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A Case Study Investigation Of Dairy Farm Discussion Groups

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A thesis presented in partial fulfilment of the requirement for the degree of Masters of Agricultural Science in Farm Management at Massey University.

1995
ABSTRACT

This study investigated issues relating the operation of dairy farm discussion groups by Consulting Officers (COs) of the Livestock Improvement Corporation (LIC). Understanding these issues is a precursor to a more complete evaluation of discussion groups as an extension activity. The perspectives of the CO leading the group, farmers attending the groups and farmers hosting the groups are gathered from two case-study discussion groups.

Discussion groups are shown to provide a unique source of practical information that is highly valued by the farmers. Farmers attended discussion groups to learn from the experiences of other farmers and to obtain practical farming ideas and solutions from the properties they visited. Many farmers also attended discussion groups to compare their current farming circumstances with those of other farmers in the group in order to identify strengths and weaknesses in their systems of management. The CO had an essential role as the facilitator of the discussion group and was required by farmers to distinguish between fact and farmer opinion. Socialising was seen as an important aspect of discussion groups as it encouraged the sharing and exchange of personal farming information in an environment that farmers trust.

The main issue arising from the host farmer section was the importance of communication between the host farmer and the CO prior to the discussion group meeting. Prior communication was essential to provide the group with some focus and direction during the day while ensuring the meeting had some relevance for the host farmer.

The CO section revealed the potential for the LIC to further investigate extension techniques that would lead to greater farmer participation during discussion group meeting, which would be beneficial to all parties.
Before changes are made to the existing structure and format of discussion groups a thorough understanding of their value and potential needs to be developed. This research project has helped to identify some of the potential issues that require further investigation.
ACKNOWLEDGMENTS

This thesis would not have been completed without the input and assistance of a large number of people.

Firstly the author wishes to acknowledge the assistance of Kate Mirams, Heather and Ewen Cameron, Joe Hughes and Warren Parker for their advice and suggestions during the initial stages of planning my investigation.

Thanks must go to Janet Reid and Dick Kuiper for their continued support, assistance and advice over the year.

Many thanks must go to the farmers who were interviewed and the discussion group members for their assistance and cooperation.

The author is extremely grateful to the CO and his wife who offered their friendship over the year and provided accommodation during her final stay in New Zealand. Many thanks goes especially to the CO who provided transport to the discussion group meetings and made himself available at any time for interviews and general information.

Acknowledgements go to Mr J.W.C. Stichbury for his invaluable assistance in piecing together the history of discussion groups.

Kathy Hamilton for her assistance in the presentation of the author’s thesis.

Marcia Stienezen was both friend and flatmate to whom the author is most grateful and indebted especially for Marcia’s assistance with some final domestic duties despite her own busy schedule. In addition the author would like to acknowledge Marcia for her advice and on the writing formalities associated with the construction the author’s thesis.
Kirsty Baird for her friendship, empathy, support and encouragement over the year.

The author's family and friends in Australia who have been largely neglected during her stay in New Zealand. Especially Michael Markham for his continuing support, patience, friendship and understanding during her long absence.

Finally, I wish to mention her main supervisor Mr Alan McRae for introducing me to a new method of research and thinking and providing the funding for my project. Alan is one of the few people who has successfully taught me how to think and work independently. His dedication to research and education are exemplary. Despite my initial frustrations and difficulties I have come to appreciate many of the lessons Alan has taught me. I wish to thank Alan for his input into this investigation and for his patience and encouragement over the year.
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CHAPTER ONE

INTRODUCTION

1.1 History Of The New Zealand Dairy Industry

Dairying in New Zealand first became established during the 1880s with small privately owned dairy factories (Nightingale 1992, Stichbury Pers. Comm. 1995). Production and expansion of the industry was hampered in the initial stages from technical problems and lack of facilities. In addition suspicion grew between factory owners and dairy farmers. Dairy experts believed that cooperatively owned dairies would remove the suspicion between producers and the factories, lift the quality standards of milk production and improve the organisation structure of the industry (Nightingale 1992). Once the cooperative dairy factories were established farmers found themselves at the mercy of overseas traders (Stichbury Pers. Comm. 1995). After the first world war the number of dairy cows doubled. The sudden expansion in the dairy sector was attributed to allocation of new farming land to returned serviceman, an improvement in farming techniques and the use of fertilisers. During the early 1920s the intensification of farming lead to a glut of primary produce in New Zealand's major export market, the United Kingdom, and subsequent lower returns for dairy produce (Nightingale 1992).

1.2 History Of The New Zealand Dairy Board

The lower returns received by dairy farmers lead to increasing pressure from producers to take control of all overseas marketing. As a result increasing pressure from producers the New Zealand Dairy Board was formally established in 1924, under an act of Parliament (Stichbury Pers. Comm 1995). The New Zealand board was made up of 11 members elected by the cooperative milk companies and two members appointmented members by the government. The primary responsibility of the Dairy Board was to purchase all milk from the cooperative milk companies
and organise the sale of the milk and milk products to overseas export markets (Anonymous 1971).

The depression of 1929 reduced dairy farmers' incomes by two thirds. As a result the newly appointed Labour Government introduced a guaranteed price scheme for dairy products sold on the export markets, in order to provide farmers with some stability in their incomes. Under the scheme the government would lend farmers money to make up the price if milk dropped below the guaranteed level. The government was repaid when the price of milk went above the guaranteed level. As the government now underpinned the guaranteed price scheme, they assumed control over the marketing and export of all dairy produce. Full control of the marketing and export of dairy produce was not returned to the Dairy Board until 1961 (Stichbury Pers. Comm. 1995).

1.3 History of The Herd Improvement Council

In 1894 a butter grading system was introduced a price differential system which graded butter into three classes. The butter grading system proved to be successful and soon formed the basis on which New Zealand butter was sold on the United Kingdom export markets. Herd testing trials were introduced in 1909 as a means of achieving higher grades of butter through the production of creamier milk. The Herd testing system allowed cows producing high levels of butter fat to be retained and those cattle with low butterfat yields to be culled (Nightingale 1992). By 1922 herd testing services had expanded. However the 1929 depression placed these services under great financial difficulties (Stichbury Pers. Comm. 1995).

In 1934 a royal commission was established to investigate the problems associated with the herd recording services. The commission recommended that a national statutory body be established to develop a set of standards by which all herd recording bodies had to abide. As a result of the recommendations of the 1934 Royal Commission the Labour Government approached the Dairy Board in 1936, to
become that national statutory body on herd recording (Stichbury Pers. Comm. 1995).

In response the Dairy Board established the Herd Improvement Council to advise the Dairy Board on herd recording and to free the Board of the routine work involved in this area. The Herd Improvement council had the power to license herd testing associations and focused on programmes to improve the breeding and genetics of dairy cows. A large number of herd testing organisations were formed by interested farmers (anonymous 1971). In addition the Herd Improvement Council launched a number of committees to investigate how herd improvement in New Zealand could be improved and how the associated service industries could be developed. As a result of their investigations the committees recommended the implementation of the 1939 Herd Improvement Plan (Stichbury Pers. Comm. 1995).

The aim of the Herd Improvement Plan was to improve the financial returns of dairy farmers by increasing production per cow and per acre (Clifford 1968). Part of the plan encouraged the amalgamation of the herd testing organisations into six main herd testing associations (anonymous 1971).

1.4 History Of The Consulting Officer Service

As an important component of the 1939 Herd Improvement Plan, six Consulting Officers (COs) were employed, one officer to be attached to each Herd Improvement Association (Clifford 1968).

The Consulting Officer Service was formed in February 1940 to form a practical advisory link between the Department of Agriculture, the Herd Improvement Organisation and the individual testing members (Clifford 1968, Stichbury Pers. Comm. 1995). The practical advisory link was designed to assist herd testing farmers with feeding and breeding management from the intensive use of herd recording data.
The COS were employed and controlled by the Dairy Board. The work of the COS was made available to all dairy farmers and was to form a close link between the Dairy Board and the dairy farmers. The COS were supposed to consult with successful dairy farmers and pass on to other farmers those farming practices proven to be successful (Clifford 1968). The Consulting Officer Service was initially established to focus on the following four main areas (Clifford 1968):

1.4.1 Herd Improvement

The CO’s affiliation with the Herd Improvement Association gave the officers a greater knowledge of the means by which dairy farmers could improve the genetic breeding of their dairy cattle. This affiliation with the Herd Improvement Association was designed to promote improvement in the breeding practices of New Zealand dairy farmers.

1.4.2 Data Collection

COs were employed to investigate the herd management experiences and general farming problems of dairy farmers and make this information available to the central organisation.

COs were also employed to collect any information relating to dairy cattle nutrition and disease problems.

1.4.3 Extension

The COs were to conduct extension programmes and activities designed to assist farmers with the use of herd recording information. In addition the COs were to encourage farmers to maintain a high standard of herd records.

1.4.4 Transfer of Breeding Stock

The Consulting Officer Service aimed to assist farmers with the transfer of high genetic breeding stock, from areas with high utilisation to areas of lower utilisation.
In general the COs were employed to advise farmers on herd improvement and general farm practices. The duties of the officers also included collecting practical farming information on the important aspects affecting increased production and efficiency (anonymous 1971).

By establishing a link between researchers and farmers, the Consulting Officer Service was designed to create a large information pool to which every participant contributed (Stichbury Pers. Comm. 1995).

1.5 History Of Discussion Groups

Of the original COs five Dairy Board COs were employed in the North Island and one CO was employed in the South Island. As each CO had a large area to cover, strategies were developed by which the needs of a greater number of farmers could be serviced at one time (Stichbury Pers. Comm. 1995).

As COs were expected to spend most of their time out in the field, there was little need for a formal office. Hence COs were required to work from their homes (Clifford 1968).

In addition to the "one on one" advice the service offered, field days and general meetings were held. When COs were required to travel long distances from their homes, they would encourage the farmer they planned to visit, to invite as many neighbouring farmers as possible to meet and join in with the discussion. Meetings formed in this manner marked the informal beginnings of discussion groups (Stichbury Pers. Comm. 1995).

During 1936 Sir Arthur Ward was appointed as a technical officer with the Herd Improvement Association and was promoted to the position of Head of the Department in 1945. During the late 1940s Sir Arthur took a vacation to England where he stayed with some relatives. During his stay he attended a number of gardening group meetings with his relatives, who were members of the gardening
group. During the group meetings the gardeners discussed what they were doing with their gardens and why. Sir Arthur Ward decided during his vacation that a formal meeting where farmers discussed and debated their farming techniques and plans would increase the spread of successful farming practices. In 1950 to 1951 COs were encouraged to formally establish discussion groups consisting of 8 to 12 farmers. In 1952 the first formally organised discussion groups began appearing in a number regions around New Zealand (Stichbury Pers. Comm. 1995).

1.6 Formation of Livestock Improvement Corporation

During the early 1980s the Dairy Boards Production Division and the six Herd Improvement Associations amalgamated to form the Livestock Improvement Corporation (LIC). The Consulting Officer Service became one of a range of business concerns run by the LIC, although it remains funded by a grant from the Dairy Board.

The other services offered by the LIC are entirely funded through a user pays system and include: herd testing, animal and herd production information, artificial breeding records, artificial breeding and progeny testing, as well as generating animal performance indexes. In addition to the Consulting Officer Service, the LIC have established a user pays farm advisory service, called Farmwise, which currently employs a total of 13 consultants (Ridsdale, Pers. Comm 1995).

1.7 Structure and Funding of the LIC Consulting Officer Service

The LIC Consulting Officer Service has become entirely funded by the New Zealand Dairy Board, through industry levies. The annual allocation of $2.57 million is deducted from the sales of dairy products prior to the final payout to dairy farmers and is estimated to cost around $180 per farm (Bodeker Pers. Comm. 1995).

The LIC Consulting Officer Service currently employs 33 COs, 27 in the North Island and 6 in the South Island. Six of the COs are referred to as Senior
COs and responsible for the supervision of up to five COs. The senior COs spend approximately three days a year with each CO to observe them working in the field and provide feedback on the COs performance to both the individual and the organisation. In addition to the senior COs one CO is responsible for organising the training programme for the new recruits. Another CO has the title Liaison Officer and is responsible for liaising between the research stations and LIC Consulting Officer Service, in order to provide access to the latest research (Ridsdale Pers. Comm. 1995).

The COs are given the flexibility to design the mix of extension that best suits both the individual CO’s strengths and the region (Stichbury and Ridsdale Pers. Comm. 1995). On average, however, approximately two thirds of the consultants time is spent working with discussion group (Bodeker 1992).

1.8 Aims and Objectives of LIC Consulting Officer Service

The 1939 Herd Improvement Plan was introduced with the mission "to increase the net financial return to the average dairy farmer" (McKenzie 1980). In order to assist in achieving this goal the Consulting Officer Service was established with the prime aim "To have the dairy farmer’s well-being at it’s immediate interest" (McKenzie 1980). Originally the Consulting Officer Service was established using a whole farm approach to extension (McKenzie 1980). Over the years the mission statement of the LIC Consulting Officer Service has changed to reflect changes in the mission statement of the Dairy Board and to maintain the "single minded" direction of the New Zealand Dairy Industry (Bodeker, Pers. Comm. 1995).

The current mission statement of the Consulting Officer Service is "To maintain and enhance New Zealand’s low cost dairy farm production base by providing a whole farm extension service" (Bodeker Pers. Comm 1995).

The two main objectives are:
(i) To increase the cash surplus of farmers using the Consulting Officer Service and to maintain an average farm surplus differential of 7% between the users and non users (Bartlett 1992).

(ii) To increase the annual contact with farmers to 70% in the next year (Bodeker Pers Comm 1995).

1.9 Description of Discussion Groups

Since their initial establishment, discussion groups have grown enormously in popularity. Today the LIC Consulting Officer Service operates approximately 400 discussion groups throughout New Zealand. Each CO is responsible for an area covering between 370 to 660 farms (Bodeker, Pers. Comm 1995).

Each discussion group meeting ranges in length between 3 to 5 hours. The average size of each group is around 15 farmers and each group meets between 8 to 10 times a year. Each discussion group has a convener assigned to them who is responsible for organising the discussion group. In addition the group convener is responsible for selecting the host farmer, sometimes with the assistance of the CO. Once the host farmer is selected for the meeting the convener and one or two other farmers phone around the group, to let the group members know where the discussion group meeting is to be held.

Every meeting consists of a brief report of the members' management and production over the last month, a farm walk of the host farmers property and subsequent discussion and feed back of the host farmer's system of management. Each member of the group takes a turn at hosting the meeting on their property. In a groups size of 15 members, a discussion group meeting would be hosted on the same farm every 1.5 to 2 years.
1.10 Evaluation Of The Consulting Officer Service And Discussion Groups

A number of attempts have been made to gain some insight of the value of discussion groups as a form of extension. In the early 1950s the Production Improvement Plan was introduced with the prime aim to estimate the worth of the Consulting Officer Service to the funding bodies. The effectiveness of the service was measured by comparing the net incomes of farmers who use the service with those that did not. To do this a number of lower producing farmers were invited to be part of the plan. The COs were instructed to spend the same amount of time with the farmers who were participating in the evaluation plan, as the farmers they normally serviced. Production records of these participates were kept over a number of years, together with the advice of the COs. The net incomes of the Plan participate were compared with those of the non participates and an estimates of the worthiness of the service was made based upon the result (Stichbury Pers. Comm. 1995).

In addition to Production Improvement Plan evaluation programme the value of the service was justified by the increasing demand for the service by farmers (Anonymous 1971 and Clifford 1968).

In 1969 a research project attempted to gain an objective measurement of the gains from discussion groups. The study found discussion group members experienced a nine percent production increase each year which compared favourably to the national average of three percent (Hockings 1969). The study estimated that 70% of the production increase was due to discussion group membership (Hockings 1969). Thus it was concluded that approximately two thirds (6%) of the production increase was directly attributed discussion groups (Hockings 1969).

In 1980 McKenzie attempted to measure the impact of discussion groups as a form of extension. The investigation involved the random selection of 10 discussion groups in the Waikato and ranked the production of the dairy farmer members against the number of years of discussion group membership. The study
found that average production had increased by 37% between the members in their first year and those farmers who had been member for an average of 6 years (McKenzie 1980). On this basis the study concluded that national dairy production could be improved by 10% over a 10 year period by encouraging the use of the Consulting Officer Service by non regular members (McKenzie 1980).

An evaluation of an advisory programme in Northland was conducted in 1981 which compared the returns per cow between discussion groups, herd testing groups and the Northland milk factory suppliers (Armstrong 1981). The study concluded that belonging to a group alone did not provide sufficient motivation to change to management systems that would result in production gains. Thus the advisory programme was considered to be the catalyst in the adoption process. In addition the returns from the increase in production associated with the advisory programme were found to be well in excess of the cost of the combined Consulting Officer Service and MAF advisers (Armstrong 1981).

1.11 Evaluation of the LIC Consulting Officer Service

The effectiveness of discussion groups has proved to be a difficult and challenging task to measure. As a result the evaluation of both discussion groups and the Consulting Officer Service appears to have changed little since the introduction of the 1950 Production Improvement Plan. The two main methods of evaluation used today involve the quantitative measure of number of farmers who use the service and the financial comparison members and non-members of discussion groups. Both methods of evaluation have been selected to measure to the main objectives of the Consulting Officer Service alluded to earlier.

Using farmer attendance records as a gauge of the success of discussion groups assumes that farmers will only use the service if their current needs for farming information are being met, or some other useful function is being achieved by their attendance. However, attendance records give no measure or indication of the kind of farmer information needs or other functions that are met through the
service. Further, there is no documented information on how the service could be improved.

Despite these limitations attendance records do provide an indication of the popularity of discussion groups amongst farmers.

The second measure of the effectiveness involves the annual survey of the financial position of 500 randomly selected dairy farmers. The financial surveys have shown that farmers attending discussion groups have, on average, a cash surplus 7% higher than non attenders. While it is acknowledged by the LIC that higher levels of farmer performance are not solely due to this service, some of the financial success of those farmers is attributed the effectiveness of discussion groups.

Both attendance records and financial surveys seem to indicate that discussion groups have been of some measurable value to farmers. However quantitative measures such as these do not explain how discussion groups aid farmers. Very little documented evidence exist on farmers' opinions of discussion groups. Before an effective way of measuring the value and effectiveness of discussion groups is developed, some of the key issues need to be identified.

1.1 Scope and Purpose of the Study

The purpose of this research is to conduct a preliminary investigation to identify some of the potential issues that may need to be understood to gain a better appreciation of both the function and value of discussion groups. Increasing both the awareness and understanding of farmers' views of discussion groups should assist future attempts to evaluate the effectiveness of group extension programmes.

The objectives of this project are to investigate:

1. Why farmers attend discussion groups
2. The type of information that farmers value and use in farming
3. The manner in which farmers would like this information presented
4. The importance and role of the CO leading the discussion groups.
CHAPTER TWO

METHODOLOGY

2.1 Introduction

Very little research currently exists regarding farmers’ and COs’ perceptions of discussion groups. Establishing the foundations of the investigation was therefore difficult. As a result the method of collecting this information altered after completing the pilot study and continually evolved during the investigation.

2.2 Selection of Research Location and Consulting Officer

The 33 COs currently employed by the LIC are located in the main dairy regions of New Zealand. The Manawatu region of New Zealand was selected as the location of the research due to time, geographical and cost constraints.

2.3 Group Selection

The groups selected for the case study research were chosen with the assistance of the Manawatu CO. In addition to representing both seasonal supply and winter milk farmers, the two discussion groups selected were described as the most contrasting groups in the Manawatu region. On the basis of this information the two groups were selected with the expectation they would provide a broad range of opinions and views of discussion groups.

2.4 Research Design

After a literature search and brief consultations with researchers at Massey University a research design was developed. The research was have two sections.
Part A was to involve a case study analysis of 3 to 4 farmers attending a discussion group in order to identify the issues involved in assessing the effectiveness of discussion groups.

Part B was to consist of a postal survey of Manawatu dairy farmers attending discussion groups to gauge the level of importance of the key issues earlier identified in Part A.

2.5 Pilot Study

A pilot study was conducted using the winter milk discussion group attenders so that an insight could be gained as to how discussion groups operate in New Zealand. Whilst attending the discussion group three were farmers selected for interviews to test the proposed research method, questions and objectives.

The pilot study built an awareness that several issues needed to be investigated more thoroughly and extensively which necessitated a change in both the research method and design.

On the basis of the results of the pilot study the research emphasis altered to a much more qualitative approach. A qualitative method of investigation was selected in order to achieve a greater understanding of the LIC discussion groups as a whole. Understanding the issues as a whole prevents the evaluation of isolated, unrelated or out of context parts (Patton 1987).

Open ended questions were selected as a means of collecting information which would allow an understanding of the issues from the perspective of the participators (Patton 1987).

Information was collected through direct observation and experience of discussion groups and indepth interviews with the participants. This process allows
the participates to describe in terms they believe to be important, without being constrained by categories predetermined by the researcher (Patton 1987).

The approach taken during this investigation was to go into the field, attend the discussion groups and then visit farmers on their home properties. This method was designed to gain an appreciation of the circumstances and experiences of the participants and to develop a greater understanding of the individual's responses (Patton 1987). In addition, it has been suggested that going into the field builds a rapport between the researcher and the participators due to shared experiences and confidences (Patton 1987).

The case study investigation was to be divided into three sections, host farmer, farmer attendee and consulting officer sections, so as to provide a better insight into the main issues involved with discussion groups.

2.6 Interview Questions and Format

The three case study investigations were conducted with interviews. The interviews used a combined approaches which included an informal conversational interview and an interview guide approach. The first method was used in order to increase the relevance of the questions. An interview guide was also used to allow the systematic collection of data relating to the objectives of the research. Separate interview guides were developed for the three investigations, although there were some similar questions asked during each of the interviews, which related to the overall objectives of the research project.

The farmers selected for interviewing included well established "owner operator" farming families, 29% and 50% sharemilkers, farm managers and wage earners. A wide cross section of farmers were selected in order to identify any common themes or patterns that may emerge from discussion groups. Farmers were selected on the spot during the discussion group meetings.
Each discussion group meeting was taped and both host farmers and farmer attendees, selected for the case study, were asked to respond or comment on the information observed and discussed during the meetings. This was done to investigate the type of farming information farmers were interested in, valued and used.

2.7 Host Farmer investigation

From the pilot study it was noted that host farmers had more opportunity to make changes to their farming system, than farmer attendees, as a direct result of the focus of discussion group meeting on the host farm.

Two host farmers, one from each group, were selected. The first host farmer was an experienced farm owner/operator and the second were a young inexperienced farm manager couple.

The host farmer investigation involved interviewing the farmers on their properties prior to the meeting to ascertain their information needs and expectations for the day. These farmers were interviewed again immediately after the discussion group to obtain their opinions of the information presented and to gain an indication whether the information had been considered, tried or rejected. Two diverse host farmers were selected to create a broad information base.

The specific objectives of the host farmer investigation were:

1. To determine the type of technical information that host farmers derive from hosting a discussion group on their farm.

2. To investigate whether in fact host farmers gained as much or more useful farming information, than farmer attendees, from hosting a discussion group.
3. To investigate the role of discussion groups in the decision making process relating to the adoption of new ideas.

2.8 Farmer Attendees Investigation

The second investigation involved interviewing three farmers from each group after the discussion group meeting. The framers selected for interviewing were either farm owners, sharemilkers, farm managers or wage earners. The aim of this second study was to obtain a general overview of the reasons farmers attend discussion groups, their needs for farming information, the sources of that information and how discussion groups compare with those sources. The objectives of this second study were:

1) To investigate the main reasons why dairy farmers attend discussion groups.

2) To investigate the type of information that dairy farmers use and are interested in.

3) To identify the kind of information that is discussed during discussion group meetings.

4) To investigate where information used by farmers comes from, i.e. other farmers or the consulting officer.

5) To explore how the information obtained during the discussion groups meeting is valued and how it is used.

6) To obtain suggestions for changes that would encourage the attendance of more farmers and further the impact of discussion groups.
2.9 Consulting Officer Investigation

The third study involved interviewing the local consulting officer leading the discussion groups. The purpose of this interview was to gain an overall perspective of the main issues associated with discussion groups. The main objectives of this interview were to investigate the LIC perspective on:

1) The purpose or range of purpose of the discussion group.

2) The strengths of discussion groups.

3) The information that is gained by farmers during the meetings.

4) The factors that constituted a "good" and "bad" discussion group meeting.

5) General issues relating to discussion groups.

Both the discussion groups and interviews were taped and transcribed for later analysis.

2.10 Analysis and Interpretation

In order to gain a greater understanding of the interview transcripts a matrix format was developed. Categories into which data could be sorted were developed and were placed in the matrix as headings in the columns. The data from each case study transcript was entered in rows, across the matrix.

By reading across the rows of the matrix each case study's individual behaviour could be understood in a specific context. Reading down the matrix allowed for the comparison of farmer answers.
Several matrices were developed. The initial matrix was very large and contained short blocks of texts as well as quotes. Later the data was condensed, by combining and reducing the number of category columns in the matrix. In order to reduce the data further, the text in each of the columns was coded.

Once all of the data had been entered into the matrix and reduced to a more manageable size, reoccurring themes and trends between each of the case study information were identified. This information was then used as the basis of the explanations presented in the discussion.
CHAPTER THREE

FARMER ATTENDEE INVESTIGATION

3.1 Introduction

The purpose of the Farmer Attendee study was to learn about the farmers’ perspective on their use of discussion groups. In particular the following objectives were to be investigated:

1) To investigate the main reasons why dairy farmers attend discussion groups.

2) To investigate the type of information that dairy farmers use and are interested in.

3) To identify the kind of information that is discussed during discussion group meetings.

4) To investigate where information used by farmers comes from, i.e. other farmers or the consulting officer.

5) To explore how the information obtained during the discussion groups meeting is valued and how it is used.

6) To obtain suggestions for changes that would encourage the attendance of more farmers and further the impact of discussion groups.

Chapter 3 consists a results and discussion section. The results section contains the views of the 11 farmers involved in the study. Three farmers from each
discussion group were interviewed after the meeting had taken place. These results were then combined with the views of the three farmers involved in the pilot study and the opinions of the two host farmers. The information contained within the results section is then discussed. Some of the issues arising from the Farmer Attendee investigation were discussed in separate sections. However other issues had to be combined in order to develop an understanding of their significance and importance to discussion groups.

3.2 Key to Tables 3.1 to 3.13

<table>
<thead>
<tr>
<th>Group A</th>
<th>↔ Winter Milk Discussion Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group B</td>
<td>= Seasonal Supply Discussion Group</td>
</tr>
<tr>
<td>Pilot</td>
<td>= Farmers involved in Pilot Study</td>
</tr>
<tr>
<td>A1</td>
<td>= Farm manager with 5 years farming experience</td>
</tr>
<tr>
<td>A2</td>
<td>= Established farming family, current property managed since 1947</td>
</tr>
<tr>
<td>A3</td>
<td>= 50% Sharemilker with approximately 15 years experience</td>
</tr>
<tr>
<td>H1</td>
<td>= Host Farmer 1 (HF1), See Chapter 4</td>
</tr>
<tr>
<td>A1</td>
<td>= Farm owner operator with 15 years experience</td>
</tr>
<tr>
<td>A2</td>
<td>= 50% sharemilker with approximately 15 years experience</td>
</tr>
<tr>
<td>A3</td>
<td>= 29% sharemilker with approximately 15 years experience</td>
</tr>
<tr>
<td>H2</td>
<td>= Host Farmer 2 (HF2), See Chapter 4</td>
</tr>
</tbody>
</table>

3.3 Results of Farmer Attendee Investigation

The results presented in Tables 1 to 13 are a tabulated summary of the range of farmer interview responses relating to discussion groups. Any response farmers gave was significant to the particular circumstances of each individual farmer. However, given the objectives of this research, only those issues deemed to important by the number of farmer responses, were described and discussed.
Farmers attend discussion groups for a whole array of reasons (Table 3.1). These reasons can broadly be categorised under the three main headings of social, practical farming information and comparisons with other farmers.

Table 3.1 Why farmers attend discussion groups.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Group A</th>
<th>Group B</th>
<th>Pilot</th>
<th>Total No Farmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
</tr>
<tr>
<td>For the social aspect</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>To get ideas from host farm</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>To listen to guest speakers</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmer information and experience</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>To listen to COs</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To make comparisons</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>To improve general farming knowledge</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological lift</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To learn about district</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>To learn about farming</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The farmers gave a range of opinions about what makes a good discussion group; what they like and dislike (Table 3.2). In general farmers found that a good leader was fundamental to the success of a discussion group. A good leader achieved whole group involvement in discussion group meetings, directed discussion to ensure that discussion remain focused with conclusions and asked farmers lots of questions. A good discussion group was also required to have a large number of farmers in attendance (between 15 - 22 farmers) and a large number of host farms to visit.
Table 3.2  Factors that constitute a good discussion group.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Group A</th>
<th>Group B</th>
<th>Pilot</th>
<th>Total No Farmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
</tr>
<tr>
<td>Guest speaker on relevant issues</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Farm walk</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visiting farms</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whole group involvement in discussion</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Focused discussion with conclusions</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Large number of farmers in group</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>New topics to discuss each meeting</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farms open and willing to discuss</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO asking lots of questions</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Prior knowledge discussion topics</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large number of farms to visit</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Time structured meetings</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A new convenor every 12 months</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructive criticism</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Positive feedback</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Older farmers in group</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Meetings every 6 weeks</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fact sheets</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An outsider leading group</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Anything impeding farmer participation in discussion, such as the superior attitudes of some farmers and a consulting officer spending too much time lecturing,
was disliked and contributed to what farmers deemed to be a bad discussion group (Table 3.3).

Table 3.3  Farmer dislikes of discussion groups.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Farmers</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Total No Farmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group A</td>
<td>Group B</td>
<td>Pilot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
<td>A1</td>
<td>A2</td>
</tr>
<tr>
<td>Contradictions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Frequent discussion of same information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Superior farmers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Dishonesty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Competitiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Arguments between farmers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>CO lecturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Destructive criticism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Changing information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not sharing problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subjective information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Almost all of the farmers showed interest in the consulting officers presentation (Table 3.4). The reasons given for their interest were diverse (Table 3.4). However, the most common farmer response was, the presentation aided in the explanation of technical information.
Table 3.4  Farmer views on CO topics of presentation.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Farmers</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Total No Farmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group A</td>
<td>Group B</td>
<td>Pilot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H2</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Too technical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Unable to follow calculations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Interested in some calc. ans.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Interested in presentation</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Needs to slow down and ask questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Communicates latest research</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Provides food for thought</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Reinforce information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Helps explain information</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Helps develop farmer opinion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Information often irrelevant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Most of the farmers believed that sharing milk production figures was important and necessary in providing valuable feedback on both their own and other farmers' current management practices (Table 3.5). In particular, farmers believed that milk production figures assisted with the identification of problems, opportunities, and successes of farm management practices (Table 3.5). The two farmers that did not like sharing their milk production figures claimed they gained benefit from doing so. In addition, both farmers felt that milk production figures were used by the group in a negative manner.
Table 3.5  Farmer views on the use of milk production figures.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Group A</th>
<th>Group B</th>
<th>Pilot</th>
<th>Total No Farmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
</tr>
<tr>
<td>Doesn’t compare figures</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doesn’t like sharing figures</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Believe figures used negatively</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Important and necessary</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>Provides valuable feedback</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1</td>
</tr>
<tr>
<td>Helps identify problems</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1</td>
</tr>
<tr>
<td>Identifies opportunities and successes</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1</td>
</tr>
<tr>
<td>Provides motivation</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1</td>
</tr>
<tr>
<td>Useful in difficult times</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All of the farmers in this study, who had the freedom to make the majority of farming decisions appeared to rely on very similar methods of developing, implementing and assessing decisions (Table 3.6). All of the farmers based their decisions on previous farming experience. Once a change had been implemented and assessed, necessary adjustments were made to suit the farming system (Table 3.6).

Table 3.6  How farmers make decisions.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Group A</th>
<th>Group B</th>
<th>Pilot</th>
<th>Total No Farmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
</tr>
<tr>
<td>Based on previous experience</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1</td>
</tr>
<tr>
<td>Use “Trial and Error”</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1</td>
</tr>
<tr>
<td>Follows same basic pattern and makes necessary adjustments</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1</td>
</tr>
<tr>
<td>Assesses changes with milk production</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1</td>
</tr>
<tr>
<td>Doesn’t make decisions</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1 1 1 1</td>
<td>1</td>
</tr>
</tbody>
</table>
The motivation to change their current system of farming was mixed amongst farmers and dependent on the individual farmer and their circumstances (Table 3.7). However most farmers stated they required satisfactory proof the change would be a success, before being motivated to change their existing farming system (Table 3.7). Other common factors that encouraged or preceded change included problems with the current system or a significant increase in profit as a direct result of the change (Table 3.7).

Table 3.7 Factors that motivate farmers to change current management practices.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Farmers</th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group A</td>
<td>Group B</td>
<td>Pilot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Problems</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>An increase in profit</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Proof of success</td>
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<td>1</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Necessary adjustments</td>
<td></td>
<td>1</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Decreasing cost</td>
<td></td>
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<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire to improve and expand</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenge</td>
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<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduction in labour</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The farmers’ opinion of the CO’s role in attending discussion groups, were wide and varied (Table 3.8). However the majority of farmers felt it was the CO’s role to lead, focus and conclude the topics of discussion, and to involve as many farmers as possible in discussion. The CO was expected to explain the information on the board and provide the necessary facts and calculations to support the topics of discussion. In addition the CO was relied upon to stop farmers disputes, private conversations and ensure the meeting ran to time (Table 3.8).
Table 3.8  Farmer views on the role of the CO.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Group A</th>
<th></th>
<th>Group B</th>
<th></th>
<th>Pilot</th>
<th></th>
<th>Total No Farmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
</tr>
<tr>
<td>To lead discussion</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>To facilitate</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To comment on farmer discussion</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To be unbiased</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To plan meeting with host farmer</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To research host farmer issues</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To find discussion topic</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To involve everyone in discussion</td>
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<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>To ensure group sticks to time</td>
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<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focused discussion with conclusions</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>To provide facts and do calculations</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>To stop arguments</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>To stop private conversations</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>To explain information on board</td>
<td>1</td>
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<td>1</td>
<td></td>
</tr>
<tr>
<td>To provoke discussion</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>To present new topics</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

The most commonly used source of general farming information by the farmers was printed material, such as the Dairy Exporter (Table 3.9). Most of the farmers used this information to find out ideas trialled and used by farmers outside their own district (Table 3.9).
Almost all of the farmers expressed some difficulty in understanding technical language used by the CO leading discussion groups, advisers, at conferences and in farming magazines (Table 3.10). Despite having problems with the usage of technical language a minority of farmers were interested in learning the terminology in the future. A small group of farmers openly volunteered the trouble they had understanding calculations performed during discussion group meetings (Table 3.10).

Table 3.9  Farmer views of other sources of information.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Farmers</th>
<th></th>
<th></th>
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<th></th>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group A</td>
<td>Group B</td>
<td>Pilot</td>
<td>Total No</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
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<td>Printed material</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Use farmer ideas from other areas</td>
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<td>1</td>
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<td>Confused by contradictions</td>
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<td></td>
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<td></td>
<td>1</td>
<td></td>
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<td>2</td>
<td></td>
</tr>
<tr>
<td>Confused by language</td>
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<td></td>
<td></td>
<td>1</td>
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<td>1</td>
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<td></td>
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<td>4</td>
<td></td>
</tr>
<tr>
<td>Confused by changes in information</td>
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<td></td>
<td></td>
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<td></td>
<td>1</td>
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<tr>
<td>Field days</td>
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<td></td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Good source of ideas</td>
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<td></td>
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<tr>
<td>Lack of farmer discussion</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Farm advisors</td>
<td></td>
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<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Poor practical advice</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fine tuning advice</td>
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<td></td>
<td></td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Latest technical information</td>
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<td></td>
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<td></td>
<td></td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Very complex</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.10 Farmer views on the use of technical language.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Group A</th>
<th>Group B</th>
<th>Pilot</th>
<th>Total No Farmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
</tr>
<tr>
<td>Doesn't understand</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Makes them feel inadequate</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Keen to learn in future</td>
<td>1</td>
<td>1</td>
<td>1</td>
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</tr>
<tr>
<td>Only understands kg DM</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has trouble with calculations</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Doesn't want to learn</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Understands</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Does use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A large proportion of farmers used discussion groups to obtain feedback on ideas before making a decision. Most of the farmers also found comparing systems assisted with decision making (Table 3.11).

Table 3.11 How discussion assists with decision making.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Group A</th>
<th>Group B</th>
<th>Pilot</th>
<th>Total No Farmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
</tr>
<tr>
<td>Uses other farmer experience</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Farmer feedback on ideas</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Comparison of systems</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Stimulates thinking</td>
<td>1</td>
<td>1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Motivation to improve</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Only helpful on common issues</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
All farmers were interested in obtaining practical farming ideas from discussion groups (Table 3.12). In addition, the majority of farmers attended discussion groups to obtain feedback on their current management practices, to obtain information pertaining to local farming conditions and to receive practical farming advice from other farmers.

Table 3.12 Information provided by discussion groups.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group A</td>
</tr>
<tr>
<td></td>
<td>A1</td>
</tr>
<tr>
<td>Practical farming ideas</td>
<td>1</td>
</tr>
<tr>
<td>Feedback on ideas and opinions</td>
<td>1</td>
</tr>
<tr>
<td>How to cope with local conditions</td>
<td>1</td>
</tr>
<tr>
<td>Explanation of technical information</td>
<td>1</td>
</tr>
<tr>
<td>Practical farming advice</td>
<td>1</td>
</tr>
<tr>
<td>Information on good and bad deals</td>
<td>1</td>
</tr>
<tr>
<td>Technical information put into context</td>
<td>1</td>
</tr>
<tr>
<td>Provides proof of ideas</td>
<td>1</td>
</tr>
<tr>
<td>Feedback on management practices</td>
<td>1</td>
</tr>
<tr>
<td>Helps to develop opinions</td>
<td>1</td>
</tr>
</tbody>
</table>

The farmers all preferred practical farming information (Table 3.13). For the majority of farmers that included information on grasses, grazing, feeding and cropping. In particular farmers were most interested in the information that was relevant to their current circumstances and time of the year (Table 3.13).
### Table 3.13 Farmer information needs.

<table>
<thead>
<tr>
<th>Farmer response</th>
<th>Group A</th>
<th></th>
<th>Group B</th>
<th></th>
<th>Pilot</th>
<th>Total No Farmer response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>H1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Information relevant on current issues</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practical farming information</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Information on increasing production</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Advantages and disadvantages of options</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Grasses, grazing, feeding and cropping</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Practical solutions to problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Labour and cost saving measures</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Likes straight forward information</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>1</td>
</tr>
</tbody>
</table>

### 3.4 Discussion of The Social Aspect Of Discussion Groups

A common reason farmers attended discussion groups was for the social aspects of the meeting (Table 3.1). While most farmers indicated socialising was a major feature of discussion groups, the importance of the social aspect varied amongst farmers. One farmer obviously felt that the social aspect of discussion groups was most important as he stated:

"Personally the main reason why I go to discussion group is social I never leave the farm, I don’t go to town, I hate town. It’s just to get me out and have a look around and see what everyone else is doing. That’s the number one reason why I go to discussion groups."
However, he then went on to say "...the next reason is for everybodies' input on what you're doing and then to see what other people are doing". Thus indicating that while socialising was most important, it was not the sole reason for attending discussion groups.

A married couple felt that the social aspect of discussion groups assumed greater importance around calving time, when leaving the farm for social engagements became difficult. They enjoyed discussion groups at those times for the following reasons:

"It's nice to go to discussion groups and just socialise a bit with the community. Just to see what everybody else is up to and to have a bit of a general chat...Especially in farming it can be such an excluded lifestyle and you can definitely get into a rut with what you're doing...It's nice to be off the farm for half of the day. It gives you a bit of breathing space."

The remainder of the other farmers mentioned the social aspect of discussion groups in passing as they described the major reason why they attended.

For approximately half of farmers interviewed, it appeared as though socialising was an incidental part of discussion groups. The number of times socialising aspects of discussion were mentioned or inferred in farmer transcripts indicates that socialising is an important aspect of discussion groups and therefore cannot be ignored.

The social aspect of discussion group appeared to serve two important functions. Firstly it encouraged the attendance of farmers to discussion and secondly the social side of discussion groups assisted in the exchange of farmer information.

The social aspect of discussion groups provides a means of attracting farmers to discussion groups and encourages regular farmer attendance. In addition discussion groups aid farmers in building local farmer contacts and support networks.
which extend beyond the discussion group. This was illustrated by the following exchange.

Interviewer: "What made you start attending the ones (discussion groups) down here?"

Farmer: "Mainly to get to know the neighbours and the district and see how they farm down here."

Discussion groups provide farmers with the opportunity to share ideas and exchange farming experiences, information and opinions. Since much of the information farmers discuss can be highly personal in nature, it is essential that a warm and friendly atmosphere exist to facilitate the exchange of farmer information. One farmer illustrated this point when he said:

Farmer "...if you can't talk to the members as a friend, then you sure as hell aren't going to tell them about your business. If you can’t talk to members of the group about your livelihood, then it's not worth going to discussion group. The biggest thing about discussion group is communication."

Therefore it would appear that the social aspect of discussion group helps create the atmosphere which encourages farmer participation in discussion and the sharing of farming experiences, ideas and opinions.

The importance of the social aspect of discussion groups varied amongst farmers. Some may argue that funding a social gathering that occurs at discussion groups is a waste of industry levies. Based on the assumption that discussion groups are little more than a social gathering, this may well be justified. However, all the interviewed farmers indicated they attended discussion groups for a range of purpose, apart from social reasons. In addition the social aspect of discussion groups provides a means of attracting farmers to discussion groups and encourages farmer participation in discussion, which is fundamental to the success of discussion
groups as a means of extension. On this basis the social aspects of discussion groups was conducted to be an important aspect of industry development.

3.5 Practical Farming Information

The majority of farmers attended discussion groups to compare their farms and levels of production with one another and to obtain practical farming information (Table 3.1). The practical farming information that farmers were interested in was divided into three sections, host farmer ideas, farmer information and experience and the CO presentation.

3.5.1 Host Farmer Ideas

All of the farmers involved in this research attended discussion groups to obtain practical farming ideas from the host farmer. The types of ideas that farmers were interested in and the way in which visual assessments of the host farmers property were used seemed to depend on the circumstances of the individual farmers. One farmer summarised the farmer opinion on the value of visiting host farms when he said:

"Well every farm is different. It gives you a different idea of what someone else is doing and how they are achieving it."

The aspects of the host farmer's property that farmers were interested, in depended on the individual farmers and their current circumstances. This was illustrated by a farming couple in the following exchange:

Husband: "You just look around and see little things."

Wife: "Yes it might be something small, like something on the back of a backing gate. Just things that you wouldn't have thought of or if you have a problem you might find a solution, and know how to do what you want to do now. It's those things, just how people set up their unit and fencing and things. Like I said we
don’t have a wintering pad, so it’s good to see how different farmers have set them up. I think it’s just generally looking around and seeing different things in the cow shed."

The opportunity to visit other farming properties was highly valued amongst all of the farmers involved in this study. Farmers seem to rely on the use of the host farms as one of the main sources of basic farming techniques, solutions and ideas. This was demonstrated by the following farmer quotation:

"The new ideas are few and far between, that’s what I’ve found in our discussion group but you still have to go for that one or two ideas that you might pick up in a year, otherwise you don’t get exposed to them."

The majority of farmers believed a large number of host farms to visit was a determinant of a good discussion (Table 3.2). This was explained by the following farmer account:

"When I was convener, there was only 12 people in the group, so it wasn’t big enough then. So we were therefore going around everybodies’ farm in 15 months. Farms don’t really change all that much in 15 months. ….So there was not enough new farms to look at. Now we have 3 or 4 new faces, so that is 3 or 4 new farms we’ve gone to. Sometimes it comes down to the size of the group."

The larger the size of the discussion group the greater number of farms to visit which increased the exposure of host farmer ideas. In addition, the greater the number of farms to visit, the longer the interval between visits during which farms have a greater opportunity to change.

3.5.2 Farmer Experience

Another major reason the farmers attended discussion groups was to obtain information from other farmers based on their practical farming experience. As one
farmer explained: "... You learn from other people's experiences, everyone is talking all the time telling you what they are doing."

Despite having access to a wide range of farming information sources, farmers highly valued information obtained from other farmers at discussion groups. This was illustrated by the following farmer exchange.

Wife: "That's where we get most of our knowledge from. Not necessarily from farm advisers, but from farmers that know our soil type. I think a lot of the information is stuff that a farm adviser couldn't give us unless they worked on farms for quite a while."

Husband: "I would sooner listen to an older farmer than a young adviser because an older farmer knows the land like the back of his hand and he can tell you what is going to go on. Okay advisers have there place and they're good but to me an old farmer is the way to go. When they talk I shut up and listen."

In general there seemed to be a great deal of scepticism and mistrust of "expert information" amongst farmers. On farmer described experts as "...a big unknown quantity and a drip under pressure."

Another farmer expressed similar concerns regarding practical farming information from sources other than farmers, when he said:

"There is always a little bit of scepticism about the experience of the person leading the group and a lot of members rely on the experience of the people who have tried these things in practice. We've been to Massey No.1 and some things that they have done are just hopeless from the practical farmers point of view but I guess you've got to try these things out. What works on one farm does not necessarily work on another. People have a little bit of mistrust of people from Massey that preach one way or another, without having the background experience to back it up."
Some of the farmers attending the discussion group valued and trust the information from discussion groups more than from other sources. This was illustrated by the following farmer exchange.

Wife: "And on the other hand if you don’t agree with what they say everyone will argued it out until they come out with the answers everyone is happy with."

Husband: "Yes. Anything that anyone says today if it’s not 100% right then everyone will pounce on each other. In the end you get the result and it is good. And I think that is the key."

Many of the factors the farmers’ believed lead to good and bad discussion groups related to the amount of farmer involvement in discussion. A common farmer response is given below:

Interviewer: "What do you think makes a good discussion group?"

Farmer: "Lots of people coming along, all joining in and discussing different issues"

Some farmers felt that a bigger discussion group was good because it lead to a larger source of practical farming information. Many of the farmers believed one of the keys to a good discussion group the consulting officer asking farmers lots of questions to encourage farmer participation in discussion. This was illustrated by the farmers comments:

"I don’t want someone at the discussion group that just lectures. They’ve got to make everyone think and get involved. You know about what cock-ups they have made and what good management decisions they have made. "

One of the most common deterrents to farmer participation in discussion was the fear of being judged as a bad or stupid farmer, by other farmers. Within the
discussion group there did appear to a hierarchical structure with some of the high producing land owners on the top and the lower producing farmers, sharemilkers and wage earners at the bottom. A number of farmers shared similar views to the farmer below.

"Bad discussion groups are ones with superior farmers, like some of the land owners. They are bad because people don't talk freely in the group when some farmer act superior. They make you feel really uncomfortable."

3.5.3 Comparisons

Perhaps the most important and valuable function of discussion groups is the opportunity they provide farmers in the comparisons of their farming systems. The overall impression that all farmers gave during the interviews was that discussion groups provided them with a unique opportunity to compare their farming systems. How farmers used and valued these comparisons varied widely, and depended largely on farmer circumstances, levels of confidence, experience and individual personalities.

When the farmers walked around the host farmers property during the discussion group meeting they were able to make direct visual assessments and comparisons of the host farm with their own farming system. The majority of farmers interviewed were unable to understand technical language involved in quantifying farming systems (Table 3.10). The direct visual assessment of farming properties alleviated the need to communicate complex descriptions of the host farm. A farmer described the general straightforward way farmers compared their systems with the host farm.

"Oh, you just have a look at the farm that you go to on the day, the type of soil they're on, you see how they're doing and you look at when you're going around the farm how much grass they've go compared to you and how they're doing. You sort of think well either they're doing better than you or their cows are
getting fed better than yours. You look at what expenses they've got a year and think "we might be able to afford to do that rather than doing this," you know."

The most common motivating influence causing farmers to change their current farming system was proof of success (Table 3.7). One reliable source of proof is the host farm. Farmers are able to both visually assess and discuss with the farmer the advantages and disadvantages of the important aspects of the host farmers system of management. This was illustrated by the following exchange:

Interviewer: "Do you pick up any ideas from discussion groups?"

Farmer: "Yeah if some guy is doing something different and if its working for him then you will go home and try it and see how it goes for your self."

A large number farmers were shown to compare their farming system directly with the host farm and indirectly with other farmers attending the discussion group. These comparisons provided feedback on their current farming system (Table 3.12). The importance of comparisons was described by the farmer below:

"... Because we’re all in the same area doing roughly the same sort of thing, if your pasture cover is a lot less than someone else’s, it’s good to know that they have perhaps utilised the conditions better than you have. So I’m quite interested in that."

Many of the farmers attending discussion groups lacked the ability to accurately pasture score their paddocks (Table 3.10).

This was also shown by one of the two farmers in the group who felt comfortable with technical language when he complained:

"That’s the other thing I suppose, now that we have got Kg DM and a few of us are using it. There are guys that are not using it. They do know if they are
well off for feed or not, they just can't express it in kg DM, so they only need to learn that to be able to present that to the discussion group. That doesn't mean a lot, if they say it comes up over my gumboots."

Perhaps as a result of a lack of common measures farmers have come to rely on milk production records to indirectly compare their current systems of management between other farmers attending the discussion group.

Most of the farmers believed milk production records were an integral part of the comparisons (Table 3.5). This was explained by the emphasis farmers placed on milk production levels to aid with assessing the worthiness of various farming options (Table 5, Table 6). This was also demonstrated by the following farmer exchange:

Interviewer: "Do you think sharing milk production figures are important?"

Farmer: "Yes, especially with your neighbours. It's good to see how they are doing compared to you. Like if your neighbour is doing 20 litres a cow and your only doing 15 litres, it makes you wonder if you're doing something wrong or that you're not feeding your cows right. Comparing milk production figures in the group tells you whether you're doing a good or bad job, or if you've got a problem somewhere with your management."

The type of feedback farmers were interested in and how they chose to use that information depended on the farmers' circumstances, personalities and levels of experience. In general the way in which farmers used comparisons could be divided into three main categories: the awareness of problems, motivation, a psychological lift and reassurance in times of trouble.

3.5.3.1 Awareness of problems

One of the most commonly given features of discussion groups was the ability they gave the farmers to develop an awareness of farming problems through
comparisons with other farmers in the district. This was demonstrated by a farmer when he commented:

"..That’s the other thing, you’re all in much the same area, with all much the same sort of system and you find out someone is having a hell of a lot of trouble with one thing and it may make you realise that hey this isn’t going so well with me either. Whereas you may not have realised it till that discussion group."

For some farmers comparing farming systems not only assisted with the identification of the problems, but also confirmed the existence and source of the farming problem.

This was illustrated by the following farmer account:

"I was having a bit of trouble with pasture cover in early winter. Everything was going wrong and I wasn’t meeting quota etc. And when we were talking it over the majority of guys were doing okay. So I knew there must have been some management factor that wasn’t working for me. I had already decided that, but the group helped set it in concrete."

3.5.3.2 Motivation

A number of farmers indicated during their interviews that discussion groups helped motivate their work performance. There were many comments such as "..I get motivated from the group." and "I’m a lot more motivated than a few years ago and that’s due to discussion groups." This was shown by a farmer’s following explanation:

".. I think that’s good because the reason why you go to discussion groups is to find out what other people are doing. Not just what the person on the farm you’re going to is doing. Human nature says you’ve got to be competitive. And if you can say I know what sort of system that guy is running and he is doing more
than me, then hell you know, I had better shake up my own system. I had better dry off those low producers that I should have done before, sort of thing."

Often it would appear that farmers may be aware of the source or reason for sub optimal production but lack the motivation to improve their performance. When they meet other farmers from the same district with better milk production levels, some farmers appear to rise to the challenge to improve to match the performance of others in the group.

3.5.4.3 Psychological Lift

Farming seems to be a lonely occupation for most farmers and there appears to be little recognition of the hard working lifestyles farmers have. For the majority of farmers the recognition comes from comparing their farms during discussion group meetings. One farmer revealed:

"When I go along to the discussion group and find out I’m doing really well compared to everyone else I give myself a pat on the back."

For other farmers discussion groups provided the reassurance they required, especially during difficult times. This was described in the following account:

".. in the middle of calving you feel all disheartend because you’ve got calves everywhere and the place will be really wet and you go to someone else’s place and they can be wetter than you. And you come home and think my place isn’t so bad after all. It’s silly but it does help. And I’ve been there and you think we’re not so bad and you come home feeling quite good. And it can work they other way too and you can get a bit disheartend, but it’s good."

The positive reinforcement gained from comparing farming systems at discussion groups seemed to be a powerful attraction for some farmers. Even the more established farmers who acquired only the odd pieces of useful information
from discussion groups seemed to value the positive feedback obtained from the comparisons. This was illustrated by the farmers comments:

"You just never know when something may pop up and you think that's what I need to know. Or you might go to 2 or 3 discussion groups thinking and put up nothing of any benefit to you what so ever, except come home with a bit of a warm feeling that you're o.k. And there are plenty of people worse off than you are at the moment."

Only 8 of the farmers openly admitted they attended discussion groups to compare there farming system with other farmers (Table 3.1). However all the farmers within this study gave the impression they made at least one direct visual comparison with the host farming system during the discussion group meeting.

There were two farmers who expressed very negative feelings regarding the comparison of milk production figures. One farmer commented:

"Well to me it's a thing of one-up-manship. I don't let it worry me. I know what we're doing and what we're capable of doing and I'm quite happy with that."

Another farmer indicated great distrust in the figures that other farmers were presenting at discussion group meeting. In addition he felt offended by some of the farmers comments during the meeting. The account is given below.

"Well Tui send out a graph compared with how you are going compared with the district. On that graph we were doing above the district average for most of the season. But at the discussion group we sounded like we were the worst farmers there."

One farmers solution to revealing the milk production figures debate was "It would be better if that figures were optional. Because some people like to here how others are going and some don't like to say or aren't interested." He then added "


But it was really good in the dry. We all had to fill the figures in the book and it was really interesting then to see how people were coping with the dry."

To take measures to assist farmers in making more comparisons of their farming systems could be treading on very dangerous territory and should be attempted with extreme caution.

Whilst some farmers had the very liberal attitude of

"I’m quite happy to put my figures up and say "you tell me how to get their quicker if you know"..." others obviously felt the revelation of personal information very threatening.

Many of the farmers amongst those who were happy to share milk production figures expressed concern about sharing personal financial information.

A few farmers commented "I know that there are some farmers that have moved out of our group to another group where they have more indepth discussions and go through books and every thing and really work hard on it. I would probably feel a bit threatened by that, so I’m comfortable with the format of ours..."

Some farmers even expressed a reluctance to share certain farming problems, unless they were aware of farmers in the group who either currently or previously shared a similar problem, for fear of being "judged" by other farmers.

While it is clear that some farmers are happy to share and divulge personal information, others are not. Perhaps this may be the niche for privately run and funded discussion groups who are able to cater for a specific target group of farmer clients who may be willing to share the same kinds of personal information.
However the main role of the LIC run discussion groups to cater for the needs of all farmers, since all farmers contribute to the funding of the LIC Consulting Officer Service.

3.6 Decision Making

All of the farmers that were interviewed who had a capacity to make the majority of farming decisions followed the same basic format year (Table 3.6). As one farmer described

"...Basically though I follow the same basic format. I watch the daily and seasonal milk production to gauge how I'm going and to see if I need to make any changes."

The majority of farmers interviewed used their daily milk production records to assess the management of their farms. Problems with an existing farming system were a common motivating influence causing farmers to make changes to their management practices. Although only four farmers openly volunteered that problems motivated them to change their systems, many of the other farmers gave examples of problems that had lead to management changes, during their interviews. This was particularly prevalent amongst the winter milk farmers who described in detail the changes they were having to make as a result of the change in the local milk companies quota period. One farmer gave the following account of how problems motivate changes in management practices:

"The dairy company keeps changing the rules on us more than seasonal supply farmers. We've had our world completely changed around in the last few years and you have to change to survive."

When farmers are placed in the position of making management changes they rely heavily on their own experience and those of other farmers who have had
similar experiences. Farmers then assess their options based on the conditions and circumstances of their own particular farming system. As one farmer described:

"...Well we make all our decisions. We evaluate what we consider to be realistic and practical on this farm. If it stacks up we do it and if it doesn't we don't."

On the whole farmers appeared very reluctant to make changes to their farming systems without convincing proof that the change was going to be a success. A common farmer response was given below:

"...But I have to see a really good result or change, before I'll change my way of doing anything. Because if I have a system that's working, I can't see the point in changing a working system just to try something that is just going to give me the same result. Unless it's a better result or it's going to be faster, then I'm not really interested because if my system works and it just as quick and yields the same result, what the hell is the difference? That's the way I look at it."

Discussion groups assisted farmers with decision making in a number of ways. Firstly, they provided visual proof of the success of different farming systems. Secondly, they assisted farmers in evaluating options that were available to them, even if the rest of the group was against a farmer proposal. This was described by the following exchange:

Farmer: "...If the group doesn't agree, that doesn't worry me. I still think it's the thing to do. It wouldn't hold me back. At the same time I would listen to the groups point of view and I would evaluate it and weigh it up and think who is right and who is wrong. But when it comes to the final analysis and decision you have to make up your own mind. And if you feel your right, then there is no reason why you shouldn't do it."
The more thought and consideration involved in assessing a decision, the greater confidence the farmers seemed to have in that decision. This was true even for those decisions made in opposition to the consensus of farmer opinion, as illustrated in the above example.

However discussion groups did not appear to assist farmers with the exclusive decisions that related to a particular farm circumstance, as one farmer explained:

"The new thing that I’ve been doing is regrassing and discussion groups has not helped me at all with that, because none of the members have been into it. Especially not with the grasses that I’ve been using.

With things like calving date and mating management and stuff like that, it’s good. Because everyone is in the same boat."

On occasion when discussion groups were unable to assist farmer in decision making most of the farmers implemented changes on the basis of "trial and error". A common example is given below.

Wife: "On the smaller unit, we milked bigger numbers and just worked things out, with good and bad seasons doing it that way."

Husband: "We think of something and try it. If it works good and if it doesn’t, change it."

As explained in the above example implementing changes through the process of trial and error can at times can lead to production losses during the period of installation. On occasions the period of adjustment to a farming system can take anywhere from one season to a number of years, as demonstrated in the example below:
"..And I've been using these grasses for 7-8 years now and found out what works and what doesn't on our place and each paddock."

Discussing and sharing farming experiences, wisdom, and opinions can reduce the number of errors that can occur during the period of implementing change. This appears to be one of the main reason why farmers are interested in listening to the experiences of other farmers.

3.7 CO Role

Farmers felt the CO was fundamental to the success of the discussion group. As one farmer described:

"I see the CO's role as being a primary source of what makes a good discussion group. Without him there it would just be a bunch of farmers sitting there talking."

The most important role of the LIC CO common to all farmers was the leader of discussion. As a result the expectations farmers held for the LIC COs role were wide and varied (Table 8).

Although most of the ideas and information that farmers valued from the discussion group came from other farmers, the input from the CO was seen as equally important. The CO leading the discussion group was considered by many farmers to have a major role in providing the latest research and necessary facts and figures on the topics on discussion, as one couple explained:

Wife: "..the CO would tell you how it was. And another farmer would tell you how he thinks it was."

Husband: "You need to know the technical side. That's the whole reason for getting them (COs) out here."

The CO assisted farmers to form opinions in a number of important ways. As discussed, one of the main reasons farmers attended discussion groups was to listen to the experiences of other farmers. However, at times the farmers appeared to have difficulty in distinguishing between valid and nonsensical farmer experiences, advice, opinions and conclusions. Farmers therefore relied upon on the CO to see if there was any scientific basis to the opinions or advice farmers were advocating.

The second important role COs played in assisting farmers to form opinions was in the evaluation of various farming alternatives. Many of the farmers appeared to lack the skills necessary to carry out financial analysis or to evaluate the advantages or disadvantages of alternative options. Most farmers appeared to rely on the CO to carry out this function. One farmer revealed:

"...I'm not good on figures, never have been, so I'm more seat of the pants guy. That's why I appreciate someone putting it down on paper so that you can see it and ask questions about it. ...He put it in black and white the actual advantages and the costs."

By working through the actual advantages and costs of different options farmers are able to make more informed decisions. This was illustrated by a farmer's account of a brief period when the discussion group met without a LIC CO present:

"There was one time when we had a liquid fertiliser rep there and he was trying to drum up business. Now I didn't want to offend the host farmer, so I said don't you think we should look at the paddocks first before you start talking business.

So we walked around the paddocks and I asked (host farmer) if he thought his paddocks were performing as well as they had been when he was using the solid fertiliser. He said "they looked as if they needed a bit of something else," and the liquid fertiliser man just up and left."
But if there had been a CO there he would have been able to evaluate the fertiliser going on and the quantities and all the rest of it and we would have come out with far more information. We just came away with a negative feeling about liquid fertiliser."

In addition technical ability of the discussion group leader, many farmers felt the questioning skills of the consultant was an important aspect of a good discussion group. Farmers relied upon the consultant to ask questions as a means of facilitating the exchange of practical farming information between farmers. As one farmer explained:

"They've got to draw out members of the group. Collectively we know quite a bit within the group, but some are used of talking about it and some aren't. Some need confidence and some don’t, so yes he (the CO) has to draw members of the group out."

In addition to facilitating the exchange of farmer information, the CO's questioning skills was seen as a way of involving all the member in discussion. Whole group involvement was to be the responsibility of the CO and a major component of a good discussion group (Table 3.8, Table 3.2). A common farmer explanation of whole group involvement is given below.

"You've got to have an outsider there. You got to have someone there that will provoke thinking and discussion. You got to get everyone there, no matter what there experience, involved somehow by the C.O asking them questions. It's too easy at discussion to sit back and take it all in and contribute nothing to it.

A guy with very little experience can come in with a very good idea, just because there is a fresh mind looking at the same old problem. So you got to have someone who is going to involve the people there, to provoke and promote, to get farmers out of their shells and get them talking. I think that is the key to a good discussion group."
In addition to increasing the amount of farmer information, whole group involvement in discussion provides the participants with greater incentives to concentrate and stay alert. This view was supported by one farmer's explanation of the end of discussion group meetings.

"The round up at the end is normally done. That's good. That forces you to concentrate. That makes you think "what did I get out of it today." ... Otherwise the guys tend to drift off."

As was demonstrated in the above example, farmers are more likely to stay alert if they expect the CO to ask questions. In addition to provoking whole group involvement in discussion, the CO was seen to be responsible for directing the flow of discussion and explaining the necessary points of view of other farmers. Focused discussion with conclusions was to be an important requirement of a good discussion group (Table 3.2).

The general response to the question "what made a bad discussion group" was "Just a general lack of direction where nothing really definitive happens," which illustrates the importance of relevant and conclusive discussion.

In general farmers felt a non-biased and non judgemental outsider was required to ask the potentially embarrassing questions. This was explained by farmer when he commented:

"When you have a CO there, he can ask the difficult questions without being critical. But when you are a bunch of cockies together, you either have the heavies who say things very critically, which makes everyone think "pull your head in" or you don’t say anything."

Farmers appeared reluctant to ask questions and raise issues during the discussion group meetings. This may have been due to hierarchical arrangement, alluded to earlier.
During the times farmers comments became nasty or disputes erupted, the group relied on the CO, being the outsider, to stop such disputes without taking sides.

An example is given below:

".. The other thing is there has been an incident when a guy got fired up at an individual in a bit of a personal way and he (the CO) just chopped it off like that. He didn't let it develop at all."

In addition to preventing arguments between farmers from developing, most farmers expected the CO to stop private conversations during group discussions (Table 3.8). This was explained by a farmer:

"In my books he is there to run it. He's there to make sure everyone listens. Because you're there to listen to the problems that this guys got and it's no good 3 or 4 of you standing around talking about what you did last week. Because you can do that when you are walking. But when you're there in the group, you should be listening. And (the CO) is really good at that, he'll pull you up. And he'll do it to anybody. He does it to the old guys as well. And that's what it's all about."

As the farmer described in the above example, discipline from the CO was expected and accepted by all of the farmers, despite "their position of authority". This was largely because the CO was seen as an unbiased and non-judgemental outsider, who had earned farmer respect as a leader.

Another important role of the CO was to ensure that the discussion group ran to time. Farmers expected the CO to make sure there was enough time for the farm walk, discussion and feedback, even if a guest speaker was present. As one farmer explained:
"You see thing that happens with our discussion groups, which (the CO) bought up last time, is that we get bogged down in the shed, everyone is looking at their watches and thinking "I want to start milking at 3 O'clock" and thinking about making an early exit and then we start heading out to the paddock and we don't spend enough time out there on the important things."

In addition to leading and chairing the discussion group meeting, a large number of farmers attended discussion group to listen to both the guest speaker and CO presentation. Guest speakers appeared to vary from veterinarians, researchers, financial advisers and sales representatives. The level of farmer interest in the CO's and guest speakers' presentations appeared to vary in accordance with farmer's circumstances. However the general consensus of opinion is shown by the following example.

"It makes the day extra special. Having someone special come in and talk about a specific subject that he knows about...And having someone relevant to the time of season. Like (the vet) was talking about the calves and it's calving time and it's something that we all needed to hear."

On the whole, the CO presentation appeared to be a more regular feature of the meeting than a guest speaker presentation. Almost all farmers said they were interested in the COs presentation. Once again, the reasons farmers gave for their interest were wide and varied and related to the particular circumstances, levels of experience and education of the farmers.

Prior knowledge of the discussion group topic allowed farmers time to think about the information they wanted to know and prepare questions. This was illustrate by a farmer who complained "A lot of the discussion, well you never find out until the day, so you cant go armed with questions." Many of the farmers showed both pleasure and interest in having prior knowledge of CO topics. This was demonstrated in the example below.
"(the CO) has really been great at discussion group because he always brings along a discussion....Like next time we're going to discuss about growing crops on runoffs and that. So he'll go away and find out all the information. It's good to have someone like that because the last adviser we had wasn't very good."

For some farmers the CO presentation helped farmers reinforce and explain information they had first obtained elsewhere. For a minority of farmers the CO presentation seemed to provide the only exposure to the technical information available through other sources of media. This was shown by the following farmer's comments.

"...And he (the CO) brings along information that the majority of us wouldn't look at if it wasn't for him. And it's good to look at it. We might not use it, but that's our choice. At least if we see it, we can consider it."

In order for the COs presentation to be appreciated by the farmers the information had to be relevant to the main farming issues at the given time of year. Due to the dynamic nature of the seasons and farming, the information farmers required during the year change constantly. As one farmer explained:

"The topics have to relevant to what is happening in the district at that time, and I think they are. It's no good talking about non relevant things at that particular time frame because farmers are all interested in how they are going to solve the management things for the next month."

The large scale contact the CO had with other farmers through discussion groups was seen as a way of transferring farmer information around the region whilst informing the consultant of the current farming issues. As one farmer commented:
"And he (CO) is at a different discussion group every day of the week, so he can bring information about what is topical for the other discussion groups and relay to our group too."

3.8 Information needs of Farmers

The type of information farmers were interested in depended on the phase of farming development. For example one wage earner was interested in ways of reducing the hours he worked, as he was paid a set wage and increasing production or reducing cost did not affect his base rate of pay. As this farmer explained:

"Thing about farming, it's all day, seven days a week. I can get home at night, be home an hour and have to come straight back again."

Therefore he was interested in any ideas that were going to save him time and labour.

One sharemilker was interested in information on how to obtain farm ownership, as this related to his short term goals. Both farm owners and sharemilkers were interested in information on reducing costs, labour and increasing production. In general, however, all of the farmers were interested in practical farming information (Table 3.13).

3.9 Other Sources of Farming Information

Four sources of information were commonly used by farmers (Table 3.9). These included printed information, field days, conferences and farm advisers. Discussion groups differed from these other sources of information in a number of ways.
Firstly many farmers felt that discussion groups provided a forum in which new information could be explained, discussed, and opinions could be formed. As one farmer described:

"Discussion groups, rather than being information centred, are a place to toss information around to see how the others are seeing it."

Discussion groups provide farmers with an opportunity to share practical farming experiences with new information.

As mentioned previously sharing experiences can prevent difficulties during the implementation stage of a new innovation. In addition farmers are able to exchange difficulties they have had with a new innovation, which may prevent another farmer experiencing similar problems. This was illustrate by the farmer below.

"The new information is coming in free to every farmer's door step with the dairy exporter. That's a pretty good source of new information. I think its that it's actually putting those things into practice that is where discussion groups come in."

Another farmer added:

"What you get out the Dairy Exporter is only an idea and then we've got to try it. Where as in discussion groups someone may have tried it and found it useless, so you can decide whether you waste your money or not and do it."

Magazines, such as the Dairy Exporter, are valued by most farmers as a source of practical farming ideas from all over New Zealand. Discussion groups, on the other hand, tended to be a good source of information pertaining to local district conditions. This was illustrated by the following farmer comments
"Magazines cover information about farmers in other areas, so you get farmer ideas from outside your area. Discussion groups give information about how other farmers deal with the local conditions. Everyone in the discussion group has the same soil type and climate etc, so they have some good ideas on how to deal with those conditions."

Farmers complained that conferences contained confusing information, especially when experts began to argue with one another. One of the farmers who had attended a farmer's conference regarded the information as complex and difficult to utilise, as was demonstrated by the following comments.

"..You just have to take everything with a grain of salt and practically look at it. Hopefully without too much trial and error find your own way through it."

Another farmer commented "At a field day or conference they don't discuss the information in the same way as in a discussion group. Because a lot of people wouldn't get up and talk or question somebody because there are a lot of people around who might think that you were a bit of a dick or something. Where as in a discussion group you know everybody and you would feel a bit more comfortable about asking a question."

Discussion groups provide a rich source of practical information and a comfortable environment in which information can be discussed and put into context. This once again demonstrates the importance of the social aspect of discussion groups.

**3.10 Presentation of Information**

The majority of farmers had difficulty in understanding information presented by researchers and advisory officers in magazines and at field days and conferences (Table 3.10). They complained that information was delivered in a raw and undigested manner and the farmers lacked the skills to understand the information.
This was illustrated time and time again by farmers when discussing the sources of information available to them. Some of the farmers complaints:

3.10.1 Printed information

"We want information in laymen terms. It’s no use handing us stuff with scientific formulas in it because most farmers wouldn’t understand it...If you could put information across in a manner that farmers can understand, the response would be a lot better. Like in these magazines, you get a lot of technical data which means that you’ve got to then sit down and work out what they are trying to say."

3.10.2 Farm advisers

"You got to have really practical farm advisers. Because a lot of farmers are really proud. Now if you get a farm adviser in telling you a lot of really technical stuff, the farmer is not going to say "I don’t understand you can you explain it to me properly." He is just going to sit there going "yes, yes". And the farm adviser will be leaving saying "Now you know what to do?" and the farmer will be going "yes, yes, thanks very much". And as soon as the farm adviser gets up the drive, the farmer will go out and do the complete opposite."

3.10.3 Discussion Groups

"...But the same thing happens at discussion group. (The CO) will work it all out and he’ll write up the answer but he won’t show you or tell you how to do it. As much as what he could.

I know he can’t go around to everyone in the group and say to them, "did you understand it?" He has to move on.

But I think sometimes if they could stop and stand back and go "I would like you to try and work this out and what’s the answer?" Not like he’s teaching us, well I suppose he is teaching us...if you have it all laid out in front of you, you don’t take it in as much, I don’t reckon."
On the whole farmers preferred farming information that didn’t need to be explained to them. A number of farmers complained:

"I think that’s about the biggest problem we have, with trying to get knowledge about things. People just don’t explain things in terms that we can understand. They just explain things in the way that they were taught at university and out of a text book."

Some of the farmers expressed a willingness to learn details about specific animal requirements and feed budgeting at some stage in the future. One farmer even suggested "It would be really good if they ran courses over the dry period when you had time to attend them."

A number of other farmers, although interested felt that although some benefit could be gained from pasture scoring, the exercise was too time consuming and thus had not been motivated to learn. This was illustrated by the following farmers comments:

"Because I think that there is a little to be gained from it and more my own interest more than anything. At times I feel like I’m a little bit ignorant not understanding what they are talking about. So I think I should be a little more up with it. But I don’t want to devote the sort of time that they devote into pasture scoring and measurement. Because I don’t really think it’s necessary to spend a day or half a day doing it."

In addition to the difficulties farmers expressed with the use of technical language, many farmers appeared frustrated with the amount of non practical farming information available to them. Discussion groups provide farmers with the opportunity to discuss relevant information in a farming context and make comparisons between farming experiences. Further investigation is required in this area.
3.11 Conclusion

During this investigation a number of important issues relating to discussion groups, from the farmers' perspectives, were identified and discussed. Most of the farmers attended the discussion groups to learn from the experiences of other farmers, to obtain farming ideas, to make comparisons and to socialise with other members of the farming community. The social aspect of discussion groups was found to be important in creating a trusting atmosphere in which personal farming information and experiences were shared.

Discussion groups were found to provide a unique source of practical farming information. Many of the ideas that farmers valued and used were only obtained from visiting other farms during discussion group meetings. In addition, visiting other properties provided visual proof of the success of a different farming system. Learning from the experiences of other farmers helped to evaluate new information and assisted with adoption of a new innovation. Comparisons with other farmers provided valuable feedback on current systems of management and helped to motivate some farmers. Discussing information and carefully considering all the possible options seemed to build confidence with farmer decision making.

The main role of the CO was to facilitate discussion, provide research to complement host farmer issues, assist with the formal evaluation of various farming options and to provide discipline to the group. Some of the farmers expressed difficulty with the general use of technical language. However it was difficult to distinguish from the farmers' comments whether the use of technical language was the real issue or whether farmers were frustrated with the lack of practical farming information provided by the other methods of extension. Further research is therefore required in this area.
CHAPTER FOUR

HOST FARMER INVESTIGATION

4.1 Introduction

During this investigation one host farmer was selected from each of the two discussion groups in order to learn the issues relating to discussion groups from the host farmer perspective. This chapter is divided into two main sections. The first section focuses on the experiences and views of Host Farmer 1 (HF1) while the second section focuses on the second host farming couple (HF2).

4.2 Host Farmer 1 Winter Milk Discussion Group

4.2.1 Farming Background

The farming property of host farmer 1 (HF1) has been family owned since 1880. After completing a Diploma in Agriculture, at the former Lincoln College, HF1 gradually took over the responsibility of managing and controlling the family property, which was in those days a sheep and beef farm. HF1 has established three farming enterprises on the 280 ha property. The first enterprise is a 54 hectare winter milk dairy unit which currently supports 168 cows. The second enterprise is a 38 hectare deer unit and the remaining area of the farm is used for dry stock, replacement heifers and the weaner beef unit.

The weaner beef unit utilises bull calves, from the dairy unit. All cross bred and Friesian calves are reared by hand and are taken through to slaughter weights.

HF1 now employs 1 labour unit to do the milking and general farm duties. HF1 is approximately 40 years of age and is married with 5 children.
HF1 has been attending discussion groups on and off for the past 16 years with more regular attendance in the last 6 years.

**4.2.2 Focus of Discussion Group**

When asked if he were looking for any advice from the discussion group HF1 replied:

"I can't think of anything at the moment. At this time of the year I guess the feed supply is fairly critical, so I'll go into that quite deeply to see what the guys think of that. One or two of them may come up some ideas that I haven't thought of there. Otherwise no not really."

Host farmer was looking to increase milk production by another 5000 Kg MS in the next season by growing maize silage off the home farm. The host farmer is the only farmer in the group who uses maize silage, and when asked about the level of farmer interest he replied:

"They have all said you do it and we'll see how you get on. We'll see on Wednesday I suppose cause I thought that was the only thing different on my farm for a lot of them. So I'll do a bit of a presentation on it... But we'll basically be covering the same thing as when the group was here last in 1992."

When asked if he were looking for new ideas or suggestions he replied:

"Oh yes, I'm always looking. I've found myself in the past getting a bit defensive when I've heard them. You know thinking that my way is the right way and there is no other way of doing it. So that's just a danger to think about, but basically you want them to criticize you. And if they come up with a new idea that you haven't thought of that you can use, well that's great."

Despite the host farmers enthusiasm for obtaining new ideas, he did not appear to expect that hosting the discussion group would yield many new ideas or
useful feedback. Instead, the main benefit and satisfaction of hosting the discussion group meeting came from the preparation and thought that went into the presentation he was preparing. This was evidenced by the host farmers comments:

"...But what I get out of hosting the group is you have to prepare what you are going to talk about, so immediately you’ve thought about what you’re doing, which perhaps you don’t unless going through one of your five yearly reviews, so that’s half the battle. Then the other guys should be putting up alternatives, hopefully."

4.2.3 The Winter Milk Discussion Groups Meeting

The discussion group meeting started with all farmers giving a brief description of their current farming situation. The host farmer then introduced his farming property which was followed by farmers questioning the various aspects of his farm and production. At the request of a farmer, the consulting officer did a presentation on a pasture scoring technique. Farmers questioned the method and shared experiences of various techniques of pasture scoring. The host farmer then did a presentation on the board of the cost of growing maize silage, showing how it varied according to the yield and whether it was grown on or off the farm. The host farmer’s presentation on maize silage generated a great deal of farmer interest and lasted approximately half an hour. The host farmer led the majority of the farm walk. The first stop occurred at the milking herd, where discussion centred around the use of CIDRS. The second stop occurred at the maize silage pit where farmers questioned the host farmer on the pit construction and the silage quality.

After the farm walk farmers discussed cropping and pasture renovations options in conjunction with growing maize silage. Some farmers used the final discussion to raise some of their own farming issues. The meeting concluded with farmers giving their feedback on the maize silage presentation and farm walk.
4.2.4 Host Farmer Interview After The Discussion Group Meeting

After the discussion group had ended HFl was asked if there were any ideas or feedback that came out of the day that had interested him. He replied:

"Yes right at the end a farmer said that they had moved their cows' calving date back to April 1st. That just shows you. Like I said the other day, you'll go through the whole discussion group and you won't hear anything of interest and then suddenly "bang" something will come out. So they have done it. I'll ask him once he finishes his mating how he likes it. Not that much was said out in the paddock about the cows or anything."

When asked if there was anything else that he got out of hosting the meeting the host farmer replied:

"I suppose the major benefit that I got out of it was the preparation for the discussion group, because you've got to sit down in your office and run through it all in your mind."

The presentation and subsequent discussion on maize silage did appear to have helped with the host farmer make a decision regarding the influence of the maize silage yield on the cost, as the host farmer then added:

"I think how I'll attack that variation in yields (in the maize crop), is by going for a different cultivar this year. "9102" I think is the one I use and it is not known as being very good at handling very dry conditions. So I'll go for a different one that is drought resistant. I don't know what I'll sacrifice by going for a more drought resistant one, but the main thing is, and I think those figures (which were presented during the discussion group meeting) showed that you need reliability. Again you can sacrifice a little bit of yield if it's going to be consistent."

Overall the host farmer gave the impression that he was pleased with how the meeting had gone and that he had enjoyed the experience of hosting the group.
The discussion group meeting hosted by HF1 seemed to be successful in addressing the host farmer issues. HF1 felt quite comfortable leading the discussion during the meeting thus most of the discussion that took place was relevant to his particular farm.

The discussion group meeting held by HF1 was also regarded as successful and enjoyable by the farmers who were interviewed. Comments such as "It was a good farm to visit. There was plenty of interest there to think about" were common amongst those farmers who were interviewed after the meeting. Part of the groups success was due initiative HF1 took in organising and planning the day. At the beginning of the discussion group meeting, HF1 stood up and introduced his own farm and directed the groups attention to the farming issues that he thought were of importance to himself and of interest to the group. In doing so, HF1 made it clear to the group the type of feedback that he wanted. During the interview held prior to the hosting of the discussion group HF1 had mentioned:

"The round up at the end is normally done....I think that's the only chance really for the host to get some feedback. It's often a good idea if your the host to tell the guys at the beginning, "these are the areas that I'm concentrating on and I would like you to make some comments on at the end of the day". Otherwise the guys tend to drift off and you may have hosted the day and got absolutely nothing out of it. So that's a bit of a danger."

Therefore HF1 had intentionally planned to focus the groups attention in the above manner. HF1 who attended discussion groups over a long period of time, felt the host farmer was responsible for setting the agenda of the meeting. In that way both the needs of the host farmer and group members are addressed at once. This was revealed during the following exchange:

Interviewer: "So are you saying the host farmer sets the agenda for the group meeting?"
Farmer "Yes it's what concerning host farmer at the moment. Yes well that's how I've found it has worked in the past. And basically what's worrying me at the moment is what's worrying the other guys. Like how do I get through to the end of the quota period and beyond."

When the host farmer was asked what the role of the consulting officer was he replied:

"The leader of discussion...The person who researchers whatever is going to be the main topic for the day...The group has to set it's own agenda and organise itself, but you still need someone to lead the discussion, to tell people to shut up or speak up."

4.3 Host Farmer 2

4.3.1 Farming background

HF2 were a young married couple who were recently employed as contract managers of 120 hectare dairy farming property, which supported approximately 290 cows. The husband grew up on a dairy farm and after completing a butcher's apprenticeship he worked for wages on a dairy farm for approximately two seasons. This was the husband's third season of dairy farming. The wife had no previous farming experience and thus was undergoing her first season of dairy farming. HF2 had been working on the current farming property for approximately 6 weeks prior to hosting their first discussion group meeting.

The husband appeared to have the final say in the majority of farming decisions. He seemed very enthusiastic about the challenge that lay ahead and yet at times appeared to lack confidence in his decision making abilities. This was shown by the following remarks:

"This is only my third season at dairy farming fully, so it's a big jump. It's a lot of making mistakes and learning from it...So it's hard, because this is the first
time where I’ve had to make all of the decisions. In the past I’ve just been told and now I have to wrack my own brain, so I’m wrapped that everyone is coming around today."

In the six weeks HF2 has been managing the property, HF2 has been involved in extending the milk shed and repairing fences. In addition HF2 was concerned about a feed shortage on the farm, both in terms of the grass in the paddocks and stored supplement. HF2 was also concerned about the condition of dry cows. In an attempt to reduce the amount of competition between the cows and hence build condition, the herd had been split into two on the basis of their breed, friesian and jersey.

At the time of the interview the farmers had 140 tonnes of silage which they wanted to delay feeding until the cows started to calve, in ten days time. However the property owner was wanting them to feed the silage now.

The farmers were glad to be hosting the discussion group meeting as they were in the process of making some key decisions and wanted some practical farming advice from experienced farmers.

The main issues the host farmers wanted the group to address are explained below:

Husband: "What I want to get out of today is should I be feeding my silage? Are the cows getting enough grass? Should I have them tighter. That’s my main question. It’s just feed. Am I feeding them enough?"

Wife: "And what we should be putting on the feed to maximise growth out of the grass we’ve got."

Husband: "We were going to put some Nitrogen on the other day but we held off for the discussion group first. The soil temps are quite low at the moment. They’re
about 7°C and you don’t get a very good response from soil nitrogen at temps so low. We would prefer to wait but if everyone thinks that we should be doing it now then we won’t hesitate and we will go out and do it.”

The couple believed that hosting the discussion group would provide the farmers in the group with a full appreciation and understanding of the issues they were currently facing. This was shown by the husband’s explanation of why he was enthusiastic about hosting the discussion group meeting.

Husband: "...Because you can address the issues that you want to. I go to a group whenever it’s on and if I have a question about my cows and I can ask it, but I can’t go out there and show them exactly what the problem is. You can say how much cover you’ve got but a lot of people don’t address it as such because it’s not staring them in the face.....And realistically when you go to someone else’s place, you’re really there on that day for them. I hope the majority of this discussion group will be discussing my farm and what can go wrong. It’s them coming around and saying you’re doing it right or doing it wrong."

In addition to obtaining farming advice from hosting the discussion group the couple believed the discussion group would provide feedback on their current management practices as well as provide a certain degree of incentive and motivation to improve. This was shown by the following comments:

Husband: "I think I can’t get the finger pointed at me today because I have only been here for such a short time, so it’s not going to affect me as much. But if they come around here next year and the place looks the same as is does today, then the finger gets pointed at me. So when I leave here for another job and one of the guys who is at discussion group today remembers me in such a mess, it’s going to affect how I get my next job. You do try a lot harder when discussion group comes around."

Wife: "It’s like someone checking your homework."
Discussion group meetings appeared to be one of the few means of gaining feedback of the couple's overall farm management practices. The couple appeared eager to receive some feedback on their short term farm plans in order to gauge and gain some confidence in their current management skills.

In addition to providing feedback on their management, hosting the discussion group appeared to provide the couple with the incentive and motivation to improve. The couple had an ambition to go 50:50 sharemilking in the short term and achieve farm ownership in the longer term.

Therefore the couple were keen to make a good impression of their farming ability with the group, and felt accountable for their management of the farm. The possibility of receiving a poor farming reference from a group member could threaten the couple's short and long term plans and thus provided an incentive to improve.

Motivation and encouragement were also provided through the positive feedback of the group. The group's acknowledgement of HF2s' hard work appeared to be anticipated and helped to encourage them with their work. This was supported by the following exchange:

Wife: "... everyone is striving to have the best herd and have the most grass and cant wait to have discussion group come back to their place again to see how well they're doing and how much a big step they have jumped and it really is a pat on the back for that farmer. Especially when people say "wow we can really see the results of what you have been doing" ....And that just helps push you along a little more. I mean sometimes you get up in the morning and think "I don't know why I do this!". But if you can get a pat on the back for something that you are doing, it just seems to make it all worthwhile."
4.3.2  The Seasonal Supply Discussion Group Meeting

The group meeting started with a one hour presentation by the guest speaker on calf rearing. This was followed by a report on the current farming situation of each group member and presentation by two candidates for the position of director of the local milk factory. The consulting officer gave a presentation explaining the effects of the "shoulder-milk payment scheme", currently being introduced by the local milk company.

The second half of the meeting began with a farm walk of the host farmers property. During the initial stage of farm walk the consulting officer set a small group exercise in pasture scoring. The first farm walk discussion took place at the two mobs of dry cows. Some farmers gave their opinion on overall herd condition. However the majority of discussion focused on general farmer opinion regarding the separation of the two herds. The second farm walk discussion took place in a poor paddock, where issues of pasture renovation, cropping, the price of fertilisers and soil compaction was discussed.

At the completion of the farm walk the consulting officer gave a brief presentation on nitrogen responses, to complement the farm walk discussion. The group were then asked to give their opinion on the silage issue and to provide feedback on any aspect of the hostfarm they thought was important. The discussion group meeting was concluded with an opinion from the consulting officer and a final summation of the farmer feedback.

4.3.3  Host Farmer Interview After The Discussion Group Meeting

The initial response given by the couple were quite positive regarding the discussion group meeting. This was shown in the exchange:

Interviewer: "First off what were your general feelings about the discussion group you hosted on the farm?"
Wife: "Yes great. We thought there would be a lot more negativity than what there was. Everything seemed to be really positive and it was like a pat on the back for us."

When asked if any particular feature of the day stood out the reply was:

Wife: "No I don't think any one particular thing did. I don't think that the discussion group hit hard on any one particular subject. I think since it was their first time around here they just had a quick overall look around. Nothing stood out too much so they didn't place emphasis on any one thing. Apart from feeding the silage out and things. The group was actually quite divided on that. Half said yes and half said no."

Prior to the meeting HF2 had wanted the group's advice on when to feed out the last remaining supplement. When asked if the silage issue had been properly addressed the husband replied:

Husband: "In a round about way it was...I got the general impression at the discussion group that everyone said that we should be feeding out silage now. I mean either way you are going to save grass, it just a question of whether that's now or later."

The second area HF2 wanted feedback and advice on was the condition of their cows. As the group had considered that the herd feeding level tied in with the silage issue, discussion seemed to focus on the separation of the two herds.

However the young couple were already happy with their decision prior to hosting the discussion group meeting and did not agree with many of the groups comments. This was shown by the husband's comments:

Husband: "It's all very well, some of them were saying, get their pecking order over and done with now. But when they start calving they all go into a new herd while
they milking and then they have to work out their pecking order again. And then when the milking herd gets too big they have to be split up again, then they have to go through it all, all over again. So I think the fewer the number of times that you have to mix them, the better, particularly as it is such a stressful time for them."

Despite already having made the decision to keep the two herds separate, the discussion group meeting provided the host farmers with the opportunity to consider their decision and have more confidence in their plans.

The third and final issue the host farmers wanted advice on was when to apply the nitrogen fertiliser. When asked about the nitrogen, the farmer replied:

"Some went on late yesterday, so that came out of the discussion group. We sort of talked about it, but I don’t think the boss was all that keen. But we got it anyway."

An unexpected benefit that had arisen from hosting the discussion group was the positive feedback received from the owner regarding their management skills.

Husband: "..But I got a lot out of the day and I think that the boss did too. The boss said the next day that he was more pleased with what we're doing. So that seems to have come out of hosting the group here."

The interview was concluded with the following host farmer remarks:

Husband: "Yes I think the group answered a few of my questions and got a few things out in the open. Like we have decided that if it gets too wet, we’ll sacrifice a one paddock and just put them on there for a couple of hours in the morning and put them onto the grass after that. Things like that. So a lot came out of it."

The host farmers appeared to lack the initial enthusiasm displayed during the first interview. The reason for their apparent disappointment could be attributed
their high expectations for the day. Early in the previous interview the farmers had stated the three main issues they had wanted to discuss. In addition the husband had expected that the majority of the meeting would focus on the farm and the potential areas that could go wrong. However, more than one half of the meeting had been taken up with the guest speaker presentations. Most of the farm walk discussion had centred on issues that had not been of concern to the host farmers, such as the splitting of the herd and the poor paddock. A solution had already been developed for both matters prior to the discussion group meeting. The potential sources of concern for the farmers were mainly addressed when all the farmers were required to give their feedback at the end of the meeting.

The fault in the management of the discussion group meeting seemed to lie with the lack of communication between the host farmer and the consulting officer. As the couple both remained relatively quiet throughout the meeting, any signals of disappointment would have been difficult for the CO to read. Unless better communication occurs between the CO and the host farmers, the CO will focus farmer discussion on the issues that he deems are important and will generate discussion. However the issues the CO deems as important may not coincide with the issues considered to be important by the farmers. If the consulting officer attempts to generate farmer discussion on a non relevant issues, the host farmers can be confused and disappointed.

4.4 Discussion and Conclusion

Some of the main objectives provided in the methodology section proved to be inappropriate as the host farmer investigation progressed. Hosting discussion groups had the potential to provide host farmers with valuable feedback and advice on their current farming system. Once the host farmers make their future plans known to the group, the host farmers becomes, in some respects, accountable to the group during future visits. Thus the host farmer is provided with additional motivation and incentive to carry out their previously stated intentions.
The main benefit provided by the discussion group meeting for HF1 was the motivation to review his current farming situation, goals and direction in preparation for the meeting. Feedback on the and suggestions for improvement from group members provided HF2 with the opportunity to consider other points of view before making decisions. Thus HF2 seemed to gain greater confidence with their management decisions once they had considered the other options which were available to them.

Hosting a discussion group meeting appeared to provide farmers with the opportunity to receive some recognition for their hard work and positive encouragement from other people who have a thorough appreciation of the work involved.

The success of discussion group meetings appears to lie with the communication between the host farmer and the CO. Consultation between the host farmer and CO prior to the meeting ensures that discussion topics are relevant and the CO can adequately prepare for the meeting.
CHAPTER FIVE

CONSULTING OFFICER INVESTIGATION

5.1 Introduction

The purpose of this chapter is gain CO's perspective of the main issues associated with discussion groups. The chapter has been divided into a number of sections that relate directly to the objectives of this investigation. The first section gives a brief account of the COs background to provide the reader with a greater understanding of the CO's position and perspective. This is followed by the CO's view of the purpose and role of discussion groups. The reasons farmers attend discussion groups are obtained from the CO's perspective and a brief comparison is made with the results from the Farmer Attendee chapter. Finally the issues concerning the CO are presented.

Chapter 5 contains the combined results of two interviews conducted with the CO. The first interview was conducted earlier on in the research. The second interview was conducted sometime later to explore further with the CO some of the issues that arose from the farmers' perspectives.

5.2 Background to LIC CO

After completing the Bachelor of Agriculture course at Massey University, the CO was recruited by the LIC. Immediately after joining the LIC the CO underwent a five month training program which involved spending time with more experienced COs as they worked.

During the training program the CO was required to undergo two special training weeks. The first week consisted of a technical training where the CO learnt about dairy farm management and went through a number of technical exercises.
The second week was an extension week which concentrated on farmer needs, the important aspects of transferring information across to farmers and general methods of extension.

Before taking up his current position, the CO had a 23 month posting in another region. The consulting officer is currently responsible for running 14 previously established geographically located discussion groups. Like the majority of his colleagues, the CO has a home based office from which he works.

5.3 CO Duties

As well as discussion groups the CO is on a number of committees, attends conferences and LIC regional board meetings as a requirement of his job. In addition the CO is involved in organising a number of field days during the year and is available for individual farm visits.

Once a month the CO has a regional day where all the COs and local Farmwise consultants from the Wairarapa, Manawatu and Rangitikei regions, meet to discuss and share farming information and ideas.

The CO is required to keep records of farmer visits, farmer attendance records at discussion groups and record of where he spends his time. The CO is also required to make a weekly production report which estimates district production over the week and forecasts production for the next week and month in advance. These production records are coordinated on a regional basis and sent to Head Office.

Although the CO is involved in many activities throughout the year, discussion groups occupy the greatest amount of his time and remain CO’s highest priority.
5.4 Purpose of discussion groups

The main role of discussion groups from the CO's point of view is to ensure the New Zealand Dairy Industry remains highly competitive on the international market. The CO explained

"...If you look at it internationally and say we've got to maintain the competitive advantage of efficient cost production of milk, the discussion group is really to try and make sure they are farming profitably and in a way that is going to make it sustainable".

When asked how discussion groups achieved their purpose, the CO replied:

"I mean sometimes that profitability one is just a small thing really...Like sometimes you are just out there to meet the needs of the farmer... But at the end of the day you try and promote profitable farm production. Otherwise the farmer might not be there in five years time. So there is identifying the farmers needs and meeting those as well as raising awareness of issues that you don’t think they are aware of. That’s where the sustainable bit comes into it."

Therefore the main focus of the CO was directed towards promoting profitable and sustainable farming systems during discussion group meetings.

5.5 The Reasons Farmers Attend Discussion Groups

The CO was asked a series of questions relating to the reasons farmers attended discussion groups and the sort of information they obtained. These questions were asked to learn about the CO's perspective on the kind of information that farmers valued and used from discussion groups. Many of the CO's answers related very closely to the responses of the farmers. This is not surprising considering the two way information flow that exists between the farmers and CO. Some of the questions and responses are given below:
Interviewer: "What do you think it is, that farmers mainly take home at the end of the day?"

CO: "Well hopefully they find out how their cows are going compared to others. Whether it's production or mating performance, condition or feed situation. It's comparative, so they might see that they have to make decisions on their farms."

Interviewer: "What distinguishes discussion groups from other sources of information?"

CO: "The biggest thing is that you have a group of 10 to 15 farmers that are all getting information from one another and sharing ideas and things that they have actually tried... farmers can get all the information they want from other areas, but if they can talk to someone else about it, discuss and argue about it, then that's really good. I would think that was the big difference. Because the information that we give them isn't new, they can get all that from the dairy exporter."

Interviewer: "What do you think farmers value more, the technical information they get from discussion groups or the hearing about the experiences other farmers?"

CO: "I think they would value other farmer's opinions and experiences. But sometimes they want to hear the facts, particularly if they are a bit sceptical of the other farmers. Therefore technical information is still a very important aspect of discussion groups."

Interviewer: "What sort information do you think farmers like?"

CO: "I guess they like information they can take home with them and things that they can understand or that they can relate to."

Interviewer: "How do you think farmers use discussion groups for decision making?"
CO: "It's a good opportunity for them to bounce ideas. They use them to gauge themselves on how they are going. It's sharing all the experiences and information that is the big one. They might use farmer experiences to give something a go and try it on their place. On the other hand they sometimes request research information to aid them in the decisions they are going to make."

In response to a question regarding the value of discussion groups the CO replied:

"I know if I was a farmer I'd sure want to go to discussion group, otherwise people never see what's on some of the other people's farms. They might see their neighbours, but generally they don't get to see the variety and different ideas that people are using at certain times of the year...And it gives them confidence with decisions, because if they've got any ideas they can bring them up at discussion group. So I think farmers get different amounts out of different groups."

Interviewer: "What do you see as your role during discussion group meetings?"

CO: "Definitely to provide leadership. Because, mostly groups need someone to lead them...to facilitate that discussion during the day. I'm there not always to give the answer, because I think a lot of the time the answers have to come from the farmers, because otherwise you end up with no discussion. Sometimes I'm there to give the answers, because that's what they are looking for...Often it's the process you go through that is more important than the end answer... Sometimes it's just to stimulate people...So there is no single role."

The CO thought the main reasons farmers attended discussion groups were to compare their farming situation with other farmers. Discussion groups provided farmers with an opportunity to learn from the experiences of other farmers and to exchange ideas. The views of the CO corresponded with the findings of the Farmer Attendees Investigation. Please refer to chapter 3. The results of this section highlight the CO's awareness of the type of practical farming information obtained
from discussion groups that farmers value and use. The findings of both chapters emphasise the importance of the CO's role in the facilitation and exchange of that information between farmers.

5.6 Consulting Officer Issues Arising From Discussion Groups

The purpose of this section is to identify some of the important issues relating to the successful management of discussion from the CO's perspective.

The material contained within this section reflect the honest views and opinions of the CO relating to discussion groups. The farmers who were interviewed during this investigation spoke very highly of the CO and many commented that he was one of the best they had experienced. Perceived weaknesses that he admitted to while freely answering the question based in this study should not be taken out of context.

5.6.1 Discussion Group Preparation

The CO often worked ten hour days and it was not uncommon for him to work over a 50 hour week. The motivation to work such long hours came from a genuine desire to help needy farmers and to establish a good reputation amongst the farmers in the region.

As a result the CO would often have to make an individual farm visit before and after discussion group meetings, as well as have paper work and telephone calls to do in the evenings.

The hours worked made it difficult for the CO to find time to work through the host farmer's issues and objectives prior to a discussion group meeting. Often the CO only managed to spend a short period of time with a host farmer before a meeting. The CO commented:
"Generally I usually make sure that I speak to them on the phone and try to get there quarter to half and hour early."

The majority of the preparation for discussion group meetings seemed directed towards preparing a topic to present at discussion group meeting and researching information. The amount of time spent varied according to the CO's work load as he explained:

"Sometimes I spend up to three hours preparing for a group and other times hardly any time. It depends on how busy I am."

From the CO's comments it appeared as though a greater emphasis was placed on the preparation of a discussion group topic and handouts than working through potential areas of discussion with the host farmer. The consulting officer recognised the need to spend more time with a host farmer before the meeting. However the emphasis was still appeared to be placed on the preparation of a topic to teach farmers rather than the facilitation of discussion relating to the host farmer issues, which the farmers found more useful. This was illustrated by the CO's comments:

"...ideally it would be great to say to those farmers, "no I'm not coming" and spend your time with the host farmer before hand, even the day before or an hour or so and prepare something that the farmers can take away."

5.6.2 The CO's Perspective On "Good" and "Bad" Discussion Group Meetings

The CO had shared similar views with the farmers regarding what constituted a "good" and "bad" discussion group meeting, which related to the amount of farmer participation in discussion. During this section the CO's views on the issues relating to good and bad discussion group meetings were investigated.

One of the biggest frustrations for the CO were host farmers without any apparent aims or objectives from hosting the discussion group meeting. In order for
the CO to successfully lead the groups discussion, he himself must have some direction or guide from the host farmer so that the day has some relevance. This was revealed when the CO commented:

"Some farmers are difficult, because you ring up and you’ll say "I was wondering what you want to have at your discussion group on Tuesday". And they go "Oh, I hadn’t really thought about that. Or, "Oh nothing really"...and then the onus is up to me. You’re either finding something to present or just making what’s happening at that time of year relevant."

On some of those occasions finding topics that generated discussion appeared to be quite an arduous task as the consulting officer revealed:

"Well sometimes it is difficult. I mean you’re facilitating but you’re also trying to think ahead all the time. Sometimes my mind just doesn’t seem to work fast enough."

The CO found discussion easier to generate amongst farmers when farmers were struggling with the conditions. This may been due to the easier identification common issues facing farmers that generated discussion. However at other times of the year when conditions were good for farmers, the CO found discussion difficult to generate. The CO stated:

"...its all right when it’s dry, because you can say "well how are we going to get through this dry period", but the nice autumn rains have come down and you know things are looking rosier. And that’s why it’s good to have something up your sleeve to talk about. So I’ll drag something out of the Exporter, on some trials that John Peno has done with heifers and create a bit of a discussion on that."

The CO mainly found discussion difficult to generate when groups contained large numbers of quiet farmers who were reluctant to participate in discussion. Quiet farmers coupled with a lack of direction from the host farmer deemed what the
CO described as a bad discussion group. Having a bad discussion group created a frustrating challenge for the CO, as he remarked:

"The frustration I have is getting good discussion going sometimes. Some days it happens, some days it is difficult, no matter how many questions you ask."

During the times when the CO anticipated trouble with generating discussion the CO tried to ensure that he had a topic to present. However when a season, problem or issue remained with the group for longer than one discussion group meeting the CO was faced with the additional problem of finding new material to present to the group. As he explained:

"The other thing that can make quite a difficult group, like the drought was a classic this year. You might of had a group in February where you talked about the drought and yet in March your talking about the same thing again. And that can make for a bad group because you have covered it all before, so that's when you really need to challenge them or prepare something new."

Small groups which resulted in a group visit to the same property on a regular basis also had the potential to become demanding for the CO as he said:

"..If you have got a smaller group and you get around them in a year, and you're back on that farm in a years time, well you’ve got to think of something different to get into. You can’t do the same things you did a year ago. Well, you shouldn’t, because sometimes people don’t necessarily want to change to what the group suggested."

In addition to the problem of finding new information to present to the groups the CO also had difficulty in finding a topic to present that appealed to a wide range of farmer interests. This was illustrated by the CO’s comments:
"But it depends because some farmers just love getting out and kicking cow pats on the farm all day and talking to their neighbour. And yet their are others there that want to be challenged and the farm cadets that just want some basic information and some people wouldn’t want it to be too structured. But ideally I would like to structure it a bit more."

In contrast to what the CO considered a bad discussion group, a good discussion group was one where the host farmer had an aim for the day and the farmers were keen to contribute. As the CO described

"A good discussion group involves having a topic to aim for or having an aim for the day. Like today John Smith wants to know how to maximise his per hectare production profitably...So there is some sort of focus, that’s really good and that can give group some really good direction."

The CO has found that having some direction from the host farmer easily generated discussion amongst the farmers. The CO highlighted the importance of farmer direction when he remarked:

"There is no right or wrong recipe for a good group. It basically comes down to the people in the group and your ability to draw the ideas out of the farmers and the direction in which you lead the group. And if you’ve got a direction in which you want to go, or you know what the farmer wants, then it can make it quite easy."

Another factor which the CO felt contributed to the success of a discussion group was the convener. The main function of the convener was to ensure that farmers were aware of where the next discussion group meeting was to be held. Some conveners were very enthusiastic, inviting guest speakers along to meetings and assisted the CO by providing him with topic and research suggestions. Other conveners not only provided less assistance to the CO but had a negative effect on the group. The CO explained:
"Sometimes it can just be a convener. That can have some effect. Like, for instance, I had a convener who sent me a list of where all the discussion groups were going to be over the next 18 months and that was it. You know, you're going to be at this one, and half of those people weren't even coming to the groups. Now that has an effect, I reckon that nearly killed the group...If you've got someone keen to invite people along, it can really get the group going. It provides enthusiasm and interest. So you can turn groups around."

5.6.3 Feedback on CO performance During Discussion Group Meetings

The CO measured the success of the discussion group by the amount of discussion and farmer enthusiasm generated during the meeting. Good discussion groups had a large amount of farmer involvement and required little CO intervention. Bad discussion group meetings were those where the CO did most of the talking due an inability to generate discussion amongst farmers.

The CO admitted earlier that a number of factors made the facilitation of discussion difficult. Although the independence COs were granted afforded them flexibility in their approach to extension, working in isolation of fellow colleagues appeared to have distinct disadvantages. One of the difficulties that the CO appeared to have was a lack of feedback, which would enable him to further develop facilitation skills.

The main opportunities to identify and develop the COs areas of weakness were during the visits of a more senior CO visits, during recruitment training of recently employed COs and the occasional farmer comment.

Three times a year, a more senior CO spends a day with the LIC CO quietly sitting in on discussion groups. At the end of the discussion group meetings the senior CO provides feedback on good and bad aspects of the group meeting and identifies some of the potential areas of improvement.
The other main source of feedback the CO receives on his performance were comments made by the new recruits sitting in on COs discussion group meetings. On the whole the CO found feedback from farmers difficult to obtain, as he described:

"Sometimes you know when you have had a reasonably good group farmers, can tell you but it's really hard to get that sort of feedback."

In addition the CO appeared to be confused by the mixed signals that he sometimes received from discussion groups. The CO went on to explain:

"The other thing is though, I have thought the day has gone badly and I've had someone come up to me to say "Oh that was as a good group. I got a lot out of that".

And I'll say "Oh really?" Because that's the hard one about feedback isn't it? Because what you think has gone badly the farmers might think it's actually been a good day. It might be just how you're feeling on the day."

The CO appeared to find objective feedback on his performance helpful in developing and improving his performance.

5.6.4 CO Aims and Objectives For Discussion Group Meetings

In response to some of the challenges and difficulties the CO faced, he was currently developing a strategy which aimed to service the information needs of farmers and eliminate some of the CO problems. The CO explained:

"The thing that I like to see in discussion groups is farmers walking away with something new. And that the farmers are challenged on the day, so that they leave with something to think about. That's what I like to see happen. And I'm just looking to see how I can work the system to make sure that happens.....And I may have to hold discussion groups every six weeks instead of every four. And on the
day that I have discussion groups there will be no individual farm visits. I would like to work more with the host farmer in preparing for the day."

In the second interview the CO expressed a desire to hold discussion group meeting less frequently and establish specialist groups. The CO wanted to run courses in conjunction with other COs in the region, which appeal to a particular target interest group of farmers. By selecting a target audience the CO felt he could reduce the problem of catering for the information needs of a wide range of farmers at one time. In addition it appeared as though specialist groups would remove the host farmer responsibility of providing the aims of the meeting and allow the CO to develop the direction of the meetings.

5.7 Discussion and Conclusion

During this investigation the CO displayed his awareness of the reasons farmers mainly attended discussion groups and the major role he played in the facilitation of the information exchange between the members of the discussion group. The CO stated that the following factors had the potential to make discussion groups difficult to facilitate:

1. A poor unmotivated convener.
2. Small groups.
3. Good farming conditions.
4. Lack of preparation by the CO before a discussion group meeting.
5. Unfavourable weather conditions remaining longer than one discussion group meeting.

Due to the large number of factors that contribute to the difficulties in generating discussion the CO appeared to place a greater emphasis on the preparation of material to present to farmers.
Building a reliance on the presentation of topics to generate discussion, lead to the problems of catering for a large range of information needs. The CO was therefore considering the establishment of "Specialist Groups" that would allow him to target the information needs of specific group of farmers.

The establishment of "specialist groups" appears to be the CO's solution to overcoming the difficulties associated with facilitating discussion and relying on the host farmer to provide the direction. Before adopting such measures it is necessary to consider whether the problems or the symptoms are being addressed, especially when farmers appear to be more interested in the information they obtain from other farmers.

Many of the current difficulties faced by the CO could be eliminated through the introduction of new extension methods which result in greater farmer participation, such as those currently being researched by Frank (1994). Another issue facing the CO was his heavy work load. From the researchers' observations, the CO was directing discussion and presenting information during the entire three to four hours of the discussion group meeting. This appeared to be very draining especially when CO held 5 discussion groups in one week and made individual farmer visits before and after the discussion group meetings. The development of facilitation techniques which lead to greater farmer involvement, would ensure the discussion was relevant, assist the CO in generating discussion and remove some of the burden currently placed on the CO.

Direction provided by the host farmer appeared to have an important influence on the success of the group meeting. The CO expressed some degree of frustration with host farmers who appeared to have no aims or goals for the day. Farmers may believe some of their farming issues are inappropriate for discussion and are thus reluctant to reveal their concerns to the CO. However, this was not an area investigated with the farmers, so further research required in this area.
5.8 Recommendations

On the basis of the results obtained from this chapter it would appear that the following areas require further investigation.

1. The use of farmer participation extension techniques (Frank 1994) should be explored in order to assess the potential benefits that could be gained through a greater facilitation of exchange of farmer information. In addition greater emphasis should be placed on developing facilitation skills during CO training, rather than just relying on providing "relevant" technical information.

2. Consideration should be given to the development of guidelines to prevent COs from over committing themselves with work and to ensure that COs have enough time to spend with host farmers prior to the discussion group meetings.

3. The development of CO support structures should be investigated. In particular methods should be considered that could assist COs with sharing difficulties and experiences in a more organised and regular manner. In addition, to providing extra assistance to the CO in the development extension skills, the organisation could benefit through the identification of potential areas of weakness.
CHAPTER SIX

CONCLUSIONS

6.1 Summary of investigation

The methods used to evaluate both the CO service and discussion groups have changed little since the introduction of the 1950 Production Improvement Plan. The quantitative methods of evaluation have been aimed at providing some measurable form of proof of the value of discussion groups in a bid for continual of funding of the service. While these methods of evaluation have shown some financial gain of farmers using the service, very little documented research exists regarding how discussion groups aid farmers, or even if the income/production advantage shown by the farmers is due to discussion groups.

On the basis of the pilot study results a qualitative method of investigation was selected to examine farmers attending two contrasting discussion groups. The study was divided into three distinct sections in order to develop an understanding the issues relating to discussion groups, from a range of different perspectives. The major issue relating to hosting the discussion group section was the importance of communication between the CO and host farmers prior to the discussion group meeting.

Communication between the host farmer and the CO ensured the CO had a thorough understanding of the issues the host farmer wanted covered during the meeting. The CO had stated that a lack of direction from the host farmer put the onus on him to identify topics that would generate discussion, which at times had proven to be challenging and difficult. Most of the farmers attending the discussion groups had also stated that focused discussions with conclusions was a major factor in distinguishing a "good" discussion group.
Having a thorough understanding of the host farmer objectives for the meeting meant the CO could focus discussion on the relevant issues and ensure the meeting was beneficial to all parties.

Although the CO was aware that direction from the host farmer contributed to the success of the meeting, he stated that on regular occasions the host farmers had not thought through the issues prior to hosting the discussion group. This concern was not investigated with the farmers due to the time limitations of the research. Further research is required in this area to explore the reasons why some host farmers appear reluctant to consider issues to present as discussion group meetings.

One of the major reoccurring themes arising during this investigation was the unique opportunity discussion groups offered farmers to obtain valuable practical farming information. Discussion groups provided farmers with the opportunity to learn from the experiences of other farmers, to compare their current farming system with that of other farmers and obtain feedback on their management techniques.

Information presented at discussion groups was in a manner farmers could understand and relate to their own farming situation. In addition the meetings provided farmers with the opportunity to discuss and develop informed opinions on technical information. Furthermore they were able to view an on-farm illustration of the technical information and could use their own methods of evaluation rather than have to accept just the technical definition provided by research bodies and extension personnel.

Most farmers felt that whole group involvement in discussion was an important component of a good discussion group, as they highly valued the views and opinions of other farmers. However large group involvement was only likely to occur if the discussion topics were of interest to the farmers.
One of the major difficulties the CO had was generating and facilitating discussion particularly when there was lack of host farmer direction and a group of quiet farmers. On the basis of these results there appears great opportunity for the LIC to explore the use of extension techniques which involve in greater farmer participation during discussion group meetings, such as those currently being researched by Frank (1994). The use of such extension techniques would ensure relevant topics of discussion and help to reduce the amount of pressure currently placed on COs.

6.2 Discussion

A significant outcome arising from this investigation was the importance of the interactions that existed between each component of the discussion group. Studying one aspect of discussion groups in isolation of the other components does not provide a true understanding of the importance of that component to the group as a whole. The social aspect of discussion groups is a classic example. During this investigation a number of people asked "Why should the dairy industry fund a social gathering of farmers?". If discussion groups simply provided an opportunity for farmers to leave their farm and catch up with other members of the community, then such a question would be appropriate. However the social aspect of the discussion group was shown to be fundamental to the sharing of personal farming information and experiences which the farmers highly valued.

There appears to be increasing pressure to introduce a user pays discussion group system. Most farmers were interested in the technical information presented at discussion groups which complemented the practical farming information currently being discussed. However the farmers highly valued practical farming information based on the experiences of other farmers. Therefore it is unlikely that the majority of farmers would be prepared to pay for that sort of information.

The introduction of a user pays system has the potential to destroy the very foundations upon which discussion groups were first built. The more experienced
farmers who are already confident of their decision making skills are unlikely to pay to learn from the experiences of other farmers. Conversely, the inexperienced members of the group are unlikely to pay to attend discussion if more experienced farmers do not attend. The breakdown of such a unique form of extension that has contributed to the success of the dairy industry as it is today, should not be risked without good reason. Before changes are proposed to the current structure and format of discussion groups, a thorough understanding of how they assist farmers needs to be obtained to ensure the problem, and not the symptoms, are properly addressed.

That is not to say the current format discussion groups should not be reviewed. Rather they should be reviewed once important issues have been properly identified.

1.3 Issues Relating To The Method of Research

The main difficulties experienced during this investigation were due to the lack of published information regarding farmers' perceptions of discussion groups. As a consequence some of the initial aims and objectives relating to each section were inappropriate. The main issues and objectives arose during the investigation, which meant the focus of the research was continually evolving over time. This made it very easy for the researcher to get side-tracked during the investigation and lose sight of the overall objectives of the research.

Having no firm foundations on which to build interview questions made it difficult for the researcher to identify some of the important issues as they arose during the interviews. Most of those decisions had to be made during the interview, as the farmers attending the discussion groups were only interviewed once. It would have been beneficial to reinterview all farmers to investigate further the issues that rose as the research progressed. However the time limitations made this impossible. The CO had to be interviewed twice, as the issues were not explored thoroughly
enough during the first interview and required too much interpretation by the researcher.

Difficulties arose with interviewer fatigue when more than three interviews were held in one day. The interviews required full concentration and good listening skills in order to asked the appropriate questions and explore the issues sufficiently.

6.4 Conclusion

A case study approach was selected for this investigation to allow a thorough understanding of discussion groups from the farmers and CO’s perspective. The results of such an investigation cannot be deemed to represent the views of whole dairy farming population. However some important issues have been identified. Further research now needs to be conducted in these areas, so that a greater understanding of the function and value of discussion groups can be obtained.
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