail questionnaire for the following reasons:

It was considered important for the respondents to be representative of the population within the designated areas. This cannot be guaranteed with a mail questionnaire as the respondent may not be the addressee.

It was considered very difficult if not impossible to prepare a short concise schedule of questions suited to a mail survey, which would also fulfil the objectives of the project.

An important facet of the project was to determine the reasons behind the particular actions taken and decisions made in response to "fees for service".

The documentation of such reasons requires significant writing and recording, and since people generally prefer talking to writing, such a requirement may lead to a low response rate from a mail survey. Other important advantages of the personal interview include the ability to clear up any misunderstandings of questions, maintenance of question order and the ability to handle sensitive issues tactfully.
The major disadvantages are the relatively long period of time and high costs associated with a personal interview survey. Costs were kept to a manageable level through use of Tasmanian Department of Agriculture vehicles and accommodation centres.

6.2 The Questionnaires

A separate questionnaire was used for each of the three groups of respondents, as described in a later section.

Payne (1975) has published a number of suggestions and rules to follow when designing questions. His advice was heeded as much as possible when compiling the questionnaires.

Most of the questions used in the survey are either of the two-way choice or open-ended (free answer) type. The two-way choice questions were predominantly of the 'yes-no' type and often were used as a means of determining which subsequent questions were relevant to the particular respondent. As Payne points out, this type of question "reduces issues to their simplest terms ... and comes close to duplicating the types of decisions that people are most accustomed to making". The open-ended type of question was used extensively so as respondents had the opportunity to express their own ideas and opinions without any restrictions, particularly those related to enforcing conformity with pre-conceived answer categories. A limited number of questions had pre-coded answers for ease of recording rather than for forcing respondent conformity.

Many questions were aimed at elucidating reasons behind actions and decisions. In order to avoid excessive repetition, possibly resulting in the respondent becoming bored or the interviewer generating a feeling of impertinence, a number of different phrases ranging from the single
word 'why' to more verbose sentences were used. Question wording in the three questionnaires was standardised where appropriate, so as to eliminate any influence of this variable.

The survey questions are given in Appendix 1.

6.3 Farmer Sample

Farmers selected from two Agricultural Districts (fig 3) centred on Campbell Town and Burnie constituted the sample population. These two districts were chosen as they are representative of the major agricultural pursuits in Tasmania. Agriculture in the Campbell Town district is characterised by extensive grazing and grain production. In contrast, agriculture in the Burnie district is based on intensive enterprises including dairying and vegetable production.

A list of farm property owners within these two districts was obtained using Tasmanian Department of Agriculture records (property Identification System for Tasmania) in conjunction with individual advisory officers servicing these districts. The farm property owners were segregated into one of the following three groups.

Group 1 - Those farmers who have purchased services provided by advisory officers of the Tasmanian Department of Agriculture.

Group 11 - Those farmers who have not purchased any services provided by advisory officers but who used services available from Department of Agriculture advisory officers before the introduction of fees for service.

Group 111 - Those farmers who have not purchased any services provided by advisory officers and rarely (once or less per year) if ever used such services before the introduction of fees for service.
The property owners were categorised by the following means. Department of Agriculture account records were used to identify those farmers who had purchased services. The remaining farmers were categorised after consultation with the advisory officers servicing the two districts. This was considered a reliable method as the officers involved have worked in the districts for a significant period and maintain client contact records.

A random sample of twenty farmers from each group within each district was selected using tables produced by Lindley and Miller (1970). Ten reserve names were selected from each group in a similar manner.

A letter (Appendix 1) outlining the study and introducing the interviewer was sent to the farmer sample members on the following dates. Letters were sent to farmers in the Campbell Town district on November 24th, 1983 so as to arrive before December 6th, 1983, being the first day of interviews in that district. Similar letters were sent to the sample from the Burnis district on December 22nd, 1983. Interviewing in this district commenced on January 2nd, 1984.

Potential respondents were telephoned to arrange a mutually convenient time and date, a few days in advance of visiting them.

Advisory officers from the two districts provided the interviewer with a map detailing the property locations of the farmers selected in the sample. This information enabled interviews to be arranged on an area basis, thus reducing travelling time and cost. It also avoided the need for respondents to give detailed verbal directions over the telephone, thereby making the establishment of appointments quicker and easier.
6.4 The Interviewer

The author was the sole interviewer primarily because insufficient funds were available to support assistants. The advantages of a sole interviewer are mainly associated with reducing error due to biases and differences between interviewers. Although a conscious effort was made by the author to avoid interview drift, this is seen as one of the main disadvantages of using a lone interviewer.

Although the interviewer and author was employed by the Tasmanian Department of Agriculture at the time of undertaking the study, every attempt was made to diminish this bias and any personal feelings with regard to fees for advisory services.

The author has never worked in either of the two districts sampled nor was he known to any of the respondents. The interviewer introduced himself to respondents as being from the University of Melbourne. The Department of Agriculture staff servicing the two districts were asked to keep the interviewer's association with the Department confidential and to refrain from discussing the survey with their farmer clients. These measures were considered necessary so as not to inhibit or influence farmer response to the questionnaire.

The low level of refusals (Table 1) may be attributed to the high level of importance, seriousness and concern farmers have for the topic under investigation. Almost all respondents saw the interview as a good opportunity to express their personal opinions and views on the fees for service subject. The high level of farmer interest was also reflected by the number of respondents who requested a copy of the final research results, and the efforts made by respondents to make and keep interview appointments.
The three respondents with whom a suitable interview time could not be arranged were either involved with harvesting crops or had planned family vacations, but all expressed a willingness to be interviewed at a subsequent time if required.

Table 1
Interviewer Contact Results

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 11</th>
<th>Group 111</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers contacted</td>
<td>41</td>
<td>44</td>
<td>46</td>
</tr>
<tr>
<td>Refused interviews</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>No longer farming</td>
<td></td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>No suitable time for interview</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Interviews conducted</td>
<td>40</td>
<td>40</td>
<td>38</td>
</tr>
</tbody>
</table>

The two absolute refusals, both being farmers who have little or no contact with the Department of Agriculture, declined because of lack of interest both in the Department of Agriculture and any services it provides to farmers. The first refusal came at the end of the interviewing period at Campbell Town when it was impossible to find a replacement. The second refusal was in the Burnie district and was not replaced so as the number of respondents in Group 111 from each district was equal.

6.5 Questionnaire Pre-Test

The questionnaires were pre-tested in Victoria so as to minimise the cost and time involved. This was considered valid for the following reasons.
The Victorian Department of Agriculture does charge farmers for some services, including soil analysis and publications. Thus many of the questions are relevant to Victorian farmers.

As shown below, Victorian farmers can be divided into three groups corresponding to the three survey groups.

Farmers who regularly pay for advice and information from private consultants correspond to Group 1 farmers. Victorian farmers can be categorised as belonging to either Group 11 or Group 111 in a similar manner as the Tasmanian farmers were classified.

Victorian farmers from the Torrumbarry and Bendigo areas satisfying the above requirements were selected in collaboration with a private consultant, Victorian Department of Agriculture advisors in these areas and a leader within the Victorian Farmers and Graziers Association.

A total of seven farmers, comprised of two from both Groups 1 and 111 and three from Group 11, were interviewed for the pre-test. This was considered a sufficient number of respondents as many of the survey questions are common to the three groups.

The aim of the pre-test was to assess farmer understanding of the question wording. This was achieved by observing the ease with which the respondent offered an answer, whether the question needed to be repeated and by the content of the answer offered.

Questions with which respondents had difficulty interpreting or answering were discussed with them and their ideas for improvement noted.

The pre-test interviews were attended by two people, one asking the questions and the other acting as observer noting difficulties and areas needing attention. This system proved to be excellent for highlighting problems with the questionnaire as it allowed the interviewer freedom to concentrate on expressing the questions and noting the responses given.
Questions posing difficulties to respondents were soon recognised and where possible were appropriately modified and tested with later respondents.

The main problems with the questionnaires highlighted by the pre-test were associated with unclear question wording, insufficient interviewer direction and the need to include a couple of extra questions to improve clarity and quality of the resulting data.
Section 7

Results

Proposition 1

Farmers consider all Department of Agriculture advisory services should be available free of charge.

Respondent opinion on the issue of charging fees for any of the services provided by Department of Agriculture advisory officers is presented in Table 2.

Table 2

Respondents' Agreement about Fees for Service

<table>
<thead>
<tr>
<th>Agreement</th>
<th>% (n=118)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>57.7</td>
</tr>
<tr>
<td>No</td>
<td>41.5</td>
</tr>
<tr>
<td>Don't Care</td>
<td>0.8</td>
</tr>
</tbody>
</table>

There was no significant relationship between respondent opinion on fees for advisory services and whether they have purchased, previously used or rarely used advisory services.

The reasons offered for supporting the idea of clients paying for certain advisory officer services fall into three categories which are described in Table 3.
Table 3
Reasons for Supporting Fees for Service

<table>
<thead>
<tr>
<th>Reason</th>
<th>Group %</th>
<th>Cases *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(n=25)</td>
<td>(n=21)</td>
</tr>
<tr>
<td>Stops Monopolistic Use</td>
<td>16.0</td>
<td>9.5</td>
</tr>
<tr>
<td>Believes in &quot;User-Pays&quot; Principle</td>
<td>28.0</td>
<td>28.6</td>
</tr>
<tr>
<td>Part of Expected Business Costs</td>
<td>20.0</td>
<td>19.0</td>
</tr>
<tr>
<td>Recoup Cost of Providing Service</td>
<td>48.0</td>
<td>28.6</td>
</tr>
<tr>
<td>Other</td>
<td>14.3</td>
<td></td>
</tr>
</tbody>
</table>

* Multiple Response, Column Totals ≠ 100%

It is interesting to note that, although the principle of user pays was fairly strongly held by all respondents, those farmers who traditionally made little use of advisory services, heralded it as their main reason for supporting fees for service. In contrast, those respondents with a history of using advisory services were more conscious of the costs involved in providing them.

A number of arguments supporting the belief that none of the advisory officer services should attract a user fee have been propounded. These are summarised in Table 4.
Table 4
Reasons for Opposing Fees for Service

<table>
<thead>
<tr>
<th>Reason</th>
<th>Group</th>
<th>% Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>(n=15)</td>
<td>(n=19)</td>
<td>(n=15)</td>
</tr>
</tbody>
</table>

Taxes Should Cover Services 18.8 21.1 40.0 26.5
Everyone Benefits 37.5 42.1 6.0 30.6
Can't Afford Them 18.8 10.5 26.7 18.4
Tradition 18.8 26.3 13.3 20.6
Advisors Benefit As Well 12.5 10.5 6.7 10.2
Other 12.5 10.5 13.3 12.2

* Multiple Response, Column Totals ≠ 100%

Group 111 respondents considered such services should be provided free because they were unable to afford them at their present cost. Reasons given by Group 111 respondents for not using advisory services when they were available free, related to their not having perceived a need and to individualism. (Table 1, Appendix 2)

Table 5 details the broad groups of advisory services for which a user fee was considered to be appropriate by those respondents who supported the fee for service principle.
Table 5

Services that Should Attract a Service Fee

<table>
<thead>
<tr>
<th>Service</th>
<th>Group % Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n=25)</td>
</tr>
<tr>
<td>All Individual Services</td>
<td>40.0</td>
</tr>
<tr>
<td>Individual In-Depth Studies</td>
<td>52.0</td>
</tr>
<tr>
<td>All Services</td>
<td>8.0</td>
</tr>
<tr>
<td>All Property Visits</td>
<td>14.4</td>
</tr>
<tr>
<td>Pest and Disease Advice</td>
<td>14.3</td>
</tr>
<tr>
<td>Don't Know</td>
<td>9.1</td>
</tr>
</tbody>
</table>

* Multiple Response, Column Totals ≠ 100%

Individual services describes those for which the individual client requesting them is the main beneficiary. Examples of services in this category mentioned by respondents included financial budgeting, farm management decision making, soil analysis and interpretation. Many respondents emphasised the distinction between advisors providing individualised advice and acting as information transfer agents, the latter role being one which they believed should not attract a service fee. Services encompassed by the in-depth studies category include those taking more than a short time to deliver (three hours and half a day were short times suggested by respondents) and often require use of specialised resources.
Respondents suggested a range of services they considered should be provided by the Department of Agriculture advisors but which currently either was not provided or was of an unsatisfactory standard. Services mentioned included improved soil testing and recommendations, better dissemination of research results, stronger enforcement of ovine footrot and lice control procedures, provision of farm engineering and financial advisory services. Respondents suggested services relating to ovine footrot and lice control, soil testing and financial management as among those for which farmers would be prepared to pay.

Since the introduction of fees for service 56% of Group 1 and 11 respondents have used services for which a fee is not required. Approximately half (44%) of these respondents would be prepared to pay for services such as office and telephone consultations, pest and disease information.

Proposition 2

There is a positive relationship between farmer attitude toward fees for service and farmer characteristics (area managed, farming experience, main farm enterprise, gross farm receipts, education level, age and reason for farming).

2.1 Area Managed

There was no significant association between farm area managed and farmer attitude toward fees for service (Table 6). Such a result would be predicted from records of the Tasmanian Department of Agriculture summarised in Table 2, Appendix 2. These records show that before fee for service was introduced clients of advisory officers managed properties of sizes distributed in a similar manner to those of the overall state distribution of property sizes.
There was no significant relationship between respondent group and area of property managed (Table 3, Appendix 2).

Table 6

<table>
<thead>
<tr>
<th>Area Managed (ha)</th>
<th>1-50</th>
<th>51-150</th>
<th>151-800</th>
<th>&gt;800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should Pay?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6</td>
<td>19</td>
<td>12</td>
<td>31</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>17</td>
<td>10</td>
<td>13</td>
</tr>
</tbody>
</table>

χ² = 5.31  D.F. = 3  P >0.15

* One case missing because respondent "didn't care".

2.2 Farming Experience

Table 7 indicates that there was no statistically significant relationship between farmer experience (measured by total years as a farmer and by the number of years farming within the present district) and attitude toward fees for service. Similarly, there was no significant relationship between respondent group and farmer experience (Table 4, Appendix 2).
Table 7
Attitude to Fees for Service and Farming Experience

(n=117)*

<table>
<thead>
<tr>
<th>Years</th>
<th>1-5</th>
<th>6-10</th>
<th>11-20</th>
<th>21-30</th>
<th>&gt;30</th>
</tr>
</thead>
</table>

Should Pay?

Yes

| Years Farming | 6   | 7   | 21   | 21   | 13  |

| Years in District | 6   | 6   | 6    | 50   |

| Years Farming | 3   | 7   | 11   | 14   | 14  |

No

| Years in District | 3   | 3   | 4    | 39   |

\[ \frac{1}{2} \text{ (years farming)} = 2.54 \quad \text{D.F.} = 4 \quad P > 0.64 \]

\[ \frac{1}{2} \text{ (years in district)} = 0.69 \quad \text{D.F.} = 3 \quad P > 0.88 \]

* One case missing because respondent "didn't care"

2.3 Main Farm Enterprise

There was no significant relationship between main farm enterprise and attitude to fees for service (Table 8). Similarly there was no relationship between respondent group and main farm enterprise (Table 5, Appendix 2).

This result would not be predicted according to Table 6, Appendix 2. This table indicates that, although 70% of the state's farms were engaged in intensive agricultural pursuits, they accounted for only 56% of advisory officer clients, before fees for service were introduced.

The following information may help explain this apparent anomaly.
Table 7, Appendix 2 indicates that advisory officer clients used a wide range of information sources irrespective of the type of agricultural pursuit in which they were engaged (this is in agreement with the work of Bardsley, 1982). Those farmers engaged in intensive agricultural enterprises ranked their most useful sources of information as Department of Agriculture advisors, self and other farmers. In contrast, farmers engaged in extensive agriculture rated other farmers as their most useful source of information, followed by self and Department of Agriculture advisors (Table 8, Appendix 2).

<table>
<thead>
<tr>
<th>Enterprise</th>
<th>Extensive</th>
<th>Intensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should Pay?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>46</td>
<td>22</td>
</tr>
<tr>
<td>No</td>
<td>26</td>
<td>23</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 1.98 \text{ D.F.} = 1 \text{ P} > 0.16 \]

Note: Extensive includes Beef, Sheep and Cereals.

Intensive includes Dairying, Pigs, Horticulture and Fruit.

* One case missing because respondent "didn't care"

2.4 Gross Receipts from Farming

Table 9 indicates that the owner became more favourable toward fees for service as the gross receipts of the farming property increases.
Table 9
Attitude To Fees for Service and Gross Receipts from Farming

(n=117)*

Receipts ($000's)

<table>
<thead>
<tr>
<th></th>
<th>&lt;20</th>
<th>21-40</th>
<th>41-70</th>
<th>71-100</th>
<th>&gt;100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should Pay?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>10</td>
<td>13</td>
<td>4</td>
<td>10</td>
<td>31</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>12</td>
<td>15</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

$\chi^2 = 21.37$  D.F. = 4  $P < 0.0003$
* One case missing because respondent "didn't care"

As might be expected, Table 9, Appendix 2 demonstrates gross property receipts were positively related to area of the property managed. Since there was no significant relationship between attitude toward fees for service and property area managed, and between gross receipts from farming and respondent group (Table 11, Appendix 2), it was considered that gross receipts per unit property area may provide a more realistic means of assessing the influence of property income.

Table 10 indicates there is not a significant relationship between attitudes to fees for service and gross receipts per area managed. If gross receipts/area managed is accepted as a measure of farming intensity the results in Table 10 confirm those presented in Table 8.
Table 10

Attitude Toward Fees for Service and Gross Receipts per Area Managed

(n=117)*

<table>
<thead>
<tr>
<th>Gross Receipts per Area Managed ($/ha)</th>
<th>1-60</th>
<th>61-360</th>
<th>&gt;360</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should Pay?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>37</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>No</td>
<td>17</td>
<td>21</td>
<td>11</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 4.85 \text{ D.F.} = 2 \text{ } P > 0.09 \]

* One case missing because respondent "didn't care"

2.5 Education Level

Although there appeared to be an association between agreement with fees for service and education level of the respondents, Table 10, Appendix 2, indicates it was not statistically significant.

Table 11 below indicates a significant relationship between farmer group and education level. It demonstrates that farmers who had purchased advisory officer services generally have attained a higher level of education than those who have not purchased services.
Table 11
Farmer Group and Farmer Education Level

Education Level
(n=118)

<table>
<thead>
<tr>
<th>Group</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased Services</td>
<td>3</td>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td>Users-Prior Fees</td>
<td>3</td>
<td>28</td>
<td>9</td>
</tr>
<tr>
<td>Non-Users Prior Fees</td>
<td>13</td>
<td>22</td>
<td>3</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 16.70 \quad \text{D.F.} = 4 \quad P < 0.002 \]

Note: Tertiary includes University and Agriculture Colleges.

2.6 Age

There was no subsequent relationship between attitude to fees for service and age of respondent (Table 12). Similarly there was no relationship between respondent group and age (Table 12, Appendix 2).
Table 12
Attitude to Fees for Service and Respondent Age

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>25-30</th>
<th>31-40</th>
<th>41-50</th>
<th>50-65</th>
<th>&gt;66</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=117)*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Should Pay?
- Yes    | 8     | 21    | 16    | 19    | 4   |
- No     | 2     | 15    | 13    | 12    | 7   |

$\chi^2 = 4.34$  D.F. = 4  $P > 0.36$

* One case missing because respondent "didn't care"

2.6 Reason for Farming

Table 13 indicates that, irrespective of respondent group the main reasons given for being engaged in the farming profession were, "personal satisfaction from being able to do a job well" and "independence, freedom to do as I want."

Table 13

<table>
<thead>
<tr>
<th>Main Reasons for Farming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>(n=40)</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>(n=40)</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>(n=38)</td>
</tr>
<tr>
<td>Overall</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reason</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>50.0</td>
<td>62.5</td>
<td>53.8</td>
<td>55.9</td>
</tr>
<tr>
<td>Independence</td>
<td>40.0</td>
<td>30.0</td>
<td>39.5</td>
<td>36.4</td>
</tr>
<tr>
<td>Money</td>
<td>10.0</td>
<td>5.0</td>
<td>5.2</td>
<td>6.8</td>
</tr>
<tr>
<td>Community Position</td>
<td>2.5</td>
<td>0.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 4.13$  D.F. = 6  $P > 0.66$
There was no statistically significant association between attitude to fees for service and respondents' main reason for farming (Table 13, Appendix 2).

Proposition 3

Since fees for service were introduced farmers are decreasing the frequency of consulting Department of Agriculture advisory officers and are increasing their use of sources providing free advice.

Table 14 depicts the response of farmers to fees for service in terms of frequency of consulting Department of Agriculture advisory officers.

Table 14

Frequency of Consulting Advisors Since Fees for Service

<table>
<thead>
<tr>
<th>% (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Changed?</td>
</tr>
<tr>
<td>4.8 Increased</td>
</tr>
<tr>
<td>Yes 78.0</td>
</tr>
<tr>
<td>95.2 Decreased</td>
</tr>
<tr>
<td>No 22</td>
</tr>
</tbody>
</table>

Increased frequency of contact since the commencement of fees for service occurred by coincidence as these respondents embarked on further property development at about the same time.

Reasons stated for reducing contact with advisory officers since fees for service are given below in Table 15.
Table 15

Reason for Reduced Contact with Advisors Since Fees for Service

<table>
<thead>
<tr>
<th>Reason</th>
<th>% (n=59)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fees</td>
<td>79.6</td>
</tr>
<tr>
<td>Officers Not Worth Fees</td>
<td>11.8</td>
</tr>
<tr>
<td>Other</td>
<td>8.6</td>
</tr>
</tbody>
</table>

There were two main components to the fees reason given for reduced contact. Namely, they were unable to afford the cost of maintaining their previous contact level and they protested against the principle of fees for service.

Respondents who gave the opinion that their local advisory officer was not worth the fees charged suggested this either because they felt the officer was not competent or was not progressive enough.

Other reasons given included respondents' ignorance of the mechanics of the charging system, and their preference for using their experience gained before fees for service.

Those respondents who had not changed their frequency of consulting advisory officers since fees for service claimed not to have done so either because fees had no influence on their contact frequency (66.7%) or because they were able to contact the relevant officer in a non-paying situation (33.3%).

Table 16 shows the incidence of contacting free sources of advice by respondents who have decreased their frequency of contacting Department of Agriculture advisors.
Table 16
Incidence of Contacting Other Sources of Advice
\[
\% \ (n=59)
\]
Consulting Other Sources?
Yes \hspace{1cm} 52.5
No \hspace{1cm} 47.5

Since fees for service previous users of advisory services have not consulted other advisory sources with a greater frequency than those users who have paid for advisory services (Table 14, Appendix 2).

Those sources which enjoyed increased frequency of consultation can be categorised as either commercial (45.2%), including stock and station agents, fertiliser and chemical company representatives, or non-commercial (54.8%), encompassing such sources as other farmers, industry field officers, self and various forms of literature.

Proposition 4

Introduction of fees for service has not caused the circumstances or situations that induce farmers to contact Department of Agriculture advisory officers to change.

Prior to fees for service farmers contacted advisory officers from the Department of Agriculture when one or both of the following circumstances described in Table 17 prevailed.
Table 17
Reasons for Contacting Advisors Before Fees for Service

<table>
<thead>
<tr>
<th>% Cases (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Information or Advice</td>
</tr>
<tr>
<td>Faced Specific Problem Situations</td>
</tr>
</tbody>
</table>

* Multiple response, total ≠ 100%

Since the introduction of fees for service three quarters of the respondents claimed that the circumstances or situations that would induce them to contact a Department of Agriculture advisory officer had changed in the following ways (Table 18).

Table 18
Changes in Advisory Officer Contact Circumstances with Fees for Service

<table>
<thead>
<tr>
<th>% Cases (n=60)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems, situations and needs have to be more serious</td>
</tr>
<tr>
<td>Other information sources exhausted first</td>
</tr>
<tr>
<td>Needs are accumulated to minimise contact frequency</td>
</tr>
<tr>
<td>Assess whether likely benefits of contact outweigh costs</td>
</tr>
</tbody>
</table>

* Multiple response, totals ≠ 100%
Proposition 5

Fees for service has caused farmers to consult Department of Agriculture advisors by "least-cost" means.

5.1 Publications

Table 19 depicts the change in collection of Department of Agriculture publications since fees for service.

<table>
<thead>
<tr>
<th>% Cases (n=118)</th>
<th>Collected Free</th>
<th>Purchased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>71.2</td>
<td>21.2</td>
</tr>
<tr>
<td>No</td>
<td>28.8</td>
<td>78.8</td>
</tr>
</tbody>
</table>

Table 20 indicates that significantly more traditional clients than non-users of advisory officer services collected free publications. Table 15, Appendix 2 demonstrates that there was no significant association between respondent group and purchase of publications.

Less than one third of those respondents who have purchased publications saw any need to change the information content or standard of presentation, following introduction of charges. The main changes suggested included use of coloured photographs rather than black and white line drawings as illustrations. This was considered particularly important when the publication was used for making identifications.
Table 20

Respondent Group and Collection of Free Publications

<table>
<thead>
<tr>
<th>Group</th>
<th>% Cases</th>
<th>(n=40)</th>
<th>(n=40)</th>
<th>(n=38)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collected Free</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>82.5</td>
<td>87.5</td>
<td>42.1</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>17.5</td>
<td>12.5</td>
<td>57.9</td>
<td></td>
</tr>
</tbody>
</table>

\[ \chi^2 = 23.35 \quad \text{D.F.} = 2 \quad P < 0.0001 \]

5.2 Group Activities

Table 21 shows the involvement of respondents in group activities organised by the Department of Agriculture, before fees for service, and the effect of fees for service on their involvement with such groups.

Table 21

Fees for Service and Involvement in Group Activities

<table>
<thead>
<tr>
<th>% Cases (n=118)</th>
<th>Involvement Prior Fees</th>
<th>Affected by Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>70.7</td>
<td>13.6</td>
</tr>
<tr>
<td>No</td>
<td>29.3</td>
<td>86.4</td>
</tr>
</tbody>
</table>

Of the small proportion (13.6%) of respondents who said their involvement with group activities had been affected by fees for service, 81% claimed this involvement would be increased.
5.3 Means of Contacting Advisors

Results indicate that half those respondents who were regular clients of Department of Agriculture advisors before the introduction of fees for service had now changed the manner by which they would consult an advisor. Table 22 depicts how the contact methods had changed.

Table 22

<table>
<thead>
<tr>
<th>Contact Method</th>
<th>Before Fees</th>
<th>After Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone</td>
<td>91.3</td>
<td>95.0</td>
</tr>
<tr>
<td>Property Visit - Appointment</td>
<td>98.8</td>
<td>17.5</td>
</tr>
<tr>
<td>Property Visit - Call in</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>23.8</td>
<td>12.5</td>
</tr>
<tr>
<td>Group</td>
<td>8.8</td>
<td>10.0</td>
</tr>
</tbody>
</table>

* Multiple response, column totals ≠100%

Eighty five percent of respondents who changed their means of contacting advisory officers since fees for service were adamant that their new ways of making contact with advisors would affect how their requirements will be met under some circumstances.

Table 23 summarises the reasons for these opinions.
Table 23

How New Contact Methods Affect Fulfilment of Client Requirements

<table>
<thead>
<tr>
<th>Reason</th>
<th>% Cases (n=39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisor Cannot See Problems</td>
<td>76.9</td>
</tr>
<tr>
<td>Advisor Less Informed</td>
<td>15.4</td>
</tr>
<tr>
<td>Lacks Personal Touch</td>
<td>7.7</td>
</tr>
</tbody>
</table>

5.4 Agricultural Newsletter

Almost all (95%) of the respondents received a copy of an agricultural newsletter produced by the Department of Agriculture. When asked if they would be prepared to pay for such a publication 54.2% replied in the affirmative. A commonly suggested subscription price to cover production and transmission costs was in the range of $6 to $12 per year. Most farmers saw the newsletter as valuable for being a current awareness, conscience pricking medium rather than as a means of transmitting specific individualised information. This is in agreement with the findings of Warren (1976).

Proposition 6

Fees for service has resulted in farmers being less willing to pass on information to Department of Agriculture advisors.

All respondents indicated that before fees for service they were always willing to pass on information to advisory officers. Table 24 indicates the effect of fees for service on farmer willingness to pass on information to advisors.
Table 24

Farmers' Willingness to Pass Information to Advisors Under Fees for Service

<table>
<thead>
<tr>
<th>Group</th>
<th>% Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
</tr>
<tr>
<td></td>
<td>(n=40)</td>
</tr>
<tr>
<td></td>
<td>(n=40)</td>
</tr>
<tr>
<td></td>
<td>(n=80)</td>
</tr>
</tbody>
</table>

Willingness Affected

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>10.0</td>
</tr>
<tr>
<td>No</td>
<td>90.0</td>
</tr>
</tbody>
</table>

There was no statistically significant ($P > 0.26$) association between farmer group and whether willingness to pass information to advisors has been affected by fees for service.

Seven of the eight respondents who claimed fees had affected their willingness to pass on information to advisors, indicated it to be in a negative direction. They gave the reason that the advisors do not give free information and hence they (as clients) would not provide advisors with free information.

Proposition 7

Farmers place a greater reliance on and are more willing to follow information or advice for which a fee was paid than if it was received without cost.

Results indicate 85.3% of respondents do not place greater reliance on information or service for which a fee was paid than if it was received without cost. Tables 25 and 26 summarise their reasons.
Table 25

Reasons Why Paid Services Not Considered More Reliable than Free Services

<table>
<thead>
<tr>
<th>Reason</th>
<th>% Cases (n=98)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information/Advice No Better</td>
<td>77.5</td>
</tr>
<tr>
<td>Same Source as Provided it Free</td>
<td>21.4</td>
</tr>
<tr>
<td>Don't Know</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Table 26

Reasons Why Paid Services Considered More Reliable Than Free Services

<table>
<thead>
<tr>
<th>Reason</th>
<th>% Cases (n=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better Information/Advice</td>
<td>77.8</td>
</tr>
<tr>
<td>Value More if Have to Pay</td>
<td>22.2</td>
</tr>
</tbody>
</table>

Respondents who have purchased information or advice unanimously claim that their willingness to follow it has not been affected by the fees involved. They claim such advice will continue to be weighed up along with that gained from all other sources. Table 16, Appendix 2 indicates that respondents did not blindly use all the services they received from advisors before fees for service.

Proposition 8

Fees for service has resulted in farmers expecting more from advisory officers and the services they provide.
Table 27 indicates respondents' reaction to fees for service in terms of changing their expectations of advisors and the services they provide.

Table 27

<table>
<thead>
<tr>
<th></th>
<th>Group % Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n=40)</td>
</tr>
<tr>
<td>Overall</td>
<td>11</td>
</tr>
<tr>
<td>Expectations Changed?</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>37.5</td>
</tr>
<tr>
<td>No</td>
<td>62.5</td>
</tr>
</tbody>
</table>

The association between farmer group and whether expectations have changed is not statistically significant \( (p > 0.7) \).

Those respondents who have changed their expectations of advisors and advisory services since fees for service have done so in the manner depicted by Table 28.

Table 28

<table>
<thead>
<tr>
<th>% Cases (n=41)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expect...</td>
</tr>
<tr>
<td>More Accurate Information/Advice</td>
</tr>
<tr>
<td>More Professional Service</td>
</tr>
<tr>
<td>Higher Standard of Service</td>
</tr>
<tr>
<td>Value For Money</td>
</tr>
<tr>
<td>Less</td>
</tr>
</tbody>
</table>
Those respondents expecting more accurate services were adamant that they would not tolerate mistakes or advice which failed to give the predicted results. Many of these respondents indicated they would be prepared to take legal action if the services purchased were not "spot on". Respondents expecting a more professional service suggested officers should be more "service minded". Expecting a higher standard encompasses such thoughts as:

"following things up better and quicker, particularly laboratory services";

"would want the best officer and the chance to choose the officer employed";

"only want to pay for suitably qualified people - no learners".

Proposition 9

Fees for service has resulted in clients wanting any technical information they pass on to advisors to be kept in confidence by them.

Advisory officer clients' attitude towards confidentiality of technical information is presented in Table 29.

Table 29

<table>
<thead>
<tr>
<th>Clients' Preference for Confidentiality of Technical Information Since Fees for Service</th>
<th>% Cases (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidential?</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>20.0</td>
</tr>
<tr>
<td>No</td>
<td>80.0</td>
</tr>
</tbody>
</table>
Those respondents who supported the concept of confidentiality under a system of fees for service preferred either all information or just information on new developments which they have passed onto advisors to be kept in confidence. Reasons given for this preference included:

"The advisors get such information without cost and I (client) do not want the Department charging others for it";

"The information is of a personal nature".

Proposition 10

Fees for service has resulted in farmers preferring to employ advisors under specific, defined terms.

The preferred methods given by clients for employing advisors are presented in Table 30.

<table>
<thead>
<tr>
<th>Method</th>
<th>% Cases (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract</td>
<td>5.0</td>
</tr>
<tr>
<td>On-Demand</td>
<td>81.3</td>
</tr>
<tr>
<td>Management Package</td>
<td>10.0</td>
</tr>
<tr>
<td>Other</td>
<td>3.7</td>
</tr>
</tbody>
</table>

The concept of grouping related advisory services into management packages has been developed by the Tasmanian Department of Agriculture as an adjunct to fees for service. Results indicated that 79% of respondents had heard of the management package concept. This implies farmers are not favouring employing advisors by this means because of
lack of awareness. However, there was some confusion among respondents about the meaning of management. Some farmers interpreted management in the sense of overseeing day to day property management decisions. This may account for the large number of respondents who claim the services of management packages are not required.

The reasons given for not having purchased a management package to date are given in Table 31.

Table 31
Reasons for Not Having Purchased Management Packages
% Cases (n=52)

<table>
<thead>
<tr>
<th>Reason</th>
<th>% Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Not Required</td>
<td>52.0</td>
</tr>
<tr>
<td>None Suit Needs</td>
<td>11.5</td>
</tr>
<tr>
<td>Too Expensive</td>
<td>17.3</td>
</tr>
<tr>
<td>Prefer to Treat Each Situation Individually</td>
<td>7.7</td>
</tr>
<tr>
<td>Other</td>
<td>11.5</td>
</tr>
</tbody>
</table>

In contrast, five of the eight respondents who have purchased a management package did so because they considered it to be the most economical way of gaining the required information.

The preferences for employing advisors on an "on demand" basis are presented in Table 32.
Table 32
Preferences for employing Advisors on an "On-Demand" Basis

<table>
<thead>
<tr>
<th>Reason</th>
<th>% Cases (n=65)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only Want Advisor When Specific Need Arises</td>
<td>73.7</td>
</tr>
<tr>
<td>More Economical</td>
<td>15.4</td>
</tr>
<tr>
<td>More Flexible</td>
<td>9.2</td>
</tr>
<tr>
<td>Other</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Respondents were adamant that under a system of fees for service they did not want to be committed to paying for an advisor to visit as a matter of routine just to satisfy any condition that may be in a contract or agreement.

Proposition 11

Fees for service has resulted in clients requesting more formal reports from advisors.

The type of report expected by clients employing an advisor is given in Table 33.

Table 33
Report Expected by Client Employing an Advisor

<table>
<thead>
<tr>
<th>Report</th>
<th>% Cases (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spoken</td>
<td>15.0</td>
</tr>
<tr>
<td>Written</td>
<td>55.0</td>
</tr>
<tr>
<td>Spoken (Minor), Written (Major)</td>
<td>30.0</td>
</tr>
</tbody>
</table>
It is evident that at least 30% of clients would select the type of report required depending upon the complexity of the situation under discussion.

Clients preferred a spoken report because it allows the topic to be better explained in discussion between client and advisor (72.7%) and because spoken reports are cheaper (27.3%).

The reasons given for specifying a written report are presented in Table 34.

Table 34
Clients' Preference for a Written Report

<table>
<thead>
<tr>
<th>Reason</th>
<th>% Cases (n=44)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Reference</td>
<td>86.4</td>
</tr>
<tr>
<td>Better Thought Out</td>
<td>6.8</td>
</tr>
<tr>
<td>Evidence</td>
<td>13.6</td>
</tr>
</tbody>
</table>

* Multiple Response, Column Totals ≠ 100%

Proposition 12

Farmers regard Department of Agriculture advisory officers as being important to the farming community, despite fees for service.

The level of importance attributed to advisory officers by farmers is given in Table 35.
Table 36

Reasons for Considering Advisors' Role to be Important

% Cases (n=98)*

<table>
<thead>
<tr>
<th>Reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide District Experience</td>
<td>39.8</td>
</tr>
<tr>
<td>Formal Training</td>
<td>40.8</td>
</tr>
<tr>
<td>Trials and New Ideas</td>
<td>24.5</td>
</tr>
<tr>
<td>Help Young Farmers</td>
<td>10.2</td>
</tr>
<tr>
<td>Other</td>
<td>2.0</td>
</tr>
</tbody>
</table>

* Multiple response, column total ≠ 100%

Advisors were considered to be of little or of no importance in the farming community either because respondents lacked confidence in them or considered their training and knowledge to be inadequate.

Proposition 13

When fees have to be paid for advice, Department of Agriculture advisors are sought in preference to private consultants.

Farmers' preference for paying either Department of Agriculture advisors or private consultants to provide the required services is shown by Table 37. The relationship between farmer group and source preference is not significant.
Table 37

Farmers' Source Preference for Purchasing Services

<table>
<thead>
<tr>
<th>Preference</th>
<th>I (n=40)</th>
<th>II (n=40)</th>
<th>Overall (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Agriculture</td>
<td>70.0</td>
<td>47.5</td>
<td>58.8</td>
</tr>
<tr>
<td>Private Consultant</td>
<td>12.5</td>
<td>30.0</td>
<td>21.2</td>
</tr>
<tr>
<td>Either, Depends on Man and Job</td>
<td>17.5</td>
<td>22.5</td>
<td>20.0</td>
</tr>
</tbody>
</table>

$\chi^2 = 4.86$  D.F. = 2  P >0.09

Those respondents who had no clear preference for either advisory source claimed to make their choice depending upon the specific task at hand and their assessment of the ability of the available personnel.

The reasons given by respondents for their advisor preference are presented in Table 38.
Table 38
Reasons for Stated Advisor Preference

<table>
<thead>
<tr>
<th>Reason</th>
<th>Department of A Advisor (n=47)</th>
<th>Private Consultant (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best Value</td>
<td>10.6</td>
<td>6.3</td>
</tr>
<tr>
<td>Best Service</td>
<td>27.7</td>
<td></td>
</tr>
<tr>
<td>Unbiased</td>
<td>14.9</td>
<td></td>
</tr>
<tr>
<td>Local Knowledge</td>
<td>53.2</td>
<td></td>
</tr>
<tr>
<td>More Professional</td>
<td>4.3</td>
<td>81.3</td>
</tr>
<tr>
<td>Other</td>
<td>4.3</td>
<td>18.3</td>
</tr>
</tbody>
</table>

* Multiple Response, Column Totals ≠ 100%

Department of Agriculture advisors were thought to provide a better service because of their access to a wide range of support facilities and specialist officers within the one organisation. A better service also was thought to stem from Department of Agriculture advisors having the farmers' interests at heart rather than being primarily concerned with making money.

Professionalism of private consultants was used by respondents to encompass a number of characteristics, such as experience over a wide geographical area including interstate, having the market place determine their individual future in that only the better ones survive, and freedom to give positive opinions which do not necessarily have to conform with government policy. Other reasons given for preferring
private consultants included objection to paying for government based services, more practical knowledge and the ability to develop a more continuous personal relationship.

**Proposition 14**

*Farmers consider that the Department of Agriculture, in charging for its advisory services should not compete with private enterprise providing similar services.*

Farmer opinion on the issue of Department of Agriculture advisors competing with private enterprise is presented in Table 39.

<table>
<thead>
<tr>
<th>Group % Cases</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>(n=40)</td>
<td>(n=40)</td>
</tr>
</tbody>
</table>

**Support Competition?**

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td>97.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Competition</td>
<td>90.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Reasons proposed in support of competition between public and private sector advisors are given in Table 40.
Table 40

Reasons Supporting Competition Between Government and Private Advisors

% Cases (n=105)

<table>
<thead>
<tr>
<th>Reason</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition Good - Better</td>
<td>64.1</td>
</tr>
<tr>
<td>Service Results</td>
<td></td>
</tr>
<tr>
<td>D of A Service Best - Must</td>
<td>21.8</td>
</tr>
<tr>
<td>Be Retained</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>14.1</td>
</tr>
</tbody>
</table>

Other reasons included:

"To ensure that a service is always available rather than its presence being dependent upon the prosperity of the farming community";

"To reduce cost";

"To keep the government informed on rural matters";

"Department of Agriculture advisors are unbiased and independent and thus must be retained."

Proposition 15

Farmers consider that the Department of Agriculture should not advertise the services it has for sale.

Table 41 indicates farmers' opinion on the issue of the Department of Agriculture advertising the services it has for sale.
Table 41

Farmers' Opinion of the Department of Agriculture Advertising its Services

<table>
<thead>
<tr>
<th>Group % Cases</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=40)</td>
<td>(n=40)</td>
</tr>
</tbody>
</table>

Should Advertise?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>11</th>
<th>111</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>80.0</td>
<td>77.5</td>
<td>73.7</td>
</tr>
<tr>
<td>No</td>
<td>20.0</td>
<td>22.5</td>
<td>23.7</td>
</tr>
<tr>
<td>Don't Know</td>
<td>2.6</td>
<td>0.9</td>
<td></td>
</tr>
</tbody>
</table>

The association between group and opinion on advertising is not statistically significant ($\chi^2 = 0.21$ D.F. = 2 $P > 0.9$).

Those respondents who agreed with advertising did so because they said it is a way of letting everyone know what is available. Many remarks were received which suggested that advertisements should not be on too grand a scale.

Table 42 presents the reasons given for considering that the Department of Agriculture should not advertise.
Table 42

Why the Department of Agriculture Should Not Advertise its Services

% Cases (n=26) *

Reason
Everyone knows of services 65.4
Present advertisements adequate 26.9
Advertisements will increase fees 15.4
Other 3.8

* Multiple response total ≠ 100%

There was some evidence to suggest that not everyone was fully aware of what services are available from the Department of Agriculture.

Traditional non-users of the Department of Agriculture were asked what services they know to be available from advisors. Very few respondents could list specific services, and most replies were of a very general and often naive nature.
Section 8

Discussion

The sample population is split about 60:40 in favour of clients paying for some individualised services provided by advisory officers. Preparedness to pay for individualised services is not unexpected. Patterson (1978) found private consultants employed by farmer clients were retained to provide services of value only to the employer. The success of information brokers also indicates a willingness of people to pay for the provision of specific information. The results support Makeham's (1963) view that the farmer, being the short run beneficiary of new information, should bear the cost of incorporating it into his business. The ideal canvassed by Blaxter (1973) that free advice should be available on issues such as soil conservation, pest and disease control that have community-wide implications, also is supported by the results.

The results suggest restriction of service fees to those situations requiring "in-depth" attention would prove to be reasonably well accepted by farmers. This mixture of free and for fee agrees with the philosophy of Swanson (Wilson, 1972) and Broward (1978) who suggest that providing a basic free information service available to everyone does not prevent provision of extra services for a fee. Such a system does not conflict with the usually accepted role of Department of Agriculture advisory officers as information transfer agents. Such a balance between free and for fee would help to ensure advisory officers remain within the farmers' knowledge pool. Indiscriminate application of fees for service (as suggested by half of group 111 members favouring fees, Table 4) would tend to alienate advisors from the farmers'
knowledge pool, and eventually would destroy the traditional extension service.

The reasons given by respondents for favouring a fee for service system are not dissimilar to those found in general information facilitation. The library profession is acutely aware of the cost of information transfer and the need to recoup some of these costs if such institutions are to survive in a climate of reducing government funding. Those respondents with a history of using advisory officer services are obviously more conscious of the costs involved in delivering such services than are traditional non-users. The majority of the former group are not only aware of the costs but are also prepared to help meet them to ensure continuation of the services. This finding contrasts with the thoughts of Vagianos (1973) who believes users of information sources which traditionally have been available free have no conception of their cost or value to them.

Belief in the user pays principle as justification for fees for service is not unexpected considering most farmers seem to conform to a philosophy of liberalism.

It is often stated (Anderson 1982) that Department of Agriculture advisory services are only used by a limited number of farmers, sometimes termed the progressive group. Records of the Tasmanian Department of Agriculture indicate 29% of the state's commercial farmers averaged 2.2 property visits by advisory officers for the period October 1982 to October 1983 (twelve months before fees for service were introduced).
One of the reasons for supporting fees for service, considered important particularly by group 111 farmers, is the possibility that fees may reduce the monopolistic use of advisory officer services. If such a monopoly of use does exist, fees for service are unlikely to reduce it for two reasons, as demonstrated by the data.

Firstly, the characteristics (age, area managed, etc) of service users under a system of fees for service are essentially the same as those of users of a totally free system, except their individual frequency of use is less.

Secondly, the data indicate that fees for service will not induce traditional non-users of advisory services to avail themselves of the services.

Those respondents who disapprove of the concept of fee for service do so mainly because they feel the whole community eventually reaps benefit from such services through increased productivity and export earnings. This feeling is supported quantitatively by a report from the United States Department of Agriculture (1980) which shows a 190% return over three years on capital invested in agricultural research and extension activities.

It has also been argued by opponents to fees for service that general taxes should be sufficient to maintain advisory services. Such reasoning is in agreement with the philosophy of the community funding services benefiting society as a whole. But the question still remains - is it reasonable to expect the tax payer to provide services resulting in substantial gain to a limited number of individuals? A similar question posed by Williams (1968) has been left unanswered for almost fifteen years, except for the foregoing discussion which suggests that the answer should be NO.
The argument that advisory officers also benefit from dialogue with clients in the course of providing services is proposed as a reason for opposing fees for service. This two-way interchange between client and advisor is one of the key foundation stones of a successful extension service. It can be argued that, although such dialogue is important to keep the advisor in touch with his audience, their latest thoughts and needs, it is not for his personal gain. However, it is necessary for the benefit of all those individuals for whom the advisor is an active member of their knowledge pool. It could be argued that under a system of fees for service the organisation employing the advisor will benefit financially by charging others for access to information gained from consultations with its clients. Such organisations must make it quite clear whether they are charging for the information itself or to recover costs associated with the transmission and interpretation of the information. The literature review and the survey results both suggest the latter alternative if it is adopted will meet with approval by the majority.

Anderson (1982) showed face to face extension delivery to be dominated by a particular type of farmer - the so-called "progressive". The "progressive" farmer, as described by Anderson, is characterised by managing the larger, wealthier holdings, having a better education, aged between 40 and 50 years and with a strong motivation to expand output, try new farming practices and expand asset wealth. From the results, the above description of the "progressive" farmer does not typify either those farmers who have purchased advisory officer services or those who agree with the principle of fees for service. This suggests that either
the "progressive" farmer in Tasmania has characteristics other than those described by Anderson, or that fees for service does not result in selection of an advisory officer clientele comprised entirely of the so-called "progressive" farmers.

The results pertaining to some of the farmer characteristics examined in the study deserve further comment here.

There was no significant relationship between property area managed and either attitude toward fees for service or respondent group. This means that fees for service should not result in a narrowing of advisory officer clients toward those with a property of a certain size. This contrasts with the results reported by Patterson (1978) who found those farmers employing a private consultant had significantly larger farms than those not employing consultants.

Fees for service is not acting to select advisor clientele on the basis of farming experience. This means that individuals who are either new to the farming profession or to a farming district are likely to avail themselves of advisory services as much as more experienced individuals. These results therefore should dispel the fear expressed by some respondents that fees for service would act to alienate new and young farmers from Department of Agriculture advisory officer expertise.

The results also suggest that fees for service will not restrict clients to those engaged in certain agricultural pursuits. This means that as a whole none of the major agricultural industries in Tasmania should be disadvantaged because of producers not using Department of Agriculture advisory services.
The observed relationship between farm income and attitude toward fees for service is not unexpected. Costs associated with engaging advisors would be expected to become insignificant in relation to the total business expenditure as property income increases. The opposite may be true for low income-generating properties.

The income earned from farming by property owners who have purchased advisory services was not significantly different from that earned by property owners who had not purchased advisory services. Based on farmer attitude to fees for service, the results indicate this situation may change as more farmers develop the need for advisory services. It is predicted therefore that future clients of advisors will belong to the higher gross property income group.

A typical "Catch-22" situation can soon develop whereby those farmers with low income-generating properties are likely to be those most in need of advisory services, but at the same time are those least able to afford them.

The main arguments in the literature against the introduction of information access charges centre on the fear of widening the gap between those with and without resources. It is feared that charges ultimately will lead to organisations tailoring their services to meet only the needs of paying customers.

Extension organisations implementing fees for advisory services therefore must ensure that in doing so they are not contributing to the widening of economic differences within the rural sector. As has already been pointed out, one way of insuring against this is to develop a balanced approach between free and for fee.

Decreasing frequency of contact between advisors and their clients does not mean that advisors have been totally eliminated from their clients' knowledge pool. Less contact between clients and advisors may,
in the long term be as detrimental to the quality of the advisory service as it is to the clients. Advisors are only one of a number of information sources within the farmers' knowledge pool. In contrast, farmer clients as a group are the only information source in the advisor's knowledge pool able to provide information on farmers' current problems, goals and needs. Less contact between farmers and advisors means the advisor gets a less accurate and less timely appreciation of current client needs. Ultimately this may lead to less effective and less meaningful extension programmes.

In response to fees for service, many farmers are making increased use of free advisory services associated with product distributors. Unfortunately, such sources may not always offer completely impartial advice and may wax and wane in availability depending upon the current economic tide.

The remark made by a survey respondent that "there is no such thing as a free feed" may well be appropriate here. One wonders how long alternative information sources will continue to provide free information, or whether their customers have not always been paying indirectly.

Some farmers are not consulting any other advisory sources, despite having reduced contact with Department of Agriculture advisors since fees for service. These individuals obviously are relying on information gained before fees for service. Such a policy in the long term will lead to stagnation of ideas, resulting in reduced efficiency and productivity.

Many of the problems associated with reduced contact between advisors and clients could easily be circumvented. This could be achieved by encouraging informative, simple everyday dialogue between farmers and advisors and setting it apart from fee-demanding services
which put pressure on both parties to perform rather than just to exchange ideas.

Clients who refrain from contacting advisory officers until their needs are perceived to be more serious could have both beneficial and serious consequences, depending upon the individual. If those clients who previously contacted advisors without hesitation before considering their own resources, are forced to become more self reliant then advisory officer resources may be conserved (Wilson and Broadbent 1972). In contrast, and on the detrimental side, if fees for service force clients to procrastinate for long over problems before contacting an advisor, the situation may have progressed beyond redemption, or have caused excessive economic loss. In such a situation, clients certainly would not see value for money and may be deterred from making future use of advisors.

The practice of exhausting other information sources before contacting the Department of Agriculture also may reduce unnecessary inquiries. Several sources may have to be contacted in order to gain the same information or advice available from the Department of Agriculture. In such a situation the cost of receiving assistance from alternative sources may exceed the cost that would have been incurred by contacting the Department of Agriculture. One stop information service is one of the advantages of paying for the provision of information highlighted by White and Wilkinson (1981).

The practice of clients saving up inquiries (particularly if they are not urgent) until sufficient have accumulated to occupy a reasonable amount of an officer’s day will improve the efficiency and effectiveness of advisory services. Such an approach if it became automatic might result in advisors not seeing the situation at the most appropriate time, with the consequence of them being able to render less useful
assistance. It is evident that fees for service has resulted in clients favouring impersonal (free) means of contacting advisory officers. This is yet another example of farmers avoiding the fees, or perhaps of adapting to them, but at the same time ensuring advisors remain within their knowledge pool.

"Call in" property visits apparently have ceased since the introduction of fees for service, and property visits by appointment have dramatically decreased. The telephone has become the main communication medium between clients and advisors. At least in the short term, farmers apparently are willing to sacrifice service quality in the interests of economy (or as a protest), which may well be false economy in the long term. An advisors' ability to suggest accurate and practical measures to overcome problems relies on an accurate definition of the problem and its causes. This is often difficult to achieve unambiguously by indirect means as most situations do not have universally accepted and known descriptors. Reliance on impersonal contact methods may not greatly affect service quality in the short term, as advisors can use knowledge of the property gained during previous visits. The two obvious limitations to the long term success of such a system are firstly, the dynamic nature of seasons and farming resulting in changes to the property, and secondly, changes in the district advisory staff.

Farmers appeared to be most concerned with the lack of routine "call-in" visits since the introduction of fees for service. Many respondents expressed the view that they felt alienated from the Department of Agriculture since "call-in" visits ceased. Farmers see "call-in" visits as a very valuable means of keeping in touch with latest developments from both formal experimental findings and general district experience. Most respondents considered such visits should not
be charged for. Advisors also gain from such visits through broadening of their knowledge of current farming trends and improved empathy with clients.

It therefore appears that short "call-in" visits are a means of ensuring advisors and farmers remain in each others knowledge pool and sphere of influence. Extension effectiveness will decline as a result of any influences which act to decrease interaction between advisors and their clients.

Farmers may be collecting fewer publications since the introduction of fees for service because they are relying on the information presented in those collected free of charge. Such reliance is valid for subjects change little with time. McKenna (1981) reports Victorian farmers to be very willing to pay for Agnotes published by the Department of Agriculture.

It is evident from the results that, despite advisory officer involvement with farmer group activities being free of charge, there has not been a dramatic increase in the use of group activities by farmers to gain access to advisory officers.

The majority of farmers are prepared to pay to receive copies of a district agricultural newsletter. However, respondents were adamant that the subscription fee was to cover production and transmission costs, rather than being associated with the information content which they claim to be of a very general, but informative nature.

This attitude creates an interesting dilemma and inconsistency of ideals. On the one hand, farmers accept transmission costs associated with the transfer of general information via newsletters, but on the other hand, they do not favour contributing directly towards the cost of receiving general information via "call in" visits and other personalised means. Farmers may be prepared to pay for a
newsletter because they are receiving something tangible for their money, compared with a discussion which may be the only result from a "call in" visit. If a charge was imposed for the transmission of generalised information via these services, the population must be given the choice to receive or not receive them. Those who choose not to receive such services become less accessible members of an advisors' knowledge pool, and vice versa. This problem of segmenting the population by imposing fees to cover transmission costs of all types of information is warned against by Broward (1978), Kostrewski and Oppenheim (1980) and The Green Report (1974). Such a decision would be very difficult to make by a publicly funded organisation, which supposedly operates to benefit agriculture as a whole rather than those who can afford it or who believe in directly paying to receive all information (Williams 1968).

Short "call in" visits and other means aimed at transmitting general information around a district are probably the basis of true extension as distinct from presenting individualised and detailed advice which is more in the realm of consulting (Schapper 1971). Although there will be grey areas, the work of a Department of Agriculture advisor could be segmented according to these criteria. If a system of free and for fee was superimposed on such an arrangement a workable compromise may be achieved.

Fees for service has not resulted in farmers demanding advisors to keep confidential any technical information told to them. Similarly, farmers willingness to pass on information to advisory officers has not been affected by fees for service. The extension process described by Salmon (1980) is based on two-way flow and interchange of information between client and advisor. Effective two-way communication ensures both client and advisor have the same goal and a similar frame of
reference with regard to the topic under consideration. Such an understanding is important for the success of any extension service, but becomes considerably more important upon implementing fees for service. Under such a system clients only want to pay for receiving information and services they consider useful rather than what is considered useful by an advisor. This implies a "doing-to" philosophy of extension (Blokker et.al. 1977) is completely inappropriate under a system of fees for service. The client who is paying for the information or advice has the right, just as any customer, to determine what is purchased. In such a situation the advisor must adapt to the market forces, accept client goals and provide the necessary services to ensure their fulfilment. Fees for service in developing countries could not be contemplated as lack of finance is one of the prime reasons for their stage of development.

Salmon (1980) describes the extension process as "the skills required to shift knowledge within the pool and to help others integrate this knowledge into their own practices". The knowledge pool of advisors encompasses a large number of sources, the most important of which is probably farmers. Any force acting to prevent advisors disseminating information originating from farmers would severely limit the effectiveness of these workers. Local experience and information is usually held in much higher regard by clients than that of more abstract origin. This role of disseminating local information apparently is well recognised by farmers, as many respondents considered it to be the main reason for the importance of advisors in the farming community.

The belief held by many authors, including McGowan (1963), Wilkening, Tully and Presser (1962) and Garfield (1973), that paid for information will be considered more reliable, resulting in greater use being made of it, is not supported by the results presented in this
study. From the view of a realist and a professional, the observed results are those that would be expected. It would be a sad day for extension if the reliability of the services provided is a function of the price paid.

It is also evident (Table 16, Appendix 2) that advice purchased will not be blindly adopted or adhered to without the recipient going through some process of evaluating it in the light of information from other sources, user goals and needs. Fees for service is not likely to turn purchasers of information or advice into passive receivers, thereby degenerating extension to a "doing-to" rather than a "doing-with" process.

Although most respondents have not changed their expectations of advisory officers with the introduction of fees for service, the third who have changed did raise some very valid points worthy of discussion. In the majority of instances it is impossible to give the fool proof advice expected by some respondents because of the many variables (weather, pests, diseases, timing) beyond control of the advisor and client that can influence the outcome of advice. Advisors will be reluctant to give opinions or pass on general district information if there is a real fear of legal action. Thus, clients only will be provided with standard, thoroughly tested recommendations, rather than suggestions that may work or be useful. In effect, the extension process as discussed previously will be hampered.

It is probably not unreasonable to expect prompt, efficient service from a paid advisor. Organisations may have to decide whether paying clients have priority over non-paying ones and intra-organisation duties. White and Wilkinson (1981) suggest that one of the advantages of paying for the facilitation of information is that quick delivery is assured. Similar sentiments are expressed by Garvin (1979) who claims
the success of information brokers can be attributed to their ability to provide a punctual, efficient service.

Freedom of clients to choose the particular personality they wish to employ could introduce great inefficiencies into a service organisation. Some popular advisors who have served in several districts could soon find themselves with a state wide clientele, resulting in inflated travelling expenses and less effective work time.

Young graduates are the advisors of tomorrow and, unless given a chance to gain experience, will never reach the desired level of competence. New recruits could gain the necessary experience either by not charging for their services or by ensuring they operate with an experienced officer. The latter means of training is normally the accepted practice.

The majority of farmers stated they would prefer to employ advisors on a casual basis rather than by some more binding arrangement. According to Patterson (1978), private consultants are commonly employed on a retainer basis which entitles the employer to an agreed set of services each year. Patterson suggests that some farmers, in an effort to curtail management costs, prefer to employ consultants by contract to carry out specific functions as they arise. Traditionally, farmers have consulted advisory officers on an unpredictable, casual basis. Hence, fees for service is not expected to effect dramatically the manner in which advisors plan their work.

The name "management package" may have been a poor choice in light of the confusion of many respondents about the type of services offered by them. More explicit names such as pasture advisory package rather than pasture management package may be more apt.

Most clients under a system of fees for service require a written report of interactions with advisors, mainly for future reference. In
the short term such a preference may be more expensive for the client and create more work for advisors. In the long term, when similar situations arise, clients will benefit from the reference material accumulated, and advisors' time will not be taken up with provision of repetitive information. Anderson (1979) lists a number of rules for advisors giving information to farmers, but none mention providing the information in a form that can serve as a future reference.

The other reason given for requiring a written report was to provide a record of the proceedings and recommendations in the event of litigation at some later date. The prospect of facing legal action may make advisors less effective as intermediaries in the information transfer network between farmers. They may be reluctant to pass on information unless it has been thoroughly substantiated within the local district. Alternatively, clients intending to purchase information or advice could be asked to indemnify advisors against the possibility that their purchases do not give the predicted outcome. It would be a sad day for the extension process and fellow man if such safeguards became routine.

Despite fees for service, farmers generally consider Department of Agriculture advisors to be important in the farming community. The results indicate that farmers who have employed an advisor rate them higher than than those who have not. This agrees with the results reported by Patterson (1978) who found those farmers who use a private consultant perceive the consultants' role to be more important than is perceived by those farmers not employing them. It is interesting to note that 70% of those farmers who traditionally have not been clients of advisory officers, also consider such advisors to be important. A possible explanation for this is that Department of Agriculture advisors may have more indirect effect on non-users than do private consultants.
We urgently need data to verify this hypothesis as there is a lack of quantitative evaluative information on agricultural extension in Australia.

Tasmanian farmers clearly would prefer to employ a Department of Agriculture advisor rather than a private consultant. It is therefore not surprising that these farmers are quite definite in their belief that the Department of Agriculture should compete with private enterprise in providing advisory services. Such results might be expected because of the spasmodic history of private consultants operating in Tasmania. Consequently, the Department of Agriculture has offered more than generalised services, particularly in the areas of farm financial and business management, which are considered to be the realm of private enterprise in other states (Schapper 1971).

These results support the premise that farmers generally are happy with Department of Agriculture advisors having a joint role—classical extension (free) and part consultant (for fee). Obviously such a combination is advantageous as both roles complement each other by ensuring the officer has the widest possible knowledge pool, and is as sensitive as possible to the dynamic situation of the farmer. Such an arrangement is in agreement with recommendations made in the Balderstone Report (1982) and by Shelley (1967) that private consultants and extension services should try to complement each other more.

Respondents, irrespective of group, favoured the Department of Agriculture advertising the services it has for sale. Salmon (1981) posed the question "How can we motivate farmers (or change their attitudes) in relation to their management practices?" Advertising the general services available from the Department of Agriculture may be a means of motivating or creating an awareness by individual farmers.
Creating awareness is the main reason given by respondents in favour of the Department of Agriculture advertising its services.

Advertising in conjunction with fees for service may be another means available for clients to keep the Department of Agriculture within their knowledge pool without it costing them anything (directly), unless they decide to take advantage of any of the services.

Fees for service is not needed as an excuse to advertise if it is a useful means of creating awareness. There should be no hesitation to advertise if it is a way of overcoming any distancing effect that fees may have on clients and advisors.

As pointed out earlier in the thesis, this study is an introductory one as far as fees for extension services is concerned. Until recently there has not been a population available for study operating under a system of fees for service.

Fees for service has been operating in Tasmania for only two years, thus future studies are needed to provide data on the long-term effects. Information is needed in relation to both the farmer clients and the advisory service to give a more complete picture of the effects of fees for service on the whole extension process.
APPENDIX 1

Introductory Letter and Survey Questionnaires

Note:

The Questionnaires presented in this section have been abbreviated in the interests of economy.

Space for recording answers and pre-coded answers have been eliminated, but the questions are presented in the same order and with the same wording as when they were asked of respondents.
You may be aware that the Tasmanian Department of Agriculture now charges fees for some of the services provided by its advisory officers.

Mr. Robin Thompson of the Agricultural Extension Research Unit of this University is conducting a survey of Tasmanian farmers, some of whom have been users of the Department services. His survey will be concentrated in two of the main agricultural districts of the state.

Your name has been 'pulled out of the hat' at random from the list of primary producers in one of these districts.

I would be extremely grateful if you could spare about an hour one day in the next couple of weeks for Mr. Thompson to visit you and discuss your views on advisory services. He will telephone you several days before to set a time that is mutually satisfactory.

The views you express will be treated as strictly confidential to Mr. Thompson and our Research Unit. They will not be made available to government or to any other group or individual other than in the form of a research report in which general findings are presented.

We look forward to your participation in this important project.

Yours faithfully,

H.S. Hawkins,
Senior Lecturer in Agricultural Extension
UNIVERSITY OF MELBOURNE

SCHOOL OF AGRICULTURE AND FORESTRY

AGRICULTURAL EXTENSION SECTION

Fees for service study - Questions to farmers who have purchased services from the Department of Agriculture. Group 1

Confidential

NAME:______________________________________________________________

ADDRESS:________________________________________________________

TELEPHONE:______________

TIME:_______                  DATE:_______

DIRECTIONS:____________________________________________________________________

INTERVIEWER

COMMENTS:_____________________________________________________________________
1. How many hectares or acres do you manage?

2. How many years have you been a farmer?

3. Have you always farmed in this district?

4. If no to Question 3
   How many years have you farmed in this district?

5. What do you produce on your farm?

6. If more than one enterprise
   Which of the products you just mentioned brings in the most money each year?

7. From where and whom do you get information about (name enterprise just mentioned)?

8. Which of these sources do you find to be most useful as a provider of information about (quote relevant enterprise)?

9. Since the introduction of fees for service have you paid for any services provided by the Department of Agriculture?
   If no use Questionnaire for Group 11 farmers starting at Question 10.

10. If yes to Question 9
    What services have you purchased?

11. Since the introduction of fees for service have you used any of the services provided by the Department of Agriculture for which a fee is NOT required?

12. If yes to Question 11
    Which services have you used?

13. If a fee was required for these services, which ones would you be prepared to pay for?
14. Prior to fees for service, how many times per year did you consult Department of Agriculture advisory officers?

15. Since the introduction of fees for service has your frequency of consulting Department of Agriculture advisory officers changed?

16. **If no to Question 15**

   Why?

   **If no to Question 15 ask Question 22**

17. **If yes to Question 15**

   Has your frequency of consultation increased or decreased?

18. **If increased**

   Why has your frequency of consulting Department of Agriculture Advisory officers increased since the introduction of fees for service?

19. **If decreased**

   Why has your frequency of consulting Department of Agriculture Advisory officers decreased since the introduction of fees for service?

20. **If decreased**

   Since fees for service have you consulted any other source of information and advice more frequently than the Department of Agriculture?

21. **If yes to Question 20.**

   Which sources are you now consulting more frequently?

22. Prior to the introduction of fees for service what circumstances or situations induced you to contact a Department of Agriculture advisory officer?

23. Since the introduction of fees for service have the circumstances or situations which would induce you to contact a Department of Agriculture advisory officer changed?
24. **If yes to Question 23**

   In what way have they changed?

25. What is your opinion of people with both practical experience and academic training in a subject area where you feel a need for information or advice?

26. Would you seek information or advice from such a person?

27. Given you are in need of a particular service, would you prefer to pay an advisory officer from the Department of Agriculture or a private consultant?

28. Why do you have this preference?

29. When you employ an advisor are you satisfied with a spoken report or do you want to receive a written or printed report for your money?

30. Why do you prefer a (quote type of report) report?

31. In your opinion should farmers be charged for any of the services presently provided by Department of Agriculture Advisory officers?

32. Why should/should not farmers be charged?

33. **If yes to Question 31**

   Which services do you think should be charged for?

34. Are there any services presently not provided by the Department of Agriculture that you think should be made available?

35. **If yes to Question 34**

   What are they?

36. **If yes to Question 34**

   Which if any, of these suggested services do you think should be charged for?

37. What are your expectations of any publication for which you are required to pay?
38. Did you collect any publications produced by the Department of Agriculture when they were available free?

39. Have you purchased any publications produced by the Department of Agriculture?

If no, ask Question 45, if yes ask Question 40

40. Which ones?

41. Do you think the information provided in the publications which you purchased needs to be changed in any way?

42. What changes do you think should be made?

43. Given that most Department of Agriculture publications are now charged for what do you think of the standard of presentation of these publications?

44. If criticisms in Question 43

How do you think they could be improved?

45. Do you receive a copy of an agricultural newsletter produced by the Department of Agriculture?

46. Would you be prepared to pay for a newsletter type publication?

47. Now that fees for service have been introduced by which of the following methods would you prefer to employ a Department of Agriculture advisory officer?

___ On a contract basis where a set number of visits and services are provided each year for a set price.

___ On demand as the need arises.

___ As part of a management package.

___ Other (specify)

48. Why would you prefer this method?

49. Have you heard of the various farm management packages being offered by the Department of Agriculture?

If no to Question 49, ask Question 55. If yes ask Question 50.
50. Where did you hear about them?
51. Have you bought any of the management packages?
52. **If no to Question 51.**
   
   Why haven't you bought any of the management packages?
53. **If yes to Question 51.**
   
   How do you think receiving information and services from advisory officers via information packages compares to the way you received information and services prior to their introduction?
54. Will you continue to buy information packages?
55. How did you consult advisory officers of the Department of Agriculture prior to fees for service?
56. Has the introduction of fees for service changed the way by which you would contact an Advisory officer?
   
   **If yes to Question 55 ask 57, if no ask 60**
57. How would you now contact the officer?
58. Do you think this new way of contacting Department of Agriculture Advisory officers will affect the way your requirements will be met?
59. Why?
60. When all services provided by Department of Agriculture Advisory officers were free, what action did you take upon receiving them?
61. Using this scale, how do you rate Department of Agriculture advisory officers in the farming community?

```
1  2  3  4  5
          __________:________:________:________:

VERY IMPORTANT  NEUTRAL  NOT VERY  OF NO IMPORTANCE
IMPORANT
```
62. Why do you think Department of Agriculture Advisory officers are (level of importance) in the farming community?

63. Now that you are required to pay for some types of information provided by Department of Agriculture advisors, do you expect any technical information you give the officer to be kept in confidence by him?

If no to Question 63 ask Question 66

64. What type of information would you want him to keep in confidence?

65. Why would you want this information kept in confidence?

66. Prior to fees for service did you usually attend activities such as field days and discussion groups organised by the Department of Agriculture?

67. Department of Agriculture Advisory officer involvement with farmer group activities is free of charge. Do you see this affecting your involvement with such groups?

68. If yes to Question 67

How?

69. Have your expectations of Department of Agriculture advisors, the services and information they provide changed since the introduction of fees for service?

70. If yes to Question 69.

In what ways have your expectations changed?

71. Would you place greater reliance on information or service for which a fee was paid than if it was received without cost?

72. Why?

73. Has paying for information and advice from the Department of Agriculture affected your willingness to follow the advice?

If yes to Question 73 ask 74, if no ask 76.

74. Has it increased ____ or decreased ____?
75. Why?

76. Has the requirement to pay for information received from Department of Agriculture advisory officers affected your willingness to pass on information to these officers?

If yes to Question 76 ask 77, if no ask 79.

77. Has it increased or decreased your willingness to pass on information to advisory officers?

78. Why are you now less/more willing to pass information on to Department of Agriculture advisory officers?

79. Have you always been willing to pass on information to Department of Agriculture advisory officers?

80. If no to Question 79

Why not?

81. Do you think the Department of Agriculture should compete with private enterprise in providing advisory services to farmers?

82. Why do you think the Department of Agriculture should/shouldn't compete with private enterprise in providing advisory services to farmers?

83. Do you think the Department of Agriculture should advertise, like a commercial firm, the services it has available for sale?

84. Why do you think it SHOULD/SHOULDN'T advertise?

85. What is your opinion of experts in agriculture?

Just to finish off I'd like to ask you a few questions of a more personal nature.

86. Why are you farming?
87. Here are some answers to this question from a study done in Victoria.

Would you separate out the ones important to you?
Would you now place the ones important to you in their order of importance?

<table>
<thead>
<tr>
<th>Important</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence, freedom to do as I want</td>
<td></td>
</tr>
<tr>
<td>Personal satisfaction, from being able to do a job well</td>
<td></td>
</tr>
<tr>
<td>More money to do the things I want</td>
<td></td>
</tr>
<tr>
<td>To hold the position I want in the community</td>
<td></td>
</tr>
</tbody>
</table>

88. How old are you?

89. At what level did you finish your formal education?

90. Have you completed any courses in agriculture or a related field since leaving school?

91. If yes to Question 90
Which courses?

92. Would you indicate which of these ranges best approximates your average annual gross receipts from farming?

1. $20,000 or less
2. $21,000 to $30,000
3. $31,000 to $40,000
4. $41,000 to $50,000
5. $51,000 to $60,000
6. $61,000 to $70,000
7. $71,000 to $80,000
8. $81,000 to $90,000
9. $91,000 to $100,000
10. $101,000 to $200,000
11. $201,000 to $300,000
12. $301,000 to $400,000
13. $401,000 to $500,000
14. $501,000 or greater
Fees for Service Study - Questions to farmers who, prior to fees for service used Department of Agriculture services, but have not yet purchased any services - Group 11

CONFIDENTIAL

NAME: ________________________________________________

ADDRESS: ________________________________________________

______________________________________________________

TELEPHONE: ______________

TIME: ______________ DATE: ______________

DIRECTIONS: ____________________________________________

______________________________________________________

INTERVIEWER COMMENTS: __________________________________
1. How many hectares or acres do you manage?

2. How many years have you been a farmer?

3. Have you always farmed in this district?

4. **If no, to Question 3**
   How many years have you farmed in this district?

5. What do you produce on your farm?

6. **If more than one enterprise**
   Which of the products you just mentioned brings in the most money each year?

7. From where and whom do you get information about (name enterprise just mentioned)?

8. Which of these sources do you find to be most useful as a provider of information about (quote relevant enterprise)?

9. Since the introduction of fees for service have you paid for any services provided by the Department of Agriculture?
   **If yes to Question 9 use Questions for Group 1 farmers starting at Question 10.**

10. Since the introduction of fees for service have you used any of the services provided by the Department of Agriculture for which a fee is NOT required?

11. **If yes, to Question 10**
    Which services have you used?

12. If a fee was required for these services which ones would you be prepared to pay for?
13. Prior to fees for service, how many times per year did you consult Department of Agriculture advisory officers?

14. Since the introduction of fees for service has your frequency of consulting Department of Agriculture Advisory officers changed?

If no to Question 14 ask 15, if yes ask Question 16

15. Why?

16. Has your frequency of consultation increased or decreased?

17. Why has your frequency of consulting Department of Agriculture Advisory officers INCREASED/DECREASED since the introduction of fees for service?

18. If DECREASED

Since fees for service have you consulted any other source of information and advice more frequently than the Department of Agriculture?

19. If yes to Question 18

Which sources are you now consulting more frequently?

20. Prior to the introduction of fees for service what circumstances or situations induced you to contact a Department of Agriculture advisory officer?

21. Since the introduction of fees for service have the circumstances or situations which would induce you to contact a Department of Agriculture advisory officer changed?

22. If yes, to Question 21

In what way have they changed?

23. What is your opinion of people with both practical experience and academic training in a subject area where feel a need for information or advice?

24. Would you seek information or advice from such a person?
25. Given you are in need of a particular service, would you prefer to pay an advisory officer from the Department of Agriculture or a private consultant?

26. Why do you have this preference?

27. If you employed an advisor would you be satisfied with a spoken report or would you want to receive a written or printed report for your money?

28. Why would you prefer a (quote type of report) report?

29. In your opinion should farmers be charged for any of the services presently provided by Department of Agriculture advisory officers?

30. Why SHOULD/SHOULD NOT farmers be charged?

31. If yes, to Question 29
   Which services do you think should be charged for?

32. Are there any services presently not provided by the Department of Agriculture that you think should be made available?

   If no to Question 32 ask Question 35

33. What are they?

34. Which, if any of these suggested services do you think should be charged for?

35. What are your expectations of any publication for which you are required to pay?

36. Did you collect any publications produced by the Department of Agriculture when they were available free?

37. Have you purchased any publications produced by the Department of Agriculture?

   IF YES TO QUESTION 37 ASK QUESTION 38, IF NO ASK QUESTION 43

38. Which ones have you purchased?

39. Do you think the information provided in the publications which you purchased needs to be changed in any way?
40. If yes to Question 39
   What changes do you think should be made?

41. Given that most Department of Agriculture publications are now
    charged for what do you think of the standard of presentation of
    these publications?

42. If criticisms in Question 41
   How do you think they could be improved?

43. Do you receive a copy of an Agricultural Newsletter produced by the
    Department of Agriculture?

44. Would you be prepared to pay for a Newsletter type publication?

45. Now that fees for service have been introduced, by which of the
    following methods would you prefer to employ a Department of
    Agriculture advisory officer?

    _____ On a contract basis where a set number of visits and services
         are provided each year for a set price.

    _____ On demand as the need arises.

    _____ Part of a management package.

    _____ Other (specify)

46. Why would you prefer this method?

47. Have you heard of the various Farm Management packages being offered
    by the Department of Agriculture?

    If no to Question 47 ask Question 53

48. Where did you hear about them?

49. Have you considered buying any?

50. If yes, to Question 49
    Which ones have you considered buying?

51. Why HAVE/HAVE'N'T you considered buying any management packages?

52. What type of Management Packages would you like to have available?
53. How did you consult Advisory officers of the Department of Agriculture prior to fees for service?

54. Has the introduction of fees for service changed the way in which you would contact an Advisory officer?

If no ask Question 58

55. How would you now contact the Officer?

56. Do you think this new way of contacting Department of Agriculture advisory officers will affect the way your requirements will be met?

57. Why?

58. When all services provided by Department of Agriculture advisory officers were free, what action did you take upon receiving them?

59. Using this scale, how do you rate Department of Agriculture advisory officers in the farming community?

\[
\begin{array}{ccccc}
1 & 2 & 3 & 4 & 5 \\
\hline
1 & 2 & 3 & 4 & 5 \\
\end{array}
\]

VERY IMPORTANT NEUTRAL NOT VERY IMPORTANT OF NO

IMPORTANT IMPORTANT IMPORTANT

60. Why do you think Department of Agriculture advisory officers are (level of importance) in the farming community?

61. Now that you are required to pay for some types of information provided by Department of Agriculture advisors, do you expect any technical information you give the officer to be kept in confidence by him?

If no, ask Question 64

62. If yes to Question 61

What type of information would you want kept in confidence by him?

63. Why would you want this information kept in confidence?
64. Prior to fees for service did you usually attend activities such as field days and discussion groups organised by the Department of Agriculture?

65. Department of Agriculture advisory officer involvement with farmer group activities is free of charge. Do you see this affecting your involvement with such groups?

66. If yes to Question 65

How?

67. Have your expectations of Department of Agriculture advisors, the services and information they provide changed since the introduction of fees for service?

68. If yes, to Question 67

In what ways have your expectations changed?

69. Would you place greater reliance on information or service for which a fee was paid than if it was received without cost?

70. Why?

71. Has the requirement to pay for information received from Department of Agriculture advisory officers, affected your willingness to pass on information to these officers?

If yes, ask Question 72, if no ask Question 74

72. Would you see it increasing or decreasing your willingness to pass on information to Advisory officers?

73. If DECREASED willingness

Why would you be less willing to pass information on to advisory officers?

74. Prior to fees for service did you willingly pass on information to Department of Agriculture advisory officers?

75. If no to Question 74

Why not?
76. Do you think the Department of Agriculture should compete with private enterprise in providing advisory services to farmers?

77. Why do you think the Department of Agriculture should/shouldn't compete with private enterprise in providing advisory services to farmers?

78. Do you think the Department of Agriculture should advertise like a commercial firm the services it has available for sale?

79. Why?

80. What is your opinion of experts in Agriculture?

Just to finish off, I'd like to ask you a few questions of a more personal nature.

81. Why are you farming?

82. Here are some answers to this question from a study done in Victoria.

Would you separate out the ones important to you?

Would you now place the ones important to you in their order of importance?

<table>
<thead>
<tr>
<th>Important</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence, freedom to do as I want</td>
<td></td>
</tr>
<tr>
<td>Personal satisfaction from being able to do a job well</td>
<td></td>
</tr>
<tr>
<td>More money to do the things I want</td>
<td></td>
</tr>
<tr>
<td>To hold the position I want in the community</td>
<td></td>
</tr>
</tbody>
</table>

83. How old are you?

84. At what level did you finish your formal education?
85. Have you completed any courses in Agriculture or a related field since leaving school?

86. If yes to Question 85

Which courses?

87. Would you indicate which of these ranges best approximates your average annual gross receipts from farming?

<table>
<thead>
<tr>
<th>Range</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. $20 000 or less</td>
<td>10. $101 000 to $200 000</td>
</tr>
<tr>
<td>2. $21 000 to $30 000</td>
<td>11. $201 000 to $300 000</td>
</tr>
<tr>
<td>3. $31 000 to $40 000</td>
<td>12. $301 000 to $400 000</td>
</tr>
<tr>
<td>4. $41 000 to $50 000</td>
<td>13. $401 000 to $500 000</td>
</tr>
<tr>
<td>5. $51 000 to $60 000</td>
<td>14. $501 000 or greater</td>
</tr>
<tr>
<td>6. $61 000 to $70 000</td>
<td></td>
</tr>
<tr>
<td>7. $71 000 to $80 000</td>
<td></td>
</tr>
<tr>
<td>8. $81 000 to $90 000</td>
<td></td>
</tr>
<tr>
<td>9. $91 000 to $100 000</td>
<td></td>
</tr>
</tbody>
</table>
Fees for Service Study - Questions to farmers who have rarely used Department of Agriculture Advisory Services - Group 111

CONFIDENTIAL

NAME:__________________________________________

ADDRESS:_______________________________________

_________________________________________________

TELEPHONE:__________________

DATE:_________ TIME:_________

DIRECTIONS:_____________________________________

_________________________________________________

_________________________________________________

INTERVIEWER

COMMENTS:_____________________________________
1. How many hectares or acres do you manage?
2. How many years have you been a farmer?
3. Have you always farmed in this district?
4. If no, to Question 3
   How many years have you farmed in this district?
5. What do you produce on your farm?
6. If more than one enterprise
   Which of the products you just mentioned brings in the most money?
7. From where and whom do you get information about (name enterprise just mentioned)?
8. Which of these sources do you find to be most useful as a provider of information about (quote relevant enterprise)?
9. Have you ever used any of the services offered by Department of Agriculture Advisory officers?
10. If yes to Question 9
    Which services have you used?
11. If no to Question 9
    Do you have a reason for not using them?
12. If yes to Question 11
    What is your reason for not using them?
13. If yes to Question 9
    Prior to fees for service, how many times per year did you consult Department of Agriculture advisory officers?
14. If yes to Question 9
    Since the introduction of fees for service have you paid for any services provided by the Department of Agriculture?
15. If yes to Question 14
    What services have you purchased?
If greater than one visit/year use Questions for Group 11 farmers.
If has purchased a service use Questions for Group 1 farmers.

16. Given fees for service, do you intend to make use of Department of Agriculture advisory officers and the services they provide?

17. Why?

18. What services do you know to be available from Department of Agriculture Advisory officers?

19. In your opinion should farmers be charged for any of the services presently provided by Department of Agriculture advisory officers?

20. Why should/should not farmers be charged?

21. If yes to Question 19

Which services do you think should be charged for?

22. Are there any services presently not provided by the Department of Agriculture that you think should be made available?

23. If yes to Question 22

What are they?

24. If yes to Question 22

Which if any, of these services do you think should be charged for?

25. What are your expectations of any publication for which you are required to pay?

26. Did you collect any publications produced by the Department of Agriculture when they were available free?

27. Have you purchased any publications produced by the Department of Agriculture?

If No to Question 27 ask Question 32, if yes ask 28.

28. Do you think the information provided in the publications which you purchased needs to be changed in any way?

29. If, yes to Question 28

What changes do you think should be made?
30. **If, yes to 27**

Given that most Department of Agriculture publications are now charged for what do you think of the standard of presentation of these publications?

31. **If criticises in Question 30**

How do you think they could be improved?

32. Do you receive a copy of an Agricultural Newsletter produced by the Department of Agriculture?

33. Would you be prepared to pay for a newsletter type publication?

34. What is your opinion of people with both practical experience and academic training in a subject area where you feel a need for information or advice?

35. Would you seek information or advice from such a person?

36. Using this scale, how do you rate Department of Agriculture advisory officers in the farming community?

```
  1  2  3  4  5
```

:__________________________:________________________:________________________:

VERY IMPORTANT NEUTRAL NOT VERY IMPORTANT OF NO IMPORTANT IMPORTANCE

37. Why do you think Department of Agriculture Advisory officers are (level of importance) in the farming?

38. Prior to fees for service did you usually attend activities such as field days and discussion groups organised by the Department of Agriculture?

39. Department of Agriculture Advisory officer involvement with farmer group activities is free of charge. Do you see this affecting your involvement with such groups?
40. If yes, to Question 39

How?

41. Have your expectations of Department of Agriculture advisors, the services and information they provide changed since the introduction of fees for service?

42. If yes to Question 41

In what ways have your expectations changed?

43. Would you place greater reliance on information or service for which a fee was paid than if it was received without cost?

44. Why?

45. Do you think the Department of Agriculture should compete with private enterprise in providing advisory services to farmers?

46. Do you think the Department of Agriculture should advertise, like a commercial firm, the services it has available for sale?

47. Why do you think the Department of Agriculture should advertise?

48. What is your opinion of experts in agriculture?

Just to finish off, I'd like to ask you a few Questions of a more personal nature

49. Why are you farming?
50. Here are some answers to this question from a study done in Victoria.

Would you separate out the ones important to you?
Would you now place the ones important to you in their order of importance?

<table>
<thead>
<tr>
<th>Importance</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence, freedom to do as I want</td>
<td></td>
</tr>
<tr>
<td>Personal satisfaction from being able to do a job well</td>
<td></td>
</tr>
<tr>
<td>More money to do the things I want</td>
<td></td>
</tr>
<tr>
<td>To hold the position I want in the community</td>
<td></td>
</tr>
</tbody>
</table>

51. How old are you?

52. At what level did you finish your formal education?

53. Have you completed any courses in Agriculture or a related field since leaving school?

54. If yes, to Question 51

Which courses?

55. Would you indicate which of these ranges best approximates your average annual gross receipts from farming.

1. $20,000 or less
2. $21,000 to $30,000
3. $31,000 to $40,000
4. $41,000 to $50,000
5. $51,000 to $60,000
6. $61,000 to $70,000
7. $71,000 to $80,000
8. $81,000 to $90,000
9. $91,000 to $100,000
10. $101,000 to $200,000
11. $201,000 to $300,000
12. $301,000 to $400,000
13. $401,000 to $500,000
14. $501,000 or greater
Appendix 2

Additional Results and Supporting Data

Table 1

Reasons for Non-Users Not Using Department of Agriculture Advisory Services

<table>
<thead>
<tr>
<th>Reason</th>
<th>% Cases (n=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Need</td>
<td>21.1</td>
</tr>
<tr>
<td>Independent</td>
<td>42.1</td>
</tr>
<tr>
<td>Not Practical Enough</td>
<td>21.1</td>
</tr>
<tr>
<td>Other</td>
<td>15.8</td>
</tr>
</tbody>
</table>

* The remaining members of this group did not have a reason
Table 2
Total Rural Holdings and Advisory Officer Client Properties By Size

<table>
<thead>
<tr>
<th>Property Size (ha)</th>
<th>% Total Rural Holdings</th>
<th>% Advisory Officer Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 50</td>
<td>25.2</td>
<td>25.8</td>
</tr>
<tr>
<td>51 - 100</td>
<td>25.5</td>
<td>29.1</td>
</tr>
<tr>
<td>101 - 150</td>
<td>14.6</td>
<td>9.5</td>
</tr>
<tr>
<td>151 - 200</td>
<td>5.4</td>
<td>8.4</td>
</tr>
<tr>
<td>201 - 299</td>
<td>7.8</td>
<td>4.6</td>
</tr>
<tr>
<td>300 - 399</td>
<td>4.1</td>
<td>3.1</td>
</tr>
<tr>
<td>400 - 599</td>
<td>4.0</td>
<td>5.8</td>
</tr>
<tr>
<td>600 - 799</td>
<td>2.9</td>
<td>3.0</td>
</tr>
<tr>
<td>800 - 999</td>
<td>1.2</td>
<td>1.5</td>
</tr>
<tr>
<td>1000 - 2000</td>
<td>6.1</td>
<td>5.3</td>
</tr>
<tr>
<td>&gt; 2000</td>
<td>3.2</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Note: 1. This table was derived from records of the Commonwealth Bureau of Census and Statistics and from records of Tasmanian Department of Agriculture advisory officers for the period 1-10-81 to 30-9-82. This corresponds to the twelve month period preceding the introduction of fees for service.

2. Properties classified as sub-commercial or unused by the Bureau of Census and Statistics or as hobby or home garden by advisors were not included in the calculations.

3. Department of Agriculture clients were only included if their contact with an advisor involved a property visit.
Table 3
Farmer Group and Area of Property Managed

<table>
<thead>
<tr>
<th>Group</th>
<th>1 - 50</th>
<th>51 - 150</th>
<th>151 - 800</th>
<th>&gt;800</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>12</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>11</td>
<td>6</td>
<td>10</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>111</td>
<td>6</td>
<td>14</td>
<td>13</td>
<td>15</td>
</tr>
</tbody>
</table>

$\chi^2 = 8.56$  D.F. = 6  P > 0.20

Table 4
Farmer Group and Farmer Experience

<table>
<thead>
<tr>
<th>Years</th>
<th>1 - 5</th>
<th>&gt;5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years Farming</td>
<td>4</td>
<td>36</td>
</tr>
</tbody>
</table>

Group 1

| Years in District | 3    | 37 |
| Years Farming    | 3    | 37 |

Group 11

| Years in District | 5    | 35 |
| Years Farming    | 2    | 36 |

Group 111

| Years in District | 1    | 37 |

$\chi^2$ (years farming) = 0.62  D.F. = 2  P > 0.70

$\chi^2$ (years in district) = 2.70  D.F. = 2  P > 0.70
Table 5

Farmer Group and Main Farm Enterprise

<table>
<thead>
<tr>
<th>Group</th>
<th>Intensive</th>
<th>Extensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13</td>
<td>27</td>
</tr>
<tr>
<td>11</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>111</td>
<td>13</td>
<td>25</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 2.27 \text{ D.F. } = 2 \text{ P >0.32} \]

Note: Extensive includes Beef, Sheep and Cereal enterprises;
Intensive includes Dairying, Pigs, Horticulture, Fruit and Mixed enterprises.

Table 6

Total Rural Holdings and Advisory Officer Client Properties By Main Enterprise

<table>
<thead>
<tr>
<th>Enterprise</th>
<th>% Total Rural Holdings</th>
<th>% Advisory Officer Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensive</td>
<td>29.3</td>
<td>44.0</td>
</tr>
<tr>
<td>Intensive</td>
<td>70.7</td>
<td>56.0</td>
</tr>
</tbody>
</table>

Note: This Table was derived in a similar manner to Table 2.
Table 7

Information Sources of Advisory Officer Clients BY Main Farm Enterprise

% Cases*

<table>
<thead>
<tr>
<th>Information Source</th>
<th>Intensive (n=32)</th>
<th>Extensive (n=48)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papers and Magazines</td>
<td>81.3</td>
<td>79.2</td>
</tr>
<tr>
<td>D of A Publications</td>
<td>31.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Other Farmers</td>
<td>84.4</td>
<td>131.3</td>
</tr>
<tr>
<td>Private Consultants</td>
<td>3.1</td>
<td>12.5</td>
</tr>
<tr>
<td>Meetings</td>
<td>50.0</td>
<td>22.9</td>
</tr>
<tr>
<td>Self</td>
<td>75.0</td>
<td>131.3</td>
</tr>
<tr>
<td>Industry Field Staff</td>
<td>31.3</td>
<td>12.5</td>
</tr>
<tr>
<td>D of A Advisors</td>
<td>103.1</td>
<td>122.9</td>
</tr>
<tr>
<td>Agents</td>
<td>21.9</td>
<td>56.3</td>
</tr>
<tr>
<td>Radio and Television</td>
<td>3.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Contractors</td>
<td>3.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Vets</td>
<td>6.3</td>
<td></td>
</tr>
<tr>
<td>Other States and Overseas</td>
<td>3.1</td>
<td></td>
</tr>
</tbody>
</table>

* Multiple Response, Column Totals ≠ 100%
<table>
<thead>
<tr>
<th>Information Source</th>
<th>Intensive (n=32)</th>
<th>Extensive (n=48)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papers and Magazines</td>
<td>6.3</td>
<td>14.6</td>
</tr>
<tr>
<td>D of A Publications</td>
<td></td>
<td>2.1</td>
</tr>
<tr>
<td>Other Farmers</td>
<td>25.0</td>
<td>58.3</td>
</tr>
<tr>
<td>Private Consultants</td>
<td>3.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Self</td>
<td>37.5</td>
<td>47.9</td>
</tr>
<tr>
<td>Industry Field Staff</td>
<td>12.5</td>
<td>6.3</td>
</tr>
<tr>
<td>D of A Advisors</td>
<td>59.4</td>
<td>39.6</td>
</tr>
<tr>
<td>Agents</td>
<td>6.3</td>
<td>29.2</td>
</tr>
<tr>
<td>Sheep and Wool Classer</td>
<td></td>
<td>8.3</td>
</tr>
<tr>
<td>Contractors</td>
<td></td>
<td>2.1</td>
</tr>
<tr>
<td>Other States and Overseas</td>
<td></td>
<td>2.1</td>
</tr>
<tr>
<td>Meetings</td>
<td>18.8</td>
<td></td>
</tr>
</tbody>
</table>

* Multiple Response, Column Totals ≠ 100%
### Table 9

**Area of Property Managed and Gross Receipts from Farming**

<table>
<thead>
<tr>
<th>Gross Receipts ($000's)</th>
<th>&lt;20</th>
<th>21 - 40</th>
<th>41 - 70</th>
<th>71 - 100</th>
<th>&gt;100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area Managed (ha)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 50</td>
<td>12</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 - 150</td>
<td>6</td>
<td>20</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>151 - 800</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>&gt;800</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>33</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 110.80 \quad \text{D.F.} = 12 \quad P < 0.0001$

### Table 10

**Farmer Group and Gross Receipts from Farming**

<table>
<thead>
<tr>
<th>Gross Receipts ($000's)</th>
<th>&lt;20</th>
<th>21 - 40</th>
<th>41 - 70</th>
<th>71 - 100</th>
<th>&gt;100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Farmer Group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>11</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>111</td>
<td>9</td>
<td>10</td>
<td>6</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

$\chi^2 = 10.96 \quad \text{D.F.} = 8 \quad P > 0.20$
Table 11
Opinion on Fees for Service and Farmer Education Level

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should Pay?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>45</td>
<td>15</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>30</td>
<td>8</td>
</tr>
</tbody>
</table>

$\chi^2 = 2.59$  D.F. = 2  P > 0.27

Table 12
Farmer Group and Farmer Age

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>25-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-65</th>
<th>&gt;65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>17</td>
<td>10</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>5</td>
<td>14</td>
<td>9</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>111</td>
<td>2</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>6</td>
</tr>
</tbody>
</table>

$\chi^2 = 13.24$  D.F. = 8  P > 0.10

Table 13
Farmer Attitude to Fees for Service and Main Reason Why Farming

<table>
<thead>
<tr>
<th>Should Pay?</th>
<th>Independence</th>
<th>Satisfaction</th>
<th>Money</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>23</td>
<td>40</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>25</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

$\chi^2 = 1.63$  D.F. = 3  P > 0.65
Table 14
Farmer Group and Consulting Non Department of Agriculture Advisory Sources

<table>
<thead>
<tr>
<th>Group % Cases</th>
<th>1</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=29)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n=30)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Consulting Other Sources?

Yes                  51.7  57.1
No                   48.3  46.6

$\chi^2 = 0.02$  D.F. = 1  $P > 0.89$

Table 15
Purchasing Department of Agriculture Publications and Farmer Group

<table>
<thead>
<tr>
<th>Group % Cases</th>
<th>1</th>
<th>11</th>
<th>111</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n=40)</td>
<td>(n=40)</td>
<td>(n=38)</td>
<td></td>
</tr>
</tbody>
</table>

Purchased Publications?

Yes                  48.0  32.0  20.0
No                   30.1  34.4  35.5

$\chi^2 = 3.36$  D.F. = 2  $P > 0.18$
Table 16
Action Taken By Farmers on Receiving Free Advisory Services
\% Cases (n=80)

<table>
<thead>
<tr>
<th>Action</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always Used</td>
<td>38.8</td>
</tr>
<tr>
<td>Used Some</td>
<td>53.7</td>
</tr>
<tr>
<td>Used a Little</td>
<td>7.5</td>
</tr>
</tbody>
</table>
Appendix 3

References

Department of Extension, School of Management and Human Development, Hawkesbury Agricultural College, Richmond, N.S.W.

Department of Communication, School of Management, Hawkesbury Agricultural College, Richmond N.S.W.

Proceedings of the National Bureau of Economic Research, United States of America.


Working Group Report to the Minister for Primary Industry.


School of Agriculture and Forestry.

University of Melbourne.


*Farm Policy.* 3:17-21


*Research and Development Report* No. 5430


The Veterinary Record. 93:339-343

Blokker, K., Corten, F., Oomkes, F., Rolings, N. & Van Woerkum, K. 
1977. Basic Extension Strategies: Do To, Do For and Do With. In 
Agricultural University, Dept. of Extension Education, 
Hollandseweg 1, Wageningen, The Netherlands.

Boulding, K. E. 1971. The Economics of Knowledge and the Knowledge 
of Economics. Economics of Information and Knowledge. 

Broward, M. 1978. To Pay or Not to Pay. Lasie. 2(3):13-16

Drexel Library Quarterly. 17(2):99-107

Commonwealth Bureau of Census and Statistics. 1971. Classification 
of Rural Holdings by Size and Type of Activity 1968-69. 
Bulletin No. 6, Tasmania. 
Commonwealth Government Printer, Canberra.

Davenport, J. 1979. Information Entrepreneurs Stake Claims at LACUNY. 
Library Journal. 104:1199

Farm Policy. 3(2):37-41


Australian Extension Conference. CSIRO, Melbourne.


Unpublished M. Phil. Thesis. Murdoch University, Perth, Western Australia.


Australian Council for Education Research, Victoria.

Feltham, G. A. 1968. The Value of Information.

Accounting Review. 43:684


Cost-Effectiveness and Cost/Benefit Analysis in Information Science.

Report to OSTI on Project S1/97/03. OSTI Report No. 5206.
Sheed and Ward, London.

American Libraries. 4:335

Garfield, E. 1979. *Information Entrepreneurs Stake Claims at LACUNY.*
Library Journal. 104:1199

Garrow, G. 1978. *CSIRO and Scientific and Technical Information - To Charge or Not to Charge.* Lasie. 2(3):17-18

Garvin, A. 1979. *Information Entrepreneurs Stake Claims at LACUNY.*
Library Journal. 104:1200

Veterinary Economics. 23(3):27-31

Farm Policy. 17(2):44-52

Hartridge, F. J. 1967. *Extension of the Feed-Year Concept to Dairy Farmers on the Far North-West Coast of N.S.W.*

Harvey, D. 1964. *Rural Advisory Services.* Chiasma. 2:76-78

Lewis, D. A. 1980. Today's Challenge - Tomorrows' Choice: Charge or be Charged or the Domesday Scenario MK 2.
Journal of Information Science. 2(2):59-74


Farm Policy. 3(2):42-45


New Zealand Journal of Agriculture. 144(6):40-41
Journal of Australian Institute of Agricultural Science. 
29(4):229-235

McGowan, G. P. 1973. Do You Need a Farm Consultant? 
Australian Country Magazine. 35(5):10-11

Paper to Australian Extension Conference, Australian Institute of Agricultural Science, Victorian Branch and Farm Management Section.


Cooper Square Publishers, New York.

Revised by R. E. Weston, 1981, School of Agriculture and Forestry, University of Melbourne.
Patterson, R. A. 1978. *The Role of Agricultural Consultants in Rural Industry.* School of Agriculture and Forestry, University of Melbourne.


Schapper, H. P., Beal, C. I. A. and Roberts, J. A. 
Farm Management Clubs and Private Consultants. A 
Council of the Australian Institute of Agricultural 
Journal of the Australian Institute of Agricultural 
27(4):234-243

Schapper, H. P. 1971. Prospective Developments in Farm 
Farm Management. 7(2):47-51

Shelley, R. W. 1967. Inter-relationships of Farm Management Consultants 
and Government Extension Officers. 

Sloane, P. H. 1977. Progress or Survival? Eighteen Years of 
Agricultural Consulting. 
Paper presented to Australian Institute Agricultural Science, 
N.S.W. Branch Meeting.

Strigler, G. J. 1961. The Economics of Information. 
Journal of Political Economy. 69(3):213-225

American Society for Information Science Publication.

Tough, A. 1978. Major Learning Efforts: Recent Research and Future 
Directions. 
Adult Education. 28(4):250-263


Journal of Documentation. 32(2):123-125


Library Journal. 98:1449-1451


Aslib Proceedings. 32(2):82-86


Annual Review of Information Science and Technology.

American Society for Information Science, Publication.