

SUMMARY

DAQ-123A EVALUATION OF TRAINING ACTIVITIES TO IMPROVE BUSINESS MANAGEMENT SKILLS OF FARM FAMILIES

Objectives

- Evaluate the success of a series of farm business management workshops in Central Queensland;
- Improve the effectiveness of future workshops and training activities;
- Provide a model for improving the farm business management skills of producer management teams;
- Provide evidence of the contribution of computer based approaches can make in agricultural extension.

Background

The Queensland Department of Primary Industries has been conducting training in farm business management in Central Queensland for approximately seven years. The basic course introduces participants to computerised cash record keeping and analysis using the software package, *Quicken*. A follow-up course focused on Decision Support using spreadsheets. Attendances have been high despite a significant charge and a recession in farming incomes, and most attendees have been attracted by word of mouth.

Research

The research approach consisted of four steps:

- preliminary study of questionnaires completed at the conclusion of the training workshops;
- personal interviews with attendees and non-attendees at *Quicken* workshops;
- a second interview with the same sample to reconstruct their recent decision making process;
- a final survey by personal and telephone interview to assess longer term impact of farm business management training.

Outcomes

- producers can be assisted through training to take up the use of computers and computer based cashbook systems;
- computerised cashbook systems provide the opportunity to compare enterprises for the first time;
- no evidence was found that this type of comparison is being used in major decision making processes to date, by workshop attendees or others in the Central Queensland farming population;
- there is evidence that the division of responsibilities in farm management teams (between maintaining a cash book and analysing and making decisions, largely on a gender basis) may contribute to the non-use of financial information in decision making;
- physical record keeping is lagging behind financial record keeping; and
- producers cannot envisage how their management could be improved. They perceive it depends on personality and on improving physical production.

Implications

The research indicates that the workshops were successful in impacting on farm business management skills. The awareness and attendance of the courses in the rural population, adoption rates of computerised packages, competency in the skills taught at the workshops, impact of the workshops on improving management skills such as record keeping and decision making, and benefits to teamwork within the management unit were all reported and provide evidence that the workshops were successful.

Notes

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DAQ123A

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**RURAL INDUSTRIES RESEARCH & DEVELOPMENT
CORPORATION REPORT**

**EVALUATION OF TRAINING ACTIVITIES TO IMPROVE
BUSINESS MANAGEMENT SKILLS OF FARM FAMILIES
DAQ-123A**

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A final report prepared for the Rural Industries R&D Corporation

i. EXECUTIVE SUMMARY

Skills in farm business management are considered essential for survival in modern farming. However, farmers may not recognise the need for additional skills, and as noted in the National Farmers' Federation's *New Horizons* strategy (1993, p.76), *there has been little research into the sociological or psychological factors which contribute to resistance among farmers to participation in training programs of various types*. This project addresses that gap. It involved an evaluation of the impact of farm business management courses to understand their popularity, to understand the effect of the training on management practices, and to plan future training.

The Department of Primary Industries (DPI) has been conducting training in computer based farm business management in Central Queensland for six years. The basic course introduces farm management units (husbands and/or wives) to computerised cash book accounting using the *Quicken* software, with advanced courses covering spreadsheets for decision support. Attendances were high despite a significant charge and a recession in farm incomes, with most attendees attracted by word of mouth.

Comparing the demographic characteristics of a random sample of course participants and the general farming population, the age distributions were similar. Attendees were slightly better educated, particularly comparing husband-attendees (10% with only primary education) and the general sample (45% with only primary education). Producers with higher farm incomes were more likely to attend the workshops.

The key to the success of the courses was that they filled an audience need. Course participants had a much higher proportion of computer ownership (44% owned a computer; 74% of those who did not own a computer intended to buy one in the next 12 months) than expected in the general farmer population. Participants were satisfied with the two day course format, the pace of the workshops, the ratio of one tutor to every two participants, and the emphasis on computers rather than manual processes. The course fee (\$100-150) was considered to have been money well spent.

Ideally, the impact of training in financial management would be measured in improved management capacity, resulting in higher profits and better business viability. However, many factors affect management success and it was unlikely that the impact of training would be clear cut within three years. For this reason, the research approach focused on creating a link of cause and effect between participation in training and the adoption of improved decision making practices.

The initial research indicated that while most course participants (95%) kept a cash book, only a few used the information to undertake analyses such as profit and loss (21%), gross margins (17%), cash flow budgets (34%) and enterprise budget (15%). However, several of those who reported doing analyses did not reconcile their accounts, casting doubt on the accuracy of their reporting as an indication of their actual behaviour. Because of the inconsistencies in the reported behaviour and the need to obtain reliable data, the research design had to focus on real events and encourage the interviewees to demonstrate (rather than explain) how they handled record keeping and decisions. This approach was used in the two stage survey comparing samples of attendees and the general population.

Farmers who had undertaken training were more likely to keep physical records and to total the columns of their cash book. They were much more likely (75% compared with 22%) to reconcile their cash books with their bank statements than were the sample of the general farm population. Our conclusion is that the participants in training were a group who already had a greater interest in record keeping and in better business management. Since 73% of this sample were using the *Quicken* software in the first post workshop survey and 60% were still using *Quicken* up to three years later for cashbook purposes, it seems clear that the availability of the software and training in its use increased their ability to perform the tasks necessary to monitor cash flows, as a basis for business management.

Among computerised cashbook users identified in a survey in the third year of the project, eighty per cent were allocating expenditure and income to separate enterprises. This was not done prior to the use of a computerised system, and few respondents reported doing comparative financial analysis of alternatives in the first post-workshop survey. This suggests that learning and change were occurring over several years.

Disturbing conclusions were that fewer people kept physical records than financial records in both groups, and that cash flow budgeting was done largely at the behest of financial institutions. Once done, it was not used on-farm for cash planning. Most producers based their judgement on how the business was going on the bank balance - not on financial analyses such as profit and loss, equity, or net worth. They were confident in their capacity to use their established processes to make good decisions. Most believed that good managers were born, not made, and that improved management entailed production based improvements.

The gross differences in record keeping between course attendees and others did not clarify the processes actually used by each group in management and decision making. A Card Sort technique was used to reconstruct recent experience with decision making. Each management team used cards showing activities, content and people, and resources in two recent decisions - one tactical (for example, to sell cattle) and the other strategic (for example, purchase of major machinery or investment in fencing). This technique showed that each decision making process was unique and comprised from two to fifteen steps. Strategic decisions contained more steps on average than tactical decisions, and there was no consistent evidence that workshop attendees had more methodical decision making processes than non-attendees.

Other key findings were

- discontinuity between management roles: most farms were managed jointly by a husband and wife team, but the roles were differentiated within both sample groups. Women collected and recorded information, and many husbands were relatively poor at retrieving the information, yet many decisions were made by husbands without the involvement of wives;
- financial comparisons were not used in most decisions: farmers did not have access to data on their own businesses, and had not had an opportunity to use real data and develop skills to compare the relative effects of alternative investments or management strategies; and
- members of the farm management unit perceive the role of people outside the farm as supplying information for on-farm decision making rather than assisting in analytical processes.

As a result of their experiences producers have concluded that good management is an innate rather than a developed attribute, and that for them, improved management would revolve around physical improvements rather than greater business acumen. This implies that they may not be open to, or able to envisage ways in which better information and better analytical skills could improve their decisions.

Computers provide an essential tool to handle farm records and analyse alternatives, which has previously been impractical for farm management units. Future training activities will need to focus on real decisions, to involve both men and women, and to follow through to the application of the conclusions which can be drawn from the analysis of farm records, if they are to convince farmers that they can develop and draw value from improved management skills.

ii. BACKGROUND OF THE PROJECT

DPI has been conducting training in farm business management in Central Queensland for approximately seven years. The basic course introduces participants to computerised cash record keeping and analysis using the software package, *Quicken*. A follow-up course focused on Decision Support using spreadsheets. Attendances have been high despite a significant charge and a recession in farming incomes; and most attendees have been attracted by word of mouth. This project consisted of a series of surveys designed to evaluate the impact of these workshops on producer financial management skills.

iii. OBJECTIVES OF THE PROJECT

The objectives of the project were to:

- Evaluate the success of a series of farm business management workshops in Central Queensland;
- Improve the effectiveness of future workshops and training activities;
- Provide a model for improving the farm business management skills of producer management teams;
- Provide evidence of the contribution of computer based approaches can make in agricultural extension.

iv. THE RESEARCH PROBLEM

One consequence of the cost-price squeeze which has faced Australian farmers for the last two decades has been the widely recognised necessity for farmers to acquire better management skills. These have been viewed as essential to manage smaller margins between production costs and receipts, fluctuations in world prices to which Australian farmers are exposed, and the variability of the Australian climate. The barriers to farmers developing these skills include their lack of recognition of the need for new skills and their resistance to formalised structured training (National Farmers' Federation Australia, 1993). An additional and not inconsiderable barrier is the possibility that much of the training available to farmers does not suit their existing skills, knowledge, and time availability, and little effort has been devoted to understanding what benefits arise from more formal training, or to attempting to measure these benefits in dollar terms.

The recognised need for better management skills exists despite a substantial number of courses in basic and advanced skills related to farm business management being offered both by extension services and by higher education providers over the last twenty years. These have been typically viewed as *hard to market* and if judged by the level of farm business management skill widely reported, they cannot have been successful in significantly raising the quality of management decisions. A likely reason for the difficulty in attracting participants and the apparently continuing poor level of farm management skills is that farmers are not convinced that the courses being offered will lead to better profit outcomes. In fact, research on business success or its corollary, business failure, has not produced consistent or conclusive evidence (see, for example, Edwards, 1993) about the critical success factors in farm business management. It is therefore not guaranteed that participation in farm business management training will lead to better decisions, greater profits or business longevity. While we may have ideas about what the ideal record keeping and management system might be for a particular farm, there is little published data about how farm families currently manage their farms or about how or the extent to which new skills actually improve management performance.

Against this background, the unique feature of the Central Queensland courses was the high level of participation and the popularity of the basic courses which spread by word of mouth. This popularity was sustained in the face of a recession caused by the combination of low commodity prices and sustained drought. It suggested that farmers perceived these courses to have practical value, and led to the researchers questioning what was the basis of the popularity of the courses, what was their impact on farm management, and what were the implications for extension officers running the courses, in terms of the demand and possible future directions.

The highest level impact which could have resulted from these workshops would have been an improvement in the management capacity of Central Queensland producers, resulting in an increase in the profitability and the long term viability of their businesses. However, a multitude of factors contribute to both profitability and viability (for example, climatic variation, market fluctuations, indebtedness. Within three years, it was unlikely that the impact of training in computerised farm business techniques would be sufficient to be clearly identifiable. The research approach therefore focused on creating a link of cause and effect (Bennett, 1975) between participation in training and the adoption of improved decision making practices. These might, over a longer time period, be linked to profit and business survival.

v. RESEARCH METHODOLOGY

The research approach consisted of four steps:

- preliminary research to establish a base line through a questionnaire completed at the conclusion of the training workshops
- phase 1: personal interviews with attendees at *Quicken* workshops and non- attendees;
- phase 2: a second interview with the same sample to reconstruct their recent decision making processes;
- a final survey by personal and telephone interview to assess longer term impact of farm business management training.

The methods used in each stage are outlined in Appendices 1-4.

vi. DETAILED RESULTS

Each of the major stages of the research has been reported separately in interim reports. These outline the research approach and the detailed results of each stage. These reports are attached as Appendices 1-4.

vii. DISCUSSION OF THE RESULTS

The survey at the end of the workshops (Appendix 1) indicated a much higher proportion of computer ownership among course participants than expected in the general farmer population (44% of course participants owned a computer, and 74% of those who did not own a computer intended to buy one in the next 12 months). Participants were satisfied with the two day course format, the pace of the workshops, the ratio of one tutor to every two participants, and the emphasis on computers rather than manual processes. The course fee (\$100-150) was considered to have been money well spent.

While 95% of participants claimed to keep a cash book, this data suggested that few used the information to undertake regular analyses such as profit and loss (21% of participants), gross margins (17%), cash flow budget (34%), and enterprise budget (15%). Of those who reported doing these analyses, several did not reconcile their accounts, casting some doubt on the accuracy of their reporting. It appeared that many financial analyses were done at the insistence of financiers rather than as a tool for management.

It is common in surveys for reported behaviour of respondents to be inconsistent with their actual behaviour. This led to careful design and testing of the personal interview instrument (Appendix 2), which also allowed for the interviewee to show the interviewer what was done if there was uncertainty. This survey compared a random sample of workshop attendees and a random sample of other Central Queensland producers. Attendees at the workshops were slightly better educated than the randomly selected group, particularly comparing husband-workshop attendees (10% with only primary education) and husbands in the general sample (45% with only primary education). While the age distributions were similar in the two samples, producers with higher farm incomes were more likely to attend the workshops. Cotton producers were 35% in the workshop sample but not represented in the general sample; beef was the major enterprise of 72% of the general sample compared with 25% of the workshop sample.

Most farms were managed jointly by a husband and wife team, but roles were differentiated within both sample groups. Recording cash inflows and outflows and storing invoices were handled more often by wives than husbands. However, analysis of information (in gross margins, cash flow planning) and physical record keeping were rarely handled by wives alone. Twenty-five per cent of the general group kept no cash book, while a further 16% had only a simple cheque listing. Of those with a cash book, only 54% totalled the columns, compared with 88% of the workbook attendees. Twenty-two per cent of the general population sample compared with 75% of workshop attendees reconciled their cash books with their bank statements. Cash flow budgeting was done largely at the behest of financial institutions, and once done, was not used on farm for cash planning. Most producers based their judgement of how the business was going on the bank balance, not on financial management concepts such as profit and loss, equity or net worth. Few did any comparative financial analysis of alternatives. One in the general sample and 73% in the workshop sample were using the Quicken software.

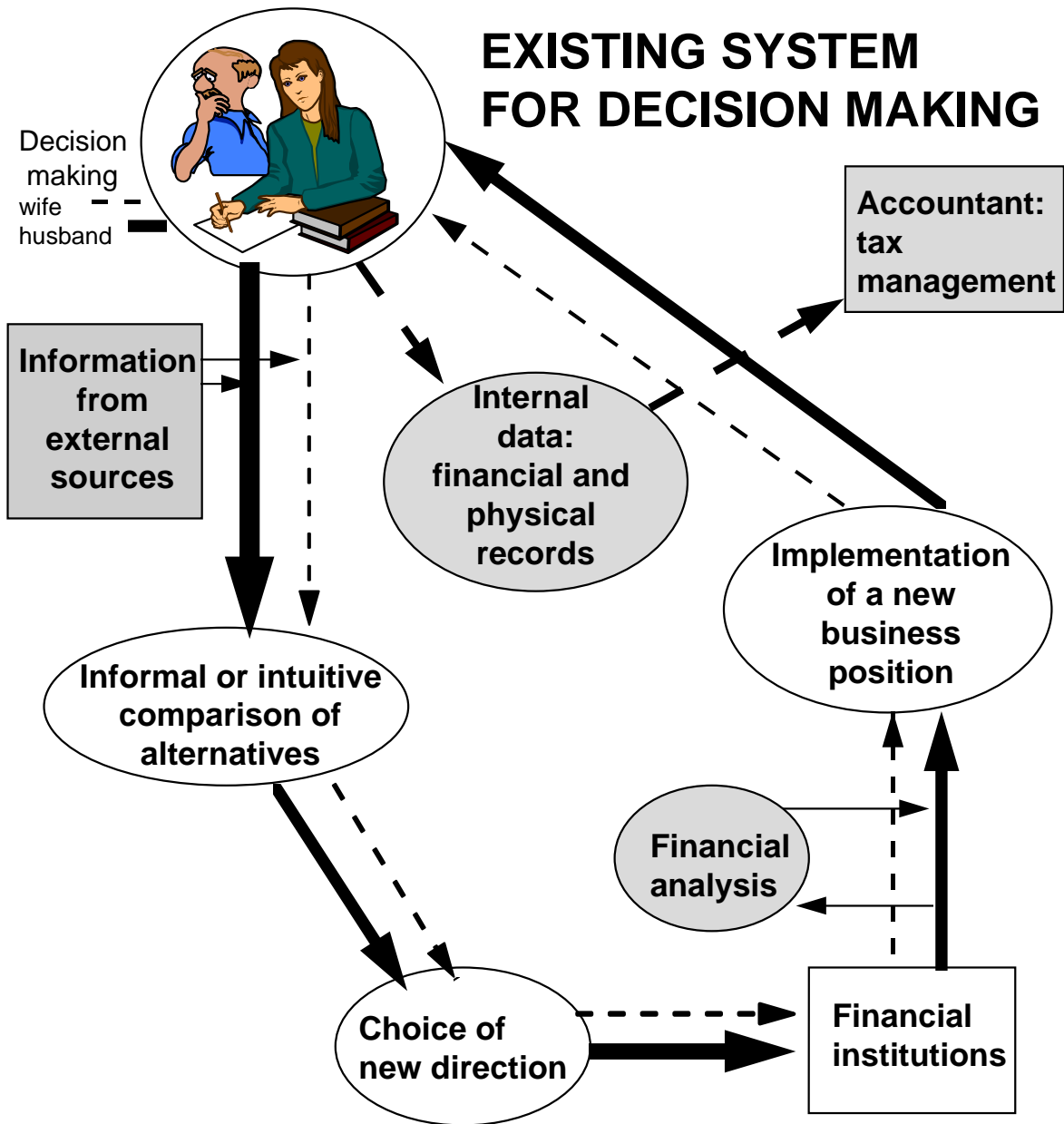
In each sample, fewer people kept physical records than financial records. Workshop attendees kept more physical records than those in the general sample, and for both groups, beef producers kept more records than crop farmers. A range of physical record keeping approaches were used, with only a small proportion (< 20%) in either group using a computer based system.

This survey, while showing some gross differences in record keeping between those who had been to the workshops and the general farming population, did not clarify the effect that workshop attendance had on management and decision making. To really understand the decision making process required a research process (Appendix 3) which could account for the role of intuition in decision making and focus on real rather than reported decision making behaviour. A Card Sort technique was used to help respondents reconstruct recent experience with decision making. Each management team used cards showing activities, content and people, and resources of the steps in two recent decisions - one tactical (not affecting the capital structure of the farm) and the other strategic (changing the capital structure of the farm).

This technique showed that decision making comprised from two to fifteen steps. Each process was unique, strategic decisions contained more steps on average than tactical decisions, and there was no consistent evidence that workshop attendees had more methodical decision making processes than non attendees.

The husband was involved in every decision. Cattle decisions were more likely to be made by husbands alone than were cropping decisions. Wives were involved in 63% of strategic decisions and 58% of tactical decisions and wives were generally less involved in tactical decisions.

Figure 1

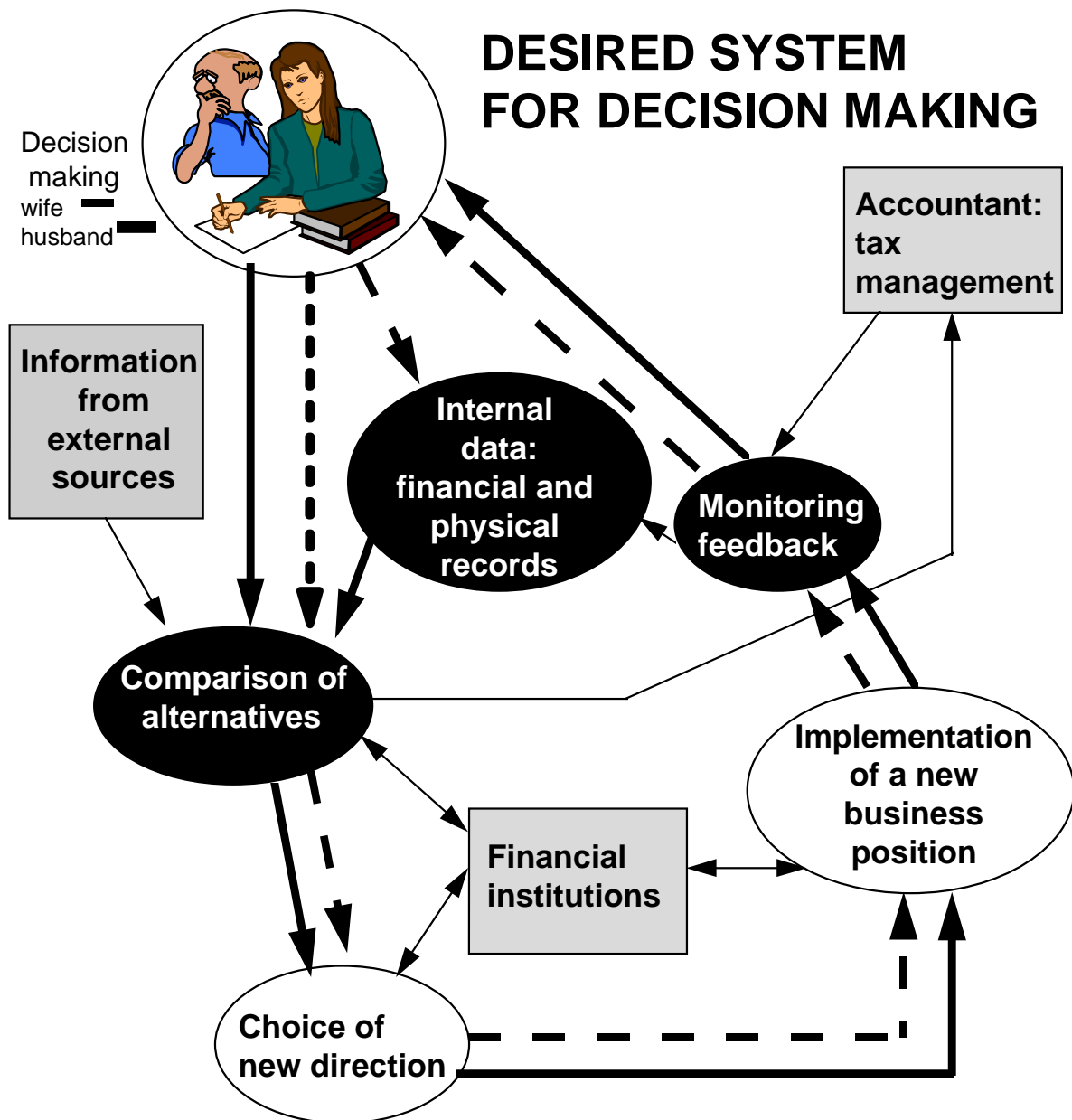


FEATURES

- external sources used for information, not analysis or decision making
- internal data not used for analysis for decision making
- comparison of alternatives rare
- little monitoring of effects of decisions
- defined gender roles

Gender role	Male	Female
•Decision making	+++	++
•External information	++	+
•Internal data	+	+++

Figure 2

**FEATURES**

- comparison of alternative strategies using computer based system central to decision making
- internal data used for comparison and analysis
- capacity to monitor progress
- shared or complementary gender roles
- all decision makers have access to data and contribute to comparisons

This implies that a significant number of decisions are made without the involvement of wives, yet wives should have a good feel for the state of the business from regularly doing the books. The earlier survey showed that many husbands were relatively poor at retrieving the financial information documented and stored by their wives.

Based on the research results a diagrammatic model of decision making was developed (Figures 1&2). This indicates that the use of a computerised system can contribute to key features of improved decision making. It enables comparison of alternative strategies based on internal data and provides the capacity to monitor progress. Additional changes which appear to be necessary to improving farm business management are the development of shared or complementary gender roles (to ensure that key information is available to decision makers) and improved skills for all decision makers in accessing data and conducting comparisons.

This survey showed only a loose relationship between having skills or analyses such as cash flow budgets, and using them. This again reinforced the perception that cash flow budgets were being done for the bank and not for use by the farm management team. For example, half of all beef enterprise decisions were made without any process of financial comparison. Similarly 57% of all the decisions researched were made without reference to either bank or accountants. Where bank managers were involved it was generally late in the process, to check whether the producers *were allowed* to undertake their chosen strategy.

Agricultural merchants and the media were important information sources for tactical decision making; DPI were consulted in 25% of strategic decision making, particularly in relation to enterprise and property development. Most participation of outside people in decision making was in information input rather than decision making process. Producers were generally confident in their capacity to use their established processes to make good decisions. This implies that they may not be open to, or able to envisage ways in which better information and better analytical skills could improve their decisions.

The final survey (Appendix 4) involved a larger sample, and confirmed many of the conclusions of the smaller early samples. It found that 60% of attendees were still using Quicken up to three years later for cashbook purposes. Eighty per cent of computerised cashbook users were allocating expenditure and income to separate enterprises. This is the first step to tighter business management and was not done prior to the use of a computerised system.

After time for reflection and the opportunity to apply their skills, the positive attributes of the workshops were identified as the relevance of the examples used, the format of the workshops, and the ease of gaining assistance for subsequent enquiries. The workshops did result in an increase in the use of computerised approaches. Few attendees had applied for and received the Rural Training Grant (funded through the Rural Adjustment Scheme).

In relation to participation in further training, producers found it difficult to identify training needs to improve their management. Most believed that good managers were born, not made, and that improved management entailed production based improvements.

The success of the farm business management workshops in Central Queensland

The research indicates that the workshops were successful in impacting on farm business management skills. The awareness and attendance of the courses in the rural population, adoption rates of computerised packages, competency in the skills taught at the workshops, impact of the workshops on improving management skills such as record keeping and decision making, and benefits to teamwork within the management unit were all reported and provide evidence that the workshops were successful.

This conclusion is based on the following findings:

- 60% awareness existed in the rural population of availability of the workshops, as a result of a positive word of mouth effect from the 20% who have attended a workshop;
- there is a high rate of adoption of both the Computerised Cashbook and Spreadsheet packages among those who attended the workshops;
- the workshops have been successful in transferring skills, with high levels of competency exhibited in skills taught at both the original and the higher level decision support workshops;
- a large proportion of producers who attended a workshop improved their financial record-keeping and analysis skills. Even in producers who did not adopt a computerised cashbook after the workshop, there was often a level of improvement, attributed on occasion, to the materials supplied with the course;
- computerised cashbooks were extremely beneficial to useful record-keeping. Computerised records allowed tracking of expenditure in different cost categories and heightened awareness of cash position. This has the potential to enable producers to develop more effective cost control and liquidity management strategies;
- there was evidence that attendees were using enterprise analysis in a computerised cashbook. This was previously impractical in a manual system, and has the potential to enable producers to make more informed decisions regarding resource allocation on farm;
- the workshops enhanced communications concerning decision making between team members;
- spreadsheets were considered beneficial to both record keeping and decision making. The impact was primarily on tactical decision making processes by performing ‘What If’ comparisons of alternative outcomes.

viii. IMPLICATIONS AND RECOMMENDATIONS

Some key messages from this research were:

- producers can be assisted through training to take up the use of computers and computer based cashbook systems;
- computerised cashbook systems provide the opportunity to compare enterprises for the first time;
- no evidence was found that this type of comparison is being used in major decision making processes to date, by workshop attendees or others in the Central Queensland farming population;
- there is evidence that the division of responsibilities in farm management teams (between maintaining a cash book and analysing and making decisions, largely on a gender basis) may contribute to the non-use of financial information in decision making;
- physical record keeping is lagging behind financial record keeping; and
- producers cannot envisage how their management could be improved. They perceive it depends on personality and on improving physical production.

The success the workshops had on impacting on producer management skills, and the recognition and overall positive attitude towards FBM Workshops, was attributed to many positive features of the Workshops. These features provide a guide to future workshop design. They included :

- the two day format allows time for participants to master skills
- use of practical industry related examples
- the interactive group environment
- acceptable price
- knowledgeable and helpful tutors
- the accessibility of the initial course and the availability of follow-up service
- the easy-to-follow course format and additional materials
- use of up-to-date and easy to use computer technology.

Strategies to improve the effectiveness of future workshops and training activities

Producers found it difficult to identify their training needs. They believed that personality traits are of major importance in a manager, and that these traits are innate characteristics unable to be developed by training. Clearly workshops need to be carefully designed to ensure that producers experience growth in their skills. The outcomes from the workshop need to be of visible practical value and the experience must be that acquiring these skills is achievable.

Producers identified production based issues as management priorities. The tendency not to rank financial management as a concern, suggests that a different group of producers may be attracted to workshops if they were based on production issues with relevant financial management concepts incorporated into the workshop. For example, financial considerations might be included in workshops relating to improving pasture, increasing breeding stock or buying another property.

Among the producers who have completed an advanced Decision Support Workshop demand existed for follow-up activities. To meet this demand, specific issue workshops, such as drought feeding, property expansion, or pasture development, were planned, utilising spreadsheet based decision support methodology. Based on the experience to date the following format was planned:

- one day;
- concentrated on a specific issue;
- providing opportunities in a motivatory environment to explore problem-solving avenues for their specific property situation, aided by group interaction feedback and assistance from tutors.

Organisers of workshops providing farm business management skills need to promote awareness of incentives to attend training activities, such as the Rural Training Grant, since few producers were successfully accessing this support.

Producers do not understand the concept of strategic planning. They consider agricultural production is controlled by environmental or seasonal conditions so they have no accurate method in which to plan for future production changes. This is consistent with little evidence of strategic approaches through-out the survey.

Producers often see budgeting as an exercise in predicting an unreliable future rather than as a tool to help them plan for uncertainty. Budgeting for variability and risk such as for poor, average and good outcomes in variables such as yield and price, was an alien concept to most producers. This is the type of process that needs to be developed in producers, to enable them to effectively use financial records in management.

If there is to be major improvement in farm business management, there must be an effort made to encourage entire management team participation in training activities. Lack of communication between the member responsible for keeping the records (whether physical or financial), and the member responsible for the day-to-day running and decision making on the property, appears likely to lead to less informed decisions by the decision maker. The importance of gender roles in improving farm business management is worthy of detailed further research.

Evidence of the contribution of computer based approaches in agricultural extension

The majority of the rural community consider the use of computers for on-farm management as positive. It is envisaged that computer adoption is likely to increase in the future. The wider acceptance and increased affordability of computers by the rural and general community will continue to see computers having a significant role in agricultural extension.

Producers are receptive to progressing to computers where they provide relative advantage in dealing with practical issues. It is unlikely that the Central Queensland Farm Business Management Project would have made the same impact on record-keeping analysis and decision support using non-computer based methods. Financial management strategies such as cost control allocatable to itemised categories, liquidity management due to instantaneous cash balance, and resource allocation to enterprise analysis, are all advances in farm business management provided by a computerised approach to cash record-keeping which are impractical or difficult to do in a manual system. They indicate that the benefits of using computers can be clearly demonstrated when they provide the only practical strategy to achieve a desired outcome.

ix. INTELLECTUAL PROPERTY

There were no commercially significant developments, patents applied for, or licences resulting from this research.

x. TECHNICAL SUMMARY OF INFORMATION DEVELOPED

The summary of information developed is presented under Section vii on the Discussion of Results. Specific comments on methodology are incorporated in the Appendices. The Card Sort Technique outlined in Appendix 3 was an advance in research technology.

xi. NATIONAL ISBN LIBRARY LISTING AND CIRCULATION

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APPENDIX 1

PRELIMINARY EVALUATION OF FARM BUSINESS MANAGEMENT TRAINING

a project funded by DPI and RIRDC

This paper outlines the findings of a preliminary evaluation in a three stage evaluation of Farm Business Management Training Activities in the Central Region of Queensland Department of Primary Industries. The project is titled 'Evaluation of Training Activities to Improve Business Management Skills of Farm Families' and is funded by RIRDC and DPI.

John Daniels
Elizabeth Woods
Alan Jamieson

Outline of the workshops

Each workshop was two days in length. On the first morning, the emphasis was on discussion of office procedures and a manual cash book exercise. The remainder of the workshop focused on 'hands on' cash book exercises using the computer program, Quicken®. After cash book information is entered, Quicken® can generate a comprehensive range of reports and budgets. Quicken® was chosen for these workshops because it is easy to operate and is relatively inexpensive. Some producers used their own computers for the exercises, but most used computers supplied by the Farm Business Management Program.

After preliminary discussions with DPI staff, industry groups or representatives invited participants with similar enterprises to form workshop groups. Workshops with community groups were preferred, to encourage the formation of local support networks to help the participants after the workshops. The preferred group size was approximately 10 management units.

Workshop evaluation

At the conclusion of each workshop, a short questionnaire was used to define the participants' present financial management practices and their perceptions of the workshops. These questionnaires were modified during the project to obtain more specific information.

Workshop structure

Feedback on the questionnaires was very supportive of the existing workshop design. The main points are as follows.

1. There was almost unanimous support for the two-day format.
2. The pace at which the workshops were conducted was appropriate.
3. Participants considered the ration of one tutor to every two management units to be just right.
4. The producers considered that the emphasis on computers in preference to manual exercises should be maintained.
5. There was also general agreement that the cost of the workshops (\$100-\$150) was money well spent.

Use of cash books

Ninety-five per cent of workshop participants claimed to keep a cash book. Of those with cash books, 59% reconciled their cash book themselves and an additional 24% were aware that their accountants reconciled their cash books. It was surprising to the project team that so many participants had cash books which they did not reconcile. These findings raise the following issues:

1. Was the high percentage of producers claiming to have cash books the result of misunderstanding of what constitutes a cash book? It is possible to truthfully answer yes to have a cash book regardless of what it contains.
2. Is the high percentage of producers with cash books representative of the general community, or, were the producers attending the workshops a biased group?
3. Questions on how producers use their cash book information were poorly answered, with a strong suggestion that to many producers the cash book is prepared as a requirement of tax accountants

and not as a business management tool. The fact that only 59% reconcile their cash books supports the suggestion that many producers have cash books to satisfy their accountants and not themselves.

It is not possible to clarify these issues with questionnaires at the end of workshops. Personal interviews are necessary with the interviewer having access to the producers cash books.

Computer ownership

Forty-four per cent of participants owned computers. This is clearly above the general ownership by producers, confirming the bias in the group attending workshops. Only one management unit suggested that they would never buy a computer and of those without computers (35), 74% intended to buy a computer in the next 12 months. This suggests a rapid future increase in computer ownership.

Financial analyses and budgets

While nearly all producers collected cash book information, there was less evidence that the cash book information was being used for further financial analysis and budgeting. At the first two workshops, the participants were simply asked 'how they used the cash book information' without prompting on the types of financial analysis we expected. The responses obtained varied from 'to produce cash flow reports, profit and loss, etcetera' to 'to meet the needs of accountant only'. Because of the general nature of responses, eg, 'keeping track of expenses' or 'estimating if able to afford new machinery' it was difficult to determine to what extent the producers were systematically analysing the information. It was clear that there is no common language for describing financial management practices.

In an attempt to overcome this confusion, the remaining 8 groups were asked specifically whether they did Profit and Loss statements, Gross Margins, Cash Flow Budgets and Enterprise Budgets 'regularly', 'sometimes' or 'never'. The responses are summarised below:

Analysis	% of Producers			
	Regularly	Sometimes	Never	No response
Profit and Loss	21	32	40	8
Gross Margins	17	25	48	10
Cash Flow Budget	34	20	27	20
Enterprise Budget	15	15	27	44

The high 'no response' rate supports the suggestion that many of the producers did not understand what the analyses were. Accepting that this sample is biased towards better financial managers, only a small proportion of producers in the general community must regularly analyse their financial situation. Comments in the questionnaires such as references to 'bank budgets' indicate that in many cases financial analysis is done only on the insistence of financiers.

APPENDIX 2

PHASE 1: SURVEY OF ATTENDEES AND NON ATTENDEES OF FARM BUSINESS MANAGEMENT TRAINING

a project funded by DPI and RIRDC

This paper outlines the findings of the first survey in a three stage evaluation of Farm Business Management Training Activities in the Central Region of Queensland Department of Primary Industries. The project is titled 'Evaluation of Training Activities to Improve Business Management Skills of Farm Families' and is funded by RIRDC and DPI.

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Introduction

This paper reports the findings of a survey of farm business management practices in Central Queensland during March and April 1992. The interview schedule is attached.

The survey method

The survey involved personal interviews with two groups:

1. A random sample of 32 producers representing the general population of Central Queensland agricultural producers(G)
2. A random sample of 20 workshop attendees (W)

Education and age

The data in Table 1 suggest that the workshop attendees were a little better educated than the general population. This effect was most apparent among husbands in the general population where 45% had only primary education compared to 10% of the workshop attendees.

Table 1 Level of education

HIGHEST LEVEL REACHED	GENERAL HUSBAND	W'SHOP HUSBAND	GENERAL WIFE	W'SHOP WIFE
Primary	45%	10%	28%	10%
Junior secondary	19%	55%	40%	50%
Senior secondary	13%	10%	8%	25%
Technical after junior	10%	5%	12%	0%
Technical after senior	7%	15%	4%	5%
Tertiary	7%	5%	8%	10%

The spread of ages was similar for both groups confirming that no particular age group was attracted to workshops.

Gross income

The data in Table 2 suggests that producers with higher farm incomes are more likely to attend the workshops.

Enterprises represented

The number of single enterprise producers (G 47%, W 50%) and the number of mixed cropping/cattle producers (G 53%, W 50%) were similar for the general population and workshop attendees. However, 35% of workshop attendees had cotton as their major profit making enterprise compared to nil in the general population sample. Also, 72% of the general population had cattle as their major profit making enterprise compared to 25% of workshop attendees. It is not known whether the workshop attendance bias towards cotton growers and away from cattle producers is a reflection of perceived need by producers, or the way the workshops were arranged.

Table 2 Gross farm income

GROSS FARM INCOME	% GENERAL POPULATION	% WORKSHOP ATTENDEES
Less than \$100,000	26	5
\$100,000 to \$250,000	32	15
\$250,000 to \$500,000	29	50
More than \$500,000	13	30

Where people do bookwork

Most producers have an office (G 72%, W 85%). However, 59% of the general population and 30% of workshop attendees do their bookwork on the kitchen or dining room tables. It would appear that the increased use of computers by the Workshop group requires that the worker has to go to the work instead of the work being taken to their preferred environment.

Gender analysis

The majority of farms in this survey were managed by husband / wife teams. In many cases, management roles were shared, but in others, each had individual duties. For example, recording cash inflows and outflows was handled more often by wives than husbands. Storing invoices was handled by wives in the majority of cases. However, analysis of information (eg, gross margins and cash flow planning) and physical record keeping was rarely handled by wives alone. This division of duties could be causing communication problems on farms. The division of roles was similar for the general population and workshop groups.

Sorting invoices

More workshop attendees (G 28%, W 55%) sort newly received invoices into categories depending on when payment is planned. Most producers (G 75%, W 85%) sorted invoices by account or by date after payment.

Storing invoices

In the majority (G 63%, W 70%) of teams, the person who stores the invoices after payment claims to be ALWAYS able to retrieve specific invoices. However, the ability of others (not the storer) to ALWAYS be able to retrieve specific invoices was much lower (G 22%, W 30%). Therefore, most teams have a system that works, but successful retrieval of information depends on the storer being present. The wives were better at retrieving invoices than husbands, because they were more likely to have been the storers.

Cash book records

As shown in Table 3, there were major differences between the general population and workshop attendees in the type and detail of 'cash book' record keeping. It is of concern that a quarter of the general population keep no cash book records and a further 16% only keep a simple cheque listing which serves no management purpose. The fact that only 54% of the general population who had cash books totalled the columns, strongly suggests that the cashbooks are generally being done for the benefit of taxation accountants and are not being used as a management tool. By comparison, 85% of workshop attendees totalled cashbook columns suggesting greater use of the information. The suggestion that the general population tend to keep cash book information for 'someone else's benefit' is supported by the finding that only 22% of the general population compared to 75% of workshop attendees reconcile their cash books with their bank statements.

Table 3 Cash book record keeping

TYPE OF CASH BOOK RECORDS	% GENERAL POPULATION	% WORKSHOP ATTENDEES
No cash book records	25	0
Cheque listing	16	0
Cash book with dissection by category	34	40
Cash book with dissection by category and enterprise	6	5
Journal/Ledger	3	0
Computerised system	16	55

Use of computers

Computers were owned by 19% of the general population and 70% of workshop attendees. All of these computers were IBM compatibles. Workshop questionnaires indicated that 44% of attendees owned computers before attending workshops which suggests:

- Producers who already own computers were most likely to attend workshops
- Producers who do not own computers before attending workshops were likely to purchase computers soon after attending workshops. Many producers were using the workshops to assess the potential value of computers before they bought.

Sixty-eight per cent of workshop attendees owned their computers for two years or less, indicating a sudden surge in computer ownership.

The impact of the workshops was clearly demonstrated by the fact that 77% of workshop attendees who owned computers used the Quicken software that was used at the workshops. One non-attendee also used Quicken, which indicates an indirect effect of the workshops.

Physical information record keeping

The records that people keep depend on the enterprises involved. Some people keep surprisingly few records. Table 4 shows examples of the records that crop growers keep. The comparisons for crop spray and fertiliser records reflect the cotton grower bias among workshop attendees, because cotton growers use sprays and fertiliser on a regular basis while some dryland graingrowers rarely use them. Recording of crop areas and yields were similar for the general population and workshop attendees. Managers must find it difficult to accurately track the consequences of decisions and use the information for future planning unless records are kept.

Table 4 Crop record keeping

RECORDS KEPT	% GENERAL POPULATION	% WORKSHOP ATTENDEES
Crop areas	56	71
Crop yields	61	77
Crop sprays	29	71
Fertilisers used	39	65

Record keeping by cattle producers was more complete, as shown in Table 5. Management must be difficult for the small number of cattle producers who do not record cattle numbers.

Table 5 Cattle record keeping

RECORDS KEPT	% GENERAL POPULATION	% WORKSHOP ATTENDEES
Cattle numbers	87	93
Calves weaned	77	80
Calves branded	94	80

The data did not indicate any dominant method of physical record keeping. There were various combinations of pocket notebooks, diaries, paddock books and livestock books. A lot of reliance was placed on memory. A small number (G 9%, W 15%) of producers were using computerised record keeping. It was interesting to note that a higher proportion (G 75%, W 65%) of the general population claimed to be always able to retrieve their physical records, and an even bigger difference (G 52%, W 19%) existed in the ability of others (not the recorder) to always be able to retrieve physical records.

The physical record keeping of the workshop attendees did not appear to match their superior financial record keeping.

Cash flow budgeting

At the workshops when producers were asked in a questionnaire whether they did cash flow budgets, 54% claimed to do them at least sometimes. A high proportion of workshop attendees did not appear to understand exactly what a cash flow budget was, so in the survey producers were simply asked 'how they predicted when they would have spare cash or cash shortages'. The survey found that 60% of workshop attendees did cash flow budgets for cash planning purposes compared to 38% of the general population. The remaining producers relied on historical patterns and bank statements.

When producers were asked how they learned to do cash flow planning, a large number (G 45%, W 33%) volunteered that they learned because the banks demanded it. This is reflected in the finding that 50% of the general population and 50% of workshop attendees use a standard or bank form for their cash flow budget.

It is not a mistake that many producers who later revealed that they did cash flow budgets, did not identify them as a tool for cash planning purposes. In fact, several producers made it clear that the budgets were done for the banks and then ignored.

Guide to how farm is going financially

When producers were asked to describe 'how they know how their farm is going financially' almost all (G 84%, W 75%) nominated simple short term indicators such as bank balance. Very few producers mentioned concepts such as profit and loss statements, equity or net worth. This suggests a short term focus on financial management.

Financial comparisons

The theoretical uses of financial comparative analyses in farm business management include decisions between major enterprises, between crops, between potential markets or different production systems. The producers' perception of financial comparative analysis (eg, gross margins) differed dramatically from what a theorist might expect. This was identified when producers were asked to nominate the financial comparisons that they make. As shown in Table 6 many producers have well established rules-of-thumb largely controlled by practical and physical conditions which they operate by. Decisions which are complex in a financial sense are dealt with in a routine or straight forward way on this pragmatic basis. Two of the workshop attendees had difficulty defining any financial comparisons.

Table 6 Perception of financial comparisons in farm business management

PERCEPTION OF FINANCIAL COMPARISONS		% GENERAL POPULATION	% WORKSHOP ATTENDEES
1	Difficulty defining or no interest in comparisons	0	10
2	Decisions seen as straight forward	41	35
3	Emphasis on financial management	6	10
4	Combination of 2 and 3 above	53	45

The number of producers who did gross margins from both the general population and the workshop attendees was only 25%. A high proportion (G 63%, W 40%) claimed to rely on gut feelings in financial comparisons.

Farm business management information

Various sources of information on farm business management were given in a wide range of combinations. Accountants were the most prominent (G 59%, W 60%). Banks were mentioned in fewer cases (G 25%, W 15%). DPI was mentioned by 30% of workshop attendees compared to 19% of the general population.

APPENDIX 3

PHASE 2: EVALUATION OF THE IMPACT OF FARM BUSINESS MANAGEMENT TRAINING USING THE CARD SORT TECHNIQUE

a project funded by DPI and RIRDC

This paper outlines the findings of the second survey of a three stage evaluation of Farm Business Management Training Activities in the Central Region of Queensland Department of Primary Industries. The project is titled 'Evaluation of Training Activities to Improve Business Management Skills of Farm Families' and is funded by RIRDC and DPI.

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‘I do most of my strategic thinking on horseback’

Introduction

This survey involved the same sample as the previous survey in this project. Personal ‘Card Sort’ interviews with 46 producers in Central Queensland provided useful information on 44 tactical (operational) decisions and 41 strategic decisions. Tactical decisions are defined as decisions of an ongoing nature that do not change the capital structure of the farm. For example, the decision to grow sorghum instead of sunflower is a tactical decision because almost the same equipment is used to grow both crops. The decision for a graingrower to grow cotton for the first time would be a strategic decision because it involves the purchase of specialised equipment.

Background to the survey method

The number of variables that farmers have to cope with makes farm financial decision making complex. When farmers are asked how they make particular decisions, the terms ‘gut feeling’, or ‘experience’ are frequently used to explain reasons for outcomes. To really understand decision making, we need to be able to probe beyond tacit responses to discover what the key influencing factors are. This is not always easy, or even possible, given the definition of intuition by Isaack (1978) who suggests that through intuition, knowing can occur without conscious awareness of rational thinking.

Argyrus (1991) introduces another complicating factor with this comment:

Ask people in an interview or questionnaire to articulate the rules they use to govern their actions, and they will give you what I call their ‘espoused’ theory of action. But observe the same people’s behaviour and you will quickly see that this espoused theory has very little to do with how they actually behave... When you observe people’s behaviour and try to come up with rules that would make sense of it, you discover a very different theory of action - what I call the individual’s ‘theory in use’.

The Card Sort technique used in this project was designed to help respondents to reconstruct decision making processes. By asking people to describe how they made recent decisions rather than asking them to generalise about what they might do given certain scenarios, the effect of the paradox suggested by Argyrus can at least be minimised. It is important that techniques to study decision making do not make respondents feel that they have to invent rational explanations for intuitive decisions.

The interview process

The process used in the Card Sort technique is a modification of a technique used by Underwood (1985) to study learning.

Each management unit (eg, husband and wife) was asked to consider two decisions that had been made recently, one tactical and one strategic. Tactical decisions are defined as those that do not involve any change to the capital structure of the property. The card sort process involves arranging cards (size 15cm x 10cm) which represent components of the decision making process, on a table (from top to bottom) in the sequence that they happened. Respondents could either choose existing ‘example’ cards or they could make their own by writing on blank cards with felt pen. The process involved five steps, each using different coloured cards as follows:

1 Activity cards

A set of blue 'activity' cards were spread face up on a table with additional blank cards and a felt pen. The management team was then asked to consider the basic activities they went through in order to make the decision and to arrange the cards in that sequence, for example:

LOOKING
THINKING
READING
CALCULATING (WRITTEN)
ACTION

The management team was free to swap the cards around until they were satisfied.

2 Content cards

Red content cards were then placed beside the activity cards to describe what actually happened in each step. Several 'content' cards may be used to describe one 'activity'. At this stage, it was important to differentiate between financial comparisons the managers 'thought' about and those that they actually wrote down. The following is an example of the use of content cards:

LOOKING	Paddock FEED/CATTLE CONDITION/CATTLE
	NUMBERS
THINKING	CASH NEEDS
READING	CATTLE PRICES/MARKET PROSPECTS
CALCULATING (WRITTEN)	CASH FLOW BUDGET
ACTION	SOLD STORE CATTLE

3 Resource cards

Orange resource cards were used to identify who (including who in the management team) was involved in each action in the process and what resources were used. Not all of the management team were involved in all steps. Resource cards may have been arranged as follows:

LOOKING	HUSBAND
THINKING	HUSBAND
READING	HUSBAND/'COUNTRY LIFE NEWSPAPER'
CALCULATING (WRITTEN)	HUSBAND/WIFE/BANK MANAGER
ACTION	

4 Decision cards

White decision cards were used by the interviewer to help clarify with the managers, what part of the decision process each activity was addressing. The steps considered were those outlined by Engel, Blackwell and Miniard (1990) as follows:

- Motivation and need recognition
- Search for information
- Alternative evaluation
- Purchase
- Outcomes

5 Value cards

Respondents assigned value cards to each activity to indicate the perceived value of activities. These cards were marked, very valuable, valuable, some value or no value.

Recording the information

When the card sorting process for each decision was complete, the interviewer recorded the information on a standard sheet. As soon as possible after the interviews, the interviewers made notes in a comments column on the recording sheets to help to fully explain points missed in the process and to detail relevant background information.

Interpretation of problem solving

Engel et al (1990) define problem solving in terms of extended problem solving and limited problem solving. It was intended that the interviewers would circle relevant statements to determine whether the managers were using extended problem solving or limited problem solving. This caused problems for the interviewers because the model was not very appropriate for major decision making. While farm managers might appear to make major decisions in a 'limited problem solving' way, the process could better be described as tacit 'extended problem solving'.

Data analysis

Information from the interview forms was coded and analysed using the SPSS computer package.

Strategic decision categories

It was possible to assign the responses into the following categories:

- *Capital* (13 responses) Capital decisions involved the decision to purchase a major capital item, for example a tractor, dozer or utility.
- *Enterprise* (11 responses) Enterprise decisions involve a change in the balance of enterprises on the farm. This may be introducing a new crop like cotton, a new feedlot, or converting pasture to cultivation.
- *Land* (6 responses) Land decisions involved the purchase or sale of land.
- *Property development* (10 responses) Property development decisions involved major development such as a dam for irrigation, or clearing scrub for pasture.

Tactical decision categories

Tactical decisions were divided into the following categories:

- *Crop* (14 responses) Crop decisions involved choosing between crops grown regularly on the property.
- *Variety* (4 responses) Variety decisions involved choosing the most appropriate variety of a particular crop.
- *Cattle options* (19 responses) Cattle options were decisions on cattle management, like when to buy and sell, or when to start supplementary feeding.
- *Other* (3 responses) 'Other' decisions were tactical decisions that did not fit into the above categories.

Complexity of decisions

By using the card sort technique, decision processes that were seemingly tacit, were found to be made up of 2 to 15 activities with an average of 5 for tactical decisions and 7 for strategic decisions. The greater number of activities for strategic decisions than tactical decisions reflects their greater complexity. The information from the survey was comprehensive, with all management units working through a unique process with activities ranging from prayer to financial calculations.

Strategic decision making

Gross margin analysis

Gross margin analysis does not always have a purpose in strategic decision making. In fact, if gross margin analysis was used as the sole decision making criterion, it could be misleading because fixed costs are not considered. It is therefore not surprising that gross margin analysis did not play a significant role in strategic decision making with 84% of cases not considering gross margins at all. Gross margin analysis was used in 9% more cases by non workshop attendees than attendees. Gross margin analysis was mostly used for enterprise and property development decisions.

Financial comparison

‘Financial comparison’ includes processes that managers used to compare the financial consequences of options, for example, to buy or not, or to change or not. Given that the producers were asked to nominate business management decisions, it was a surprise that 25% did not even consider financial comparison. A further 34% producers said they thought about the financial comparative aspects, but did not write them down. Land purchase and property development decisions were the decisions least considered to require financial comparison. There were no marked differences between workshop attendees and non attendees.

Cash flow budget

The size and ‘investment in the future’ nature of strategic decisions make cash flow considerations very important. As shown in Table 1, cash flow budgets were written in 43% of cases and a further 25% thought about the cash flow considerations without writing them down. Thirty-two per cent of producers did not mention cash flow considerations in their strategic decision. Written cash flow budgets were used by 53% of workshop attendees compared to 36% of non attendees.

Table 1 Cash flow budgets (CFB)

DECISION CATEGORY	CAPITAL (14 cases)	ENTERPRISE (12 cases)	LAND PURCHASE (7 cases)	PROPERTY DEVELOPMENT (11 cases)	% OF CASES
CFB Considered but not written	5	3	2	1	25
CFB Written	4	6	4	5	43
CFB not Considered	5	3	1	5	32

There is a real opportunity for producers to improve their decision making by using cash flow budgets in a decision making sense. It would appear that many cash flow budgets are done to substantiate

loan applications. To producers without serious cash flow problems, cash flow budgets are not considered necessary, for example, one producer just 'told' the bank manager he wanted \$200,000 to buy a new tractor to minimise tax without ever doing a cash flow budget.

Husband/wife teamwork

In 86% of cases, the management teams included a husband and wife (the family farm still lives!). In these cases, the husband was involved in every strategic decision, and in 37% of cases the decision was made by the husband alone. In 53% of cases, half or more of the activities in the decision were shared by the husband and wife, showing that the role of the wives goes beyond just bookkeeping. In 11% of cases the wife only played a role in the steps involving financial information. Given the finding of the previous survey showing the role wives play in financial management, it is a concern that such a high proportion of husbands make important strategic decisions without involving wives.

Others involved in strategic decisions

During the card sort process, the management teams identified any outsiders who were involved in each activity. Table 2 summarises the involvement of outsiders in the decision process.

Table 2 Outsiders involved in strategic decisions

DECISION CATEGORY	CAPITAL (14 cases)	ENTERPRISE (12 cases)	LAND PURCHASE (7 cases)	PROPERTY DEVELOPMENT (11 cases)	% OF CASES
Bank Manager	7	3	5	4	43
Accountant	5	2	4	1	27
DPI	0	6	1	4	25
Consultant	0	3	2	1	14
Agricultural merchants	12	5	5	6	64
Other producers	8	8	2	3	48

Considering the importance of strategic decisions, it is surprising that 57% of the decisions were made without reference to either bank managers or accountants. The involvement of bank managers was generally late in the process to see if the producers could afford, or were 'allowed' to undertake the strategy they chose. Depending on the financial position of the producer, bank manager participation often involved some enforced financial analysis.

Few private consultants operate in Central Queensland. This was reflected in the finding that private consultants were only involved in 14% of decisions. Producers have been slow to recognise the value of consultants in decision making.

DPI officers were consulted in 25% of decisions. They were most involved in the enterprise and property development decisions but had very little involvement in capital and land purchase decisions. This would suggest that DPI is consulted in those areas where they have traditionally been seen as information providers. DPI are not seen as process consultants for strategic decisions where they are not seen to have information.

Agricultural merchants play a strong information role in the system. This was expected, because there is usually a lot of 'shopping around' before major items are purchased. Other producers were involved in almost half of the cases.

Some general points on the role of outsiders are:

1. Different outsiders assume greater importance for different decisions. For example, merchants play a major role in capital decisions and a lesser role in enterprise selection, while the role of the DPI is the opposite.
2. Most of the assistance from outsiders relates to information and not process. The main exceptions are bank managers and accountants. The role of bank managers is often an enforced role with producers being asked to demonstrate by some accepted process that they can repay loans.
3. There is a large potential role for consultants in strategic decision making if it is possible to demonstrate the importance of process in decision making.

Role of media

Media use is summarised in Table 3. The media, particularly the Country Life newspaper, was considered important by some producers in providing information to support their decision process. Radio and television were not considered to be part of the strategic decision making process. Personal involvement, as illustrated in Table 2 appears to be the most important information medium.

Table 3 Media use in strategic decisions

DECISION CATEGORY	CAPITAL (14 cases)	ENTERPRISE (12 cases)	LAND PURCHASE (7 cases)	PROPERTY DEVELOPMENT (11 cases)	% OF CASES
Country Life newspaper	5	4	0	2	25
Graingrower newspaper	2	1	0	1	9
Other publication	4	5	1	2	27
TV	0	0	0	0	0
Radio	0	1	0	0	0

Experience versus process

Have the scorned 'bean counters' got it wrong? Has the producer 'got it right' in his proud claims that he does most of his strategic thinking on horseback, based on long experience in property development for cattle, and experience learned from father and earlier generations? One can only imagine the content of the discussion on the night when the 'least valuable' activity - a discussion between husband and wife on whether the farm had the cash flow to support the husband's proposed new development - took place.

The strongest case for 'process' in decision making is in the following statement.

'In hindsight, the accountant should have been consulted on tax implications and cost estimates of the five year project. Actual costs were double our estimates, and tax deductions for converting cattle land to farming land were abolished in the year the project was begun. Therefore, it was more difficult to make a profit than expected.'

Tactical decision making

Gross margin analysis

Tactical decision making is where gross margin analysis would be expected to be most relevant. However gross margin analysis was only considered in 20% of cases which was only marginally greater than the use in strategic decision making. The main use was in the crop decision category where 36% of cases involved gross margin analysis.

'Rules of thumb' associated with risk management tended to mask managers' perception of need for formal financial analysis such as gross margin analysis. For example, instead of finding the 'best' crop option, one producer uses the following rules of thumb for crop choice:

- he seldom plants a full crop at one time, but spreads (wheat) planting times over April -- May (except when planting rain is received in a 2-week prime time period);
- he never plants one variety in every paddock;
- he always plants one or two trial plots of a new variety.

Another management team said that they always plant a range of crops in different seasons to avoid risk of crop failure. These rules of thumb are all sound practices, but they should not be used without seriously considering relative gross margins of alternatives.

Workshop attendees considered gross margin analysis in 32% more cases than non attendees.

Financial comparison

In 34% of cases, there was no evidence of consideration (either thought or written) being given to comparing the comparative financial outcomes of alternatives. The issue is often one of what appears to be the logical thing to do instead of what is the most profitable thing to do. Half of the cattle decisions fall into the 'not a financial comparison' category.

Cash flow budget

Cash flow budgeting is not always relevant to tactical decision making. However, unlike crops which have a predictable harvest date, key tactical decisions have to be made to determine when cattle should be sold, what the target class should be, and what action needs to be taken to achieve that target. It is concerning that only 35% of the cattle decisions involved written cash flow budgeting with 45% not considering the cash flow consequences of decisions. This was because in some cases the managers appeared to be able to make sufficient profit without managing cash flow (eg, *Price received has no influence on sale time. If he can carry the cattle, he does, and then sells later when necessary because of feed availability or when cattle are 'ready'*) or because they have very conservative cash management (eg, *keeping cash in reserve in term deposits to cater for cash shortages*) or maybe the most honest answer was that *luck plays a part somewhere along the line.*

Husband/wife teamwork

As with strategic decisions, a very high proportion (93%) of properties were husband/wife situations.

Crop variety decisions were usually made by husbands. Cattle decisions were more likely to be made by husbands alone than crop decisions. In 46% of cases, half or more of the activities were shared for crop decisions, compared to 11% for the cattle decisions. It is not known why wives were more involved in crop than cattle decisions.

Outsiders involved in tactical decisions

As shown in Table 4, the outsiders most involved in tactical decisions are agricultural merchants. The reduced involvement of bank managers and accountants in tactical decisions compared to strategic probably relates to the amount of money involved and whether loans are required. DPI involvement in tactical decision making is low, particularly for cattle. From this base, it would be difficult for DPI to influence cattle management decisions.

Table 4 Outsiders involved in tactical decisions

DECISION CATEGORY	CROP (14 cases)	VARIETY (4 cases)	CATTLE (20 cases)	OTHER (3 cases)	% OF CASES
Bank Manager	4	0	0	0	10
Accountant	3	0	0	0	7
DPI	5	2	0	0	17
Consultant	4	0	0	2	15
Agricultural merchants	10	3	13	2	68
Other Producers	6	3	5	0	34

Role of media

The role of the media in tactical decision making is summarised in Table 5. The newspapers and radio featured more strongly in tactical decisions than in strategic decisions. This reflects the need for up to date market information.

Table 5 Media use in tactical decisions

DECISION CATEGORY	CROP (14 cases)	VARIETY (4 cases)	CATTLE (20 cases)	OTHER (2 cases)	% OF CASES
Country Life newspaper	5	0	8	1	34
Graingrower newspaper	4	0	2	0	15
Other publication	3	2	1	0	15
TV	0	1	0	0	0
Radio	3	0	5	0	20

Conclusions

The Card Sort technique was an appropriate way to gather information on how farmers make decisions. It allowed the time consuming information collection to be reliably carried out by trained interviewers employed on a casual basis to be interpreted later by the project team.

The results of the survey indicate that producers were not experienced at analysing and using their own or other data in decision making processes. Many decisions were made with minimal analysis of the costs or the possible alternatives. To improve the value of the information which is readily available to producers who begin computer based record keeping, training must address the need for process skills relevant to decision making to be developed by producers. In addition to its value as a data collection tool, the Card Sort method could be considered as a training technique to help producers to better understand how they are currently making decisions and to discuss how they might improve the process.

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APPENDIX 4

**FINAL SURVEY
LONGER TERM IMPACTS OF FARM BUSINESS MANAGEMENT TRAINING**

a project funded by DPI and RIRDC

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REPORT: FINAL SURVEY

EVALUATION OF TRAINING ACTIVITIES TO IMPROVE BUSINESS MANAGEMENT SKILLS OF FARM FAMILIES

EXECUTIVE SUMMARY:

This is the third and final part of an RIRDC funded project aiming to evaluate the impact of Farm Business Management (FBM) Workshops on producer financial management skills in order to:

- improve the effectiveness of future workshops and training activities.
- provide a model for improving the farm business management skills of producer management teams.
- provide evidence of the contribution computer based approaches can make in agricultural extension.

This survey consisted of 40 on-farm visits to producers who had attended FBM Workshops, and 81 Phone interviews of randomly selected Central Queensland producers to represent the General Population.

Husband and Wife are the major management team on farms. FBM Workshops have impacted positively on teamwork, by improving communication between the record-keeper (usually the wife) and the decision maker (usually the husband), with subsequent improved decision making within the management unit. It is important that management team participation is promoted in the FBM Workshops for maximum impact on improved teamwork.

The Computerised Cash Record Keeping and Analysis (CCRK&A) workshops have been successful in positively impacting on producer management skills. Computerised cashbook users have significantly improved their financial record-keeping and decision making skills, compared to before they were using a computerised cashbook.

Sixty per cent of the CCRK&A workshop attendees are currently using a computerised cashbook. More accurate knowledge of cash position, and ability to

itemise expenditure in individual categories, has enabled these producers to develop more effective cost control and liquidity management strategies compared with using a manual cashbook system.

Eighty per cent of Computerised cashbook users allocate income and expenditure to specific enterprises. This allows monitoring of individual farm activities, and identification of costs associated with particular projects. This enables producers to more efficiently allocate resources to appropriate enterprises. While this was possible with a manual system, there was no evidence of it being done before the use of a computerised system.

CCRK&A and Decision Support Workshop fees were considered well spent, indicating that producers feel they gain substantial relative benefit. Relevance of examples used in the workshops, format of workshops, and ease of gaining assistance for subsequent queries, are advantages of DPI FBM Workshops over training provided by non-agricultural institutions. The high degree of competency displayed by producers in skills learnt at the workshops, provides evidence that the 2 day format of the CCRK&A Workshop allows mastering and long-term retention of skills.

A proportion of producers had attended the workshop to determine whether the adoption of computerised techniques could provide relative advantage for their situation. All those using a computerised cashbook were influenced to do so by the CCRK&A workshop, illustrating that FBM Workshops have been successful in promoting adoption of computerised approaches. Lack of a computer, often because of associated expense, was the main reason CCRK&A attendees gave for not using a Computerised cashbook.

Impact on management skills following Decision Support workshops was significant. 85% of the DS sample are currently using spreadsheets, with 75% of the sample having used DPI Templates, predominantly the Feedlot Analysis template. A main use made of spreadsheets was to perform 'What If' analyses as an aid to decision making.

The main financial record producers keep is a cashbook, either computerised or manual. The main physical record kept was cattle weights / numbers. A manual notebook with structured columns was the most common method of keeping records. Records are used as a reference for day to day decision making. There was little evidence of records being used to develop long term future plans involving strategic decision making where more than one option was considered.

A low percentage of producers applied for and received the Rural Training Grant. This was mainly because of reluctance to apply given uncertainty concerning their eligibility.

Producers found it difficult to identify training needs aimed at improving their management. Most producers considered intuitive traits were the most important characteristics of a good property manager and that these are innate qualities that cannot be learnt. For most producers, improved management involved production changes, such as increasing the carrying capacity of their properties. Producers identified their training needs as practical based workshops or field days to provide input into how to improve the production potential of their property. This implies that FBM Workshops are best promoted as production based rather than process based. New producer groups would be attracted to workshops if these were based on production issues, with relevant financial management (process) concepts integrated into the workshop.

Sixty per cent of producers in the region were aware of FBM workshops, with 20% having attended a workshop. Producers indicated a need to increase promotion concerning the availability of workshops in the rural community.

Workshop attendees were more likely to use computers than non-attendees, of which 23% currently use computers in farm management. Seventy-five per cent of the general population considered that the use of computers on-farm was positive. This positive attitude displayed by Central Queensland producers indicates that there is an ongoing opportunity for computer based training. The success of FBM Workshops in improving farm management skills, provides evidence that computer based approaches to training and skill development can have a substantial impact on the rural community.

The CCRK&A and Decision Support Workshops have improved the management skills and behaviour of producer management teams. This project provides a model for farm business management training. Characteristics of the approach used include:

- computer based approach using easy to learn and affordable software.
- learning strategies using industry examples
- group participation in an interactive environment
- involvement of management teams.

Ways in which future training activities may be improved include:

- further emphasising entire management team participation
- development of workshops on production based issues incorporating financial management concepts, such as forward planning, budgeting, and comparing options.
- spreadsheet follow-up workshops with relevant and producer-specific decision-making examples
- introduction of strategic planning concepts and exploring ways to demonstrate advantages of long-term planning.

INTRODUCTION:

The Farm Business Management Project of the Department of Primary Industries, Central Queensland Region, is responsible for conducting Farm Business Management Workshops. These include the 'Computerised Cash Record Keeping and Analysis' (CCRK&A) Workshops, based on Quicken®, and the 'Decision Support for Farm Managers' Workshops(DS), based previously on Lotus 123® and now Excel® . This RIRDC funded project aims to evaluate the impact of these workshops on producer financial management and to suggest ways in which future training activities may be improved. This evaluation is the third and final stage in this RIRDC project, and consists of a survey divided into two sections:

- A. **On-Farm Survey** of a random sample of 25 producers who had attended a CCRK&A Workshop and 20 producers who had attended a Decision Support for Farm Managers Workshop. The producers selected were visited on-farm and interviewed. Refer to Appendix I for the on-farm survey questionnaire. The objectives of this survey were:
- To evaluate the success of farm business management workshops by determining if the course(s) has helped them to improve their farm management.
 - To evaluate the adoption of skills learnt from the DPI Farm Business Management Workshops.
 - Identify any suggestions for the improvement of the service provided by the DPI Farm Business Management section and the development of training activities for the future.
 - Identify the adoption of computer use in property management and implications towards computer based approaches in agricultural extension.
 - Identify the most useful/used records (financial and physical) kept by land-holders, how these records are kept, and how these records are used in decision-making.
 - Identify the acceptance/awareness/adoption of the Rural Training Grant.
 - Identify the roles of team members in management teams in an effort to improve business management skills of the entire management unit.
- B. **Phone Survey** of a random sample of 81 Central Queensland producers. These producers were interviewed over the phone. Refer to Appendix III for the Phone Survey Questionnaire. The objectives of this survey were:
- Identify the awareness in the rural community of DPI FBM workshops.
 - Identify adoption and attitude to computer use in farm management.
 - Identify Business/Financial concerns in property management
 - Identify the acceptance/awareness/adoption of the Rural Training Grant
 - Identify the most useful/used records (financial and physical) kept by landholders and how these records are used in decision making.
 - Identify any suggestions for the improvement of the service provided by the DPI FBM section.

A description of the methodology used in this survey is given in Appendix III. This includes details of the samples, the survey structure and method of data analysis, and how competency was assessed.

RESULTS:

ATTENDANCE AT FBM WORKSHOPS:

20% of the Phone Sample had attended a FBM workshop.

All of these had attended a CCRK&A workshop, and 10% had attended a DS workshop.

WHO ATTENDED THE WORKSHOPS:

The CCRK&A workshops were commonly attended by Husband and Wife teams (48%), with the 'Wife' or 'Other Combination' comprising another 44%, as shown in Table 1.

The DS Workshops were mainly attended by the Wife Only (50%).

Table 1: Who attended the Workshops

Who attended	CCRK&A (%)	DS (%)
Husband & Wife	48	20
Wife Only	24	50
Husband Only	4	15
Other Combination	20	15

AWARENESS OF THE WORKSHOPS:

It was estimated that 60% of the general population were aware of FBM workshops, although the awareness of what the workshops actually entailed was varied - from 'Those computer type courses' to 'looking at cashbooks and stuff'. No-one (who hadn't attended a spreadsheet workshop) volunteered any description about a spreadsheet workshop.

Table 2: How did you find out about the workshop

Source of awareness	% CCRK&A	% DS Sample	% Phone Sample
---------------------	----------	-------------	----------------

DPI Extension	44	95	5
Word of Mouth	32	0	35
Media	16	0	17

The DPI Extension service played a major role in initiating awareness of CCRK&A and DS Workshops in the Attendee samples. Word of mouth was the main source of awareness in the Phone Sample. Refer to Table 2.

Producers were influenced to attend a CCRK&A Workshop in an effort to improve their cash record-keeping (52%), and were influenced to attend the DS Workshop through a general interest in what spreadsheets could be used for (50%), or interest in importing Cashbook data to create budgets (25%).

FOLLOW-UP WORKSHOPS:

The majority of CCRK&A attendees (64%) had not been to a follow-up CCRK&A Workshop.

No structured follow-up DS Workshops have been conducted, consistent with the finding that 90% of the sample had not attended a follow-up workshop. Those who had, were part of a specific group used for feedback for the FBM section in response to trial innovations, eg, new workshops.

OPINION OF COURSE FEE

Table 3: Opinion of Workshop fee

Opinion of cost	CCRK&A	DS
Very well spent (1)	28	15
Well - Very Well spent (1.5)	24	5
Well spent (2)	28	35
Neutral - well spent (2.5)	16	20
Neutral (3)	0	20
Not well (4)	4	5

Eighty per cent of the CCRK&A sample attendees considered the CCRK&A workshop fee to be ‘Well’ to ‘Very well’ spent, as supported by comments similar to:

*‘We think the cost of the workshop is great, especially considering its a per unit price’
(No.13).*

Fifty-five per cent of the DS Sample considered the course fee to be ‘Well’ to ‘Very Well’ spent. Whilst the opinion of the DS Workshop fee is on the whole positive, it is generally not considered as good value for money as the CCRK&A course.

A small proportion considered the workshops of little value or too expensive, with comments such as:

‘The course fee was a bit expensive - I would not even consider going to another one at the moment as our financial priorities are elsewhere with the drought ‘ (No 39)

COMPUTER USE:

Twenty-three per cent of the Phone Sample currently use a computer on-farm and were mainly influenced to do so in an effort to improve their record keeping (70%), with the main packages used, being Quicken (60%), Lotus/XL (35%) and Phoenix (25%).

In the proportion not using computers, 45% said they never intend to use a computer, although most producers (75%) said that the use of computers on farm is positive, as illustrated in Table 4 below.

Table 4: Attitude in the Phone Sample towards Computer use:

Do you consider the use of computers in FBM workshops, and leading to the use of computers on-farm:	Positive	Neg ativ e	N e u t r a l
	75	7	0

Producers indicated there were several main issues which affect the adoption and uptake of computers, including age, cost, children at school, and size of enterprise.

‘If I were younger, computers would definitely be the way to go.’ (No 6)

‘If were running a more sizeable place computers would definitely be of some benefit.’ (No 21)

‘Will buy a computer when the drought breaks - it is one of our priorities when it rains.’ (No 38)

'At 65, I think computers are a bloody menace, but they are essential for the next generation.'
(No 30)

'I did a computer course in 1988 with the intention of keeping farm records, but got disillusioned when I found out how quickly a computer/software becomes obsolete and needs upgrading.' (No 37)

The majority of the CCRK&A sample (76%) currently use a computer on-farm, with the remaining 24% of producers intending to use a computer 'Sometime' in the future - half of these saying they would 'Maybe', and the other half saying they would 'Definitely', use a Computerised cashbook if they had a computer.

Ninety-five per cent of the DS sample currently use computers with the other 5% expecting to use a computer 'Within the next 12 months'.

ADOPTION OF A COMPUTERISED CASHBOOK:

Sixty per cent of the CCRK&A Sample are currently using a computerised cashbook (Quicken), with all of these users also reconciling their records. No-one was using a computerised cashbook prior to the workshop, but all users were influenced by the workshop to start using the package.

'I went straight down town and bought the package.' (No 28)

CCRK&A workshops have improved various aspects of financial record-keeping skills, with producers progressing from keeping no financial records at all, or just minimal records required for the accountant, to actually following their finances and reconciling their statements. This development of skill is indicated by comments such as

'We didn't reconcile before we used Quicken.' (No 34)

'Wouldn't be keeping inflows or outflows if we didn't have Quicken.' (No 16)

'We were not keeping a book previously - Quicken gave us the first insight into the use of historical figures, especially for budgeting.' (No 30)

'Had not been keeping a manual cashbook, so when we decided to start keeping financial records, thought we may as well do it right the first time and learn with a computer as that's the way things are heading in the long run.' (No 36)

'Had been keeping a manual book, but in a mixed farming enterprise, I just did not have enough room or columns to keep all the categories I wanted.' (No 31)

'Quicken is great for its ability to recall information - I never went back to look in my 36 column cashbook.' (No 34)

THE MAIN USES FOR A COMPUTERISED CASHBOOK

Most people using a computerised cashbook are using its facilities to a 'high' level as illustrated in Table5.

Table 5: Computerised cashbook uses

Skill/use	Per cent
Keep records for accountant	93
Maintain individual category totals	87
Create Reports	80
Know cash position	80
Management planning	60
Set up budget facility	26

The main use for a computerised cashbook is to keep records for the accountant and monitor individual category totals. Comments referring to uses of a computerised cashbook are given below:

'Use Quicken to compare profit on feedlot compared to grass-fed, to prioritise forward purchase of grain/fodder, and to organise provisional tax.' (No 15)

'Use Quicken to prepare submissions for loans - put Quicken figures onto Westpac's cashflow format which has saved us substantial costs in administration fees.' (No 20)

Twent-six per cent use the set-up budget facility. This relatively low figure is offset by the finding that 40% use computerised cashbook information to create a cashflow budget, either in a spreadsheet or on bank forms, and that it is the budget which helps more in planning or creating projections concerning management.

'We use the historical figures from Quicken to project for our Cashflow Budget - we look at the difference between fodder and fuel in different situations eg, Rain or Dry conditions.' (No 20)

HOW COMPUTERISED CASHBOOK INFORMATION IS USED

Table 6: How the information retrieved from a Computerised cashbook is used.

Use of computerised cashbook information	Positive Replies (%)
Give reports to accountant	80
Expenditure in different categories	80
Look at balance when considering financial decision	66
Give reports to Bank	33
Negligible	7

‘Expenditure in different categories’ (80%) is one of the major ways in which producers use information on-farm:

‘We follow the Repairs and Maintenance on different machinery and work out when we should ‘turn it over’ (No 26).

The other major way in which producers use computerised cashbook information on-farm, is to ‘look at their balance when considering a financial decision’ (66%).

‘Look at balance to see if we need to sell a few cows, to make payments’ (No 16)

‘Look at account balances to assess whether we can afford this repair, or should we try and hang on a little longer, or, can we afford to purchase new bulls or work our other ones for another year ?’ (No.20)

COMPUTERISED CASHBOOK ADVANTAGES

The main advantage producers felt they achieved using Computerised cashbooks was that it forced them to take note of their cash position (87%). Other advantages are listed in Table 7.

‘Quicken is good in that it supplies hard concise information to talk about - we have figures to back up our financial discussions. We can identify how close the money situation is and we are now looking at getting into an overdraft’ (No 38)

‘The speed and accuracy of Quicken is a major advantage over a manual cashbook - I don’t need shares in white-out’. (No 6)

‘Quicken saved us \$1000 in accountancy fees in the first year.’ (No 23)

Table 7: The main advantages in using computerised cashbooks

Advantage	Per cent
Awareness of Cash Position	87
Efficient tax planning	67
Easy access for information	60
Saves time	60
Ease and Accuracy of reconciliation	40
Saves accountant fees	27
Presentation	13
No calculations	13

Some producers (40%) expressed disillusionment that using Computerised cashbooks didn’t reduce accountancy fees, especially considering that for some producers(20%), they were influenced to go the CCRK&A workshop by the suggestion that it would reduce fees:

'The thieving accountant said it would reduce fees if we bought a computer cashbook package'(No 25)

ENTERPRISE ANALYSIS:

Eighty per cent of those using Computerised cashbooks, use the enterprise analysis facility, with nearly half (47%) of these using this facility to compare production in different enterprises, and 33% monitoring costs associated with particular projects or items.

'Before using Quicken, we either made a profit or didn't at the end of the year, but now, we can make each enterprise accountable. Also, whenever we try a new venture, we set it aside as a class to see if its going to be worthwhile.' (No 25)

'We have classes set up to track costs for a particular item of machinery' (No 22)

NOT USING COMPUTERISED CASHBOOKS

Forty per cent of the CCRK&A sample do not currently use a Computerised cashbook. The main reasons given were *'We don't own a computer'*(16%), or *'We haven't had the time or motivation to put a Computerised Cashbook on their computer yet'*(12%).

Thirty-two per cent of the CCRK&A sample keep a manual cashbook.

COMPETENCY WITH COMPUTERISED CASHBOOK SKILLS:

Workshop attendees demonstrated a high level of competency with computerised cashbooks, even for those who weren't currently using Computerised cashbooks (refer to Table 8).

Table 8: Skill Competency in Computerised cashbooks

Skill Assessed	Competency (%)
Entering transactions	88
Create Cashflow Report	76
Create Itemised Category Report	72
Create Filtered Itemised Category Report	72
Create Enterprise Report	72
Ability to Reconcile	68

OVERALL BENEFIT:

To get an overall impression of the benefit of Computerised cashbooks, producers were asked two concluding general questions:

Q1 'Have Computerised cashbooks been beneficial to record- keeping?'

Q2 'Have Computerised cashbooks aided in making management decisions?'

Responses are shown in Tables 9 and 10 below.

Table 9: Have Computerised cashbooks been beneficial to record-keeping?

Response	Computerised Cashbook Users (%)	Entire CCRK&A Sample (%)
Very (1)	60	36
Moderate - Very (1.5)	20	12
Moderate (2)	20	12
Little (3)	0	0
None (4)	0	40

There were no Level 3 or 4 responses for those currently using Computerised cashbooks, reinforced by answers from producers in response to this question such as:

'The whole exercise of record-keeping is a whole lot easier and more efficient.' (No 19)

'Quicken has revolutionised my record-keeping' (No 22)

Table 10: Have Computerised cashbooks aided in making management decisions?

Response	Computerised Cashbook Users (%)	Entire CCRK&A Sample (%)
Most (1)	20	12
Some-Most (1.5)	20	12
Some (2)	7	4
Occasionally (3)	40	24
No use (4)	7	44

A wide range of comments were received in response to this question:

'I don't use Quicken much for decision-making - that's more related to the size of the operation, and we're small enough I know it all in my mind.' (No 2)

'Couldn't manage without Quicken. It's good to get figures in a hurry to help make decisions' (No 8)

'Use Quicken records mainly for comparing profit/loss for cattle - it doesn't really affect decision making - we don't really have the scope to change production, ie, Cattle breeding.' (No 16)

'Use the Enterprise Report to compare the 2 properties, and this helps us decide how to adjust proportions of different classes of stock, eg.. Breeders compared to Fats' (No 17)

'Quicken provides the main records that influence our decision making - primarily through manipulating cashflow.' (No 34)

ADOPTION OF SPREADSHEETS:

Forty-seven per cent of the DS Sample had been using spreadsheets prior to attending the workshop, with the workshop providing additional benefit through improved knowledge and understanding of spreadsheet use (75%) and access to the DPI Templates (25%). In 77% of the cases, going to the workshop influenced the unit to use, or continue using, spreadsheets.

Eighty-five per cent of the DS sample currently use spreadsheets, with 60% of those surveyed using Lotus, and the majority of the remainder, using Excel.

ADVANTAGES AND USES OF SPREADSHEETS:

Table 11: Advantages of spreadsheets

Advantage	Per cent
Easy calculations	65
Ease of changing variables	60
Record-keeping structure	60

Table 12: Use of spreadsheets

Aid in Decision Making	Per cent
Performing calculations and data processing	71
Keeping records	60
Performing 'What-Ifs' and Comparing options	41

Advantages of spreadsheets and how they are used, usually combined several responses. The ease of calculations and ease of changing variables in spreadsheets makes performing 'What Ifs', and processing data, more viable propositions for producers than if alternatives and calculations had to be worked out manually. Producers then used the findings of these comparisons as an aid to making decisions.

There was a level of tactical decision analysis displayed, either by performing 'What Ifs' (41%), or by performing calculations and processing data (71%). This was particularly evident where spreadsheets were used to create and analyse budget

scenarios, and producers manipulated figures to identify what would happen to their income with different scenarios. eg, Poor, Average or Good Crop Prices.

'I put figures into the feedlot spreadsheet and it wasn't a viable option.' (No 20)

'Mainly use spreadsheets for budgeting, change variables to see how changes in production will affect the bottom line. Budgeting is the main way in which spreadsheets have aided in management decisions.' (No 23)

Another advantage of spreadsheets was as a record-keeping structure (60%) for producers to keep physical records previously kept in manual notebooks. eg. spray records, stock numbers.

'Use spreadsheets for record-keeping structure for Wages, Pre-bought chemicals, Crop-dusting, Power for Irrigation, Tenancy Dates and Rates in off-farm enterprises.' (No 8)

'Use spreadsheets for tracking costs, eg..how much do we have to sell the cattle on the feedlot for to make any money. Do not use spreadsheets much for analysing options.' (No 22)

'Use a spreadsheet for record-keeping cattle weights - now going towards Reds as our records for price received consistently showed Santa's were fetching an extra \$30/head over Brahman.' (No 20)

OVERALL BENEFIT OF SPREADSHEETS:

To get an overall impression if producers found spreadsheets beneficial, producers were asked two concluding general questions:

Q1 'Has using spreadsheets aided in record-keeping?'

Q2 'Has using spreadsheets aided in making management decisions?'

Responses are shown in Tables 13 and 14 below.

Table 13: Has using spreadsheets aided in record-keeping?

Rating	Spreadsheet Users (%)
Very (1)	18
Moderate-very (1.5)	6
Moderate (2)	24
Minimal (3)	30
No use (4)	18

There was a mixed spread of opinion whether spreadsheets aid in record-keeping, as evidenced by 48% in the top 2 response levels and 48% in the lower 2 response levels.

Table 14: Has using spreadsheets aided in making management decisions?

Rating	Spreadsheet Users (%)
Most (1)	35
Some-most (1.5)	6
Some (2)	24
Occasionally (3)	18
No use (4)	12

The majority (65%) of those using spreadsheets, felt spreadsheets helped in Some-Most decisions, particularly from those producers whose main use for the spreadsheet is for budgeting, where manipulating budget figures helps them plan their production for the following year.

This segregation between the use of spreadsheets primarily as a record-keeping tool or as a decision-making tool is evidenced in the range of quotes received:

'Have created my own structure to record feedlot results - we identify good versus bad doers. Have decided Brahman Cross and Droughtmaster are the best lines. Use the Sorting tool to identify which cattle are saleable. (No 30)

'Spreadsheets used mainly for budgeting - haven't got round to putting on my paddock records yet. Keep these in notebooks - Wheat/Sorghum/Cattle.' (No 29)

'Mainly use spreadsheets as a record-keeping structure, then the records are used as a management tool, such as Ausmeat feedback data.' (No 25)

'Use spreadsheets for budgeting - if over budget at first quarter, we shuffle around cattle sales.' (No 30)

'Spreadsheets don't really help much with decision making - just keeping records for costings.' (No 8)

'Use the Fence Costing, Feedlot and Cattle Market Ready Reckoner templates mainly. The Feedlot one especially has helped us assess decisions concerned with feeding cattle. Spreadsheets haven't helped us much in record-keeping, mainly because I don't think we've used them to their full potential.' (No 5)

NOT USING SPREADSHEETS:

For the 3 producers in the sample (15%) who don't use spreadsheets, this was attributed to 'Lack of time' in all cases.

TEMPLATE USE:

Seventy-five per cent of the entire DS Sample had used DPI Templates, with 88% of those using spreadsheets, having utilised the Feedlot Template. 40% of the sample had created their own template - mainly of a herd-record or budgeting structure. Appendix IV illustrates the 'competency' division, considering both the entire sample, plus those who are spreadsheet users.

'My own templates include Bore Water Levels, ATO Wages Book Set-up, Machinery Costs per hour.' (No 23).

TEAMWORK IN MANAGEMENT:

Gender Analysis

The husband and wife team are by far the most dominant type of management team in all 3 samples (CCRK&A, DS and Phone). However, it is the wife who mainly keeps the records, with the husband taking the major role in making decisions, as is evidenced in Tables 15-19 below.

Table 15: Teamwork in Management

Who is involved in the Management	CCRK&A	DS	Phone
Husband and Wife	76	65	51
Husband	12	5	12
Wife	0	0	1
Other Combination	12	30	19
Individual	0	0	16

Table 16: Teamwork in Record-keeping

Who is mainly responsible for Record Keeping?	CCRK& A	DS
Husband and Wife	12	10
Husband	28	20
Wife	44	50
Others	16	20

Table 17: Teamwork in decision making

Who is mainly responsible for Decision Making?	CCRK& A	DS
Husband and Wife	28	35
Husband	56	35
Wife	0	0
Others	16	30

Segregation was observed in these general questions comparing those responsible for keeping the records and those being the main ones who use the records for decisions (Tables 15-17). These findings were consistent with the results shown in Tables 18 and 19 concerning the segregation of duty between keeping records and making decisions using Computerised cashbooks and Spreadsheets.

Table 18: Teamwork in using Computerised cashbooks

	Who is mainly responsible for entering Computerised cashbook transactions and reconciling	Who mainly uses the Computerised cashbook reports (i.e For decision making)
Husband and Wife	7	40
Husband	20	27
Wife	67	7
Individual	7	0
Accountant	0	27

Table 19: Teamwork in using spreadsheets

	Who enters the information into spreadsheets (ie record-keeping)	Who uses the spreadsheets (ie for decision making and analysing options)
Husband & Wife	6	24
Husband	24	41
Wife	47	18
Individual	12	6
Accountant	0	12

Advantages to Teamwork

Although Computerised cashbooks rarely changed the role of team members in the sample eg, the wife previously entered transactions into the manual cashbook, using a computerised cashbook benefited teamwork (52%) by increasing the awareness of cash position in all members of the management team (52%).

Overall, spreadsheets were considered to bring no great advantage to teamwork - not changing the role of the team in 80% of the cases, and benefiting teamwork in only 35% of the cases.

This is illustrated in the comment:

‘Our computerised cashbook has benefited teamwork more than Lotus as its the discussion about finances which gets everybody together’. (No 25).

DECISION MAKING

Producers were asked ‘On what evidence were most decisions based?’.

The main factors that influence producer’s decisions are the cash position, followed by seasonal conditions, in both the CCRK&A and DS samples, as shown in Table 19.

*‘Management decisions are based on finances, environmental conditions and markets’
(No16)*

‘Our decisions are based on Price, Seasonal Conditions and Financial Position. eg, We are selling bullocks today compared to a few weeks ago: a) The price is good now ; b)Its starting to get dry, and c) Its the start of the financial year.

Table 20: On what evidence are management decisions based.

	CCRK&A	DS
Cashflow/financial position	60	70
Seasonal conditions	56	65
Setting goals and analysing alternatives	24	55

Trial and error	28	30
Asking friend/relative/consultant	24	20

RECORD-KEEPING

In the phone survey in particular, there was a wide range of comments concerning the role of record-keeping in making decisions. These included:

'Records don't really help with decision making - there are too many variables - think you can pop up answers on a computer, but it doesn't work that way - the environment is the major determinant' (No 2)

'I don't think you need to know those bloody records - I don't use any records for decision making because I don't keep any' (No 5)

'Record keeping consists of 'whenever I come back from town, I empty out my pockets, put all docket, invoices etc, into a bag and take to accountant. I tried a cashbook but the accountant fees were still the same, so I didn't do one again.' (No 52)

'You bet records assist in decision making ! eg, We trialed 5 varieties of oats to find out which was the best for our situation, keep variations in composition of feed mixes to assess the best one.' (No 58)

Financial Records:

The cashbook was the major financial record kept in all 3 sample groups, as illustrated in Table 21 below.

Table 21: Financial Records

Record Type	CCRK&A (%)	DS (%)	Phone (%)
Cash book	92	100	75
Cash flow budget	48	70	43
Gross Margin	12	20	4
Net worth	12	15	4
Cheque butts	#	#	27
Profit / Loss	24	40	#

Not given as an option in this sample

The hypothesis 'That the use of a cashbook, is greater in the Workshop samples compared to the Phone survey' was tested. The DS Sample and the CCRK&A Sample keep a cashbook to a significantly greater extent than the Phone Sample. (DS to Phone sample; (P=0.01), and for the CCRK&A and Phone sample; (P=0.07)).

The budget was used off-farm mainly for the bank manager (60%), and on-farm to try to rationalise differences and look at the production cycle on the property.

'We use the budget reports whenever we are considering a decision eg, We were going to buy a calf crush, but had a poor cashflow, so we've put it off. We use the budget as a year plan and try to follow it - we use the Quicken profit/loss report to compare with our budget all the time.' (No 10)

The DS sample had a significantly high proportion of cash flow budgets being kept. This trend was consistent with a number of comments stating that one of the major reasons producers were motivated to use spreadsheets was for its budgeting options.

eg, 'Went to Lotus with main aim to transfer cashflow from Quicken to a spreadsheet to make budget projections for bank (No 34).'

Physical Records:

Table 22: Physical records

Record Type	CCRK&A	DS	Phone
Cattle weights / numbers	75	88	74
Rainfall	65	60	42
Paddock record (either cattle or crops)	55	64	59
Inventory	55	48	9
Crop yields and husbandry practices	25	48	33
Cattle returns and husbandry practices	#	#	78
Machinery R&M, hours etc	35	24	32

Not a coded option

Cattle weights and numbers were the main physical records kept.

How records are kept:

Table 23: How records are kept

Record Type	CCRK&A (%)	DS(%)	Phone (%)
Financial computer package	60	85	21
Spreadsheet/database	32	80	16
Manual notebook (structured)	68	75	73
Folders/Filing	44	35	33
Work Diary (unstructured)	64	40	70

The DS Sample keep more structured records than the CCRK&A sample, either on a computer based package, a spreadsheet/database, or in a notebook.

For the Phone Sample, keeping records on computer based packages was relatively low - 21% for a financial application and 16% for spreadsheet or data base. There was a highly significant difference ($P < 0.001$) for having a financial computer package in both the CCRK&A and DS Samples compared to the Phone Sample.

Overall, a manual notebook was the most common method for keeping physical records.

How records are used:

How records are used varies from 'Not at All' to keeping records for off-farm benefit such as Breed Society Records.

'You need records to see where you've been and a budget to see where you're going'.(No 9)

'I keep up to date with my balance from auto-teller machines' (No 24)

'Work diary allows organisation of when to perform husbandry practices eg, How long since we last gave Botulism vaccine' (No 32)

'Keep a Cattle Record Book - when we are supplementary feeding, we track how many cattle go through the lot. We know how much grain we can store or keep on the place, so we then work out how much grain we have to buy in for those cattle on the lot.' (No 49)

'Mainly just keep records for the Brahman Stud Book ' (No35)

'Mainly look at the records for costing and at cashflow - if there is surplus, do tasks we've been putting off eg. Fencing. We don't use records for actual planning or projections as that all depends on the weather.' (No 37)

Table 24: How records are used

	CCRK&A (%)	DS (%)	Phone (%)
How often do you refer back to records - at least fortnightly	52	50	#
Negligible	24	5	33
Subsequent reference (check up) when making a decision	60	75	58
Selection criteria for cattle	48	55	33
Timing of subsequent husbandry practices	72	50	44
Use previous figures to compare with future options	#	#	31

Note a coded option

Twenty-four per cent of the CCRK&A sample don't use records to any great extent to assist in their decision making processes.

This was a contrast to the DS sample with only 5% stating that their records are of 'Negligible' benefit with three-quarters of the sample using records as a reference to support or sway against a decision.

RURAL TRAINING GRANT

Table 25: Figures for the Rural Training Grant.

	CCRK&A %	DS	Phone (%)
Awareness	64	50	40
Whole population application	24	35	10
Received the grant(Whole sample)	8	15	7
Received (those who applied)	40	5	75

		0	
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There was a reasonable level of awareness in all 3 sample groups, but a small proportion of producers who applied for the grant, as shown in Table 25. A higher proportion of the DS sample (15%) received the Rural Training Grant compared to either the CCRK&A or Phone Samples.

This section tended to invoke some strong comments, such as:

'It bloody well stinks - even got stirred up enough to write a letter to the Parliamentary Enquiry' (No 11)

'Got the Grant for both the Quicken and Lotus courses in previous years, and it paid for half the cost of the Phoenix package this year.' (No 30)

'Most of those schemes don't seem to help the efficient farmers' (No 34)

'A select few can get assistance, but the ordinary man who has watched over his finances and not overcapitalised has no chance at all.' (No 58)

Training needs of producers to improve management:

Producers found it difficult to define training needs aimed at improving their management skills. In an effort to assess what management attributes should be aimed at in future training activities, producers were prompted to identify what characteristics should be displayed in good managers. Their responses are given in Table 26.

Table 26: Characteristics of Good Managers

Characteristics	CCRK &A%	DS (%)	Phone (%)
Practical skills	48	35	44
Business and Marketing skills	56	55	38
Education	12	20	7
Personality Traits	64	50	43
Empathy with land	24	5	21
Computer literate	16	10	10
Experience	4	10	20

Producers expressed that personality traits eg. Common sense, Honesty, are of major importance in a manager, with practical skills such as ability to weld, ride a horse etc., and marketing/business skills also important. Marketing was volunteered particularly with grain growers who are currently concerned about the 'new open grain market'. Varying opinions as to what constitutes a good manager are evidenced in the quotes below:

'A good manager nowadays needs to be good at decision making - you can get by without practical skills to some extent - you can hire some-one to do those tasks.' (No 56)

'A good manager needs a calm steady head and a thrifty outlook on life - certainly not any of the fancy things the DPI and fancy talkers come up with.' (N o2)

'A good manager needs good practical experience, and not all those certificates and degrees.'(No 14)

'A good manager must be able to visualise, create projections, have a goal to aim for, think about where the future's heading - can't just sit on your dung heap and do what your forefathers did.'(No 15)

Next step to improve management

For most producers, the next step in improving management involved 'Improving the production capability' of the property. eg, improve herd quality, improved pasture, water facilities, with 'Improving a certain skill' the next criterion eg, record-keeping.

Table 27: Next step in improving management

	CCRK&A%	DS%
Production based	56	50
Skills based	16	25
Financial based	8	10
Computer based	8	0

No one in the DS sample felt that improving computer skills was a priority in improving management.

Knowledge areas

The main type of workshop that people indicated they would be interested in attending were practically based courses specific to the industry they were in eg. Spaying, Plant propagation.

Marketing was the main area producers felt they needed to know more about, with other areas including off-farm investment, evaluating finance options, diversification options, improved pastures and animal nutrition. A detailed listing of all options is given in Appendix 5.

Workshops people suggested included:

1. Industry specific practical courses
2. Basic introduction to computers
3. Word Processing
4. Animal Nutrition
5. Pasture Improvement

Social implications:

Apart from the information and skills that the CCRK&A workshops develop directly, there are additional benefits producers feel they get indirectly out of the workshop that are difficult to quantify. These include social interaction and development e.g mutual discussion of 'how are things going out at your place', and also increase in involvement of some producer's wives. Some quotes supporting these aspects are listed below:

'Could probably learn Quicken out of a manual, but it is good to get feedback from a group in a workshop situation to conglomerate ideas. (No 31)

'The workshop structure is good in that you can read-off other people who have similar enterprises as yourself, and get help to talk over hassles etc. (No 23)

'I had not been involved with the management of the place before, but now I feel part of the running of the place - I just can't say enough good about the DPI Workshops, I'd go to any they put on - love getting rid of the kids for a couple of days and getting the course over and done with rather than dragging it out over a few months like the TAFE courses.' (No 26)

'I had been stuck at home with the kids and was getting 'brain hungry' so wanted to do something worthwhile, so decided to put the farm onto computer.' (No 10)

CONCLUSION:

This report has presented the findings of an RIRDC funded project aimed at evaluating the impact of Farm Business Management Workshops on producers' financial management skills. This was done by interviewing on-farm, 25 producers who had been to a Computerised Cashbook Record-keeping and Analysis (CCRK&A) workshop, and 20 producers who had attended a Decision Support for Farm Managers (DS) Workshop.

The success of the CCRK&A or Decision Support Workshops has been evaluated by determining how skills learnt at the workshops have benefited producer management skills, such as record-keeping or decision making.

Other issues relating to management have also been discussed. These included: Teamwork in Management, Record-keeping (financial, physical, how records are kept and used), Training Needs of Producers, and Producers' thoughts on what their next step would be to improve management. This has enabled recommendations to be made aimed at improving the effectiveness of the farm business management skills of producer management teams and to propose developments for future workshops and training activities.

The findings of a Phone Survey in which 81 producers were randomly selected from across Central Queensland, are also presented, from which producers' financial management concerns have attempted to be identified in an effort to provide insight into future developments in FBM Workshops.

Other issues discussed concerning workshop development included: Awareness of the workshops in the rural community, promotion of the workshops, incidence of follow-up workshops, competency in skills covered in the workshops and opinion of course cost.

The attitude towards the adoption and use of computers, was also assessed, and has provided evidence concerning the potential contribution of computer based approaches in agricultural extension.

IMPACT OF THE CCRK&A WORKSHOP:

Attendance:

- Twenty per cent of the Phone Sample have attended a CCRK&A Workshop. This level of attendance indicates these workshops have gained recognition and acceptance by the rural community as a beneficial training activity.
- The attributes of these courses which make them attractive to producers are: workshop accessibility, industry relevance, hands on approach, use of the most up-to-date computer technology, standard of tuition and follow-up service.

Competency:

- The high level of competency displayed by producers in skills learnt at the CCRK&A workshop indicates that these workshops have been successful in transferring skills. Competency was even displayed by those producers who had not used a computerised cashbook since attending the workshop, in some cases, up to three years ago.
- This illustrates that the content and structure of the CCRK&A workshop, such as the 2 day format, practical industry related examples and a group interactive environment, is conducive to development and long-term retention of workshop skills.

Adoption:

- The CCRK&A workshops have had a positive impact on the adoption of computerised cash record-keeping and analysis. 60% of the CCRK&A sample are currently using a computerised cashbook. No participants had been previously using a computerised cashbook, and all attributed subsequent adoption to having attended a CCRK&A workshop.
- The use of an inexpensive and easy to use computerised cashbook package in the FBM Workshops has been a significant factor contributing to this high rate of adoption. Computer based training using relevant course material and easy-to-use software, can have a substantial impact on the uptake of new technology with the potential to improve management.
- The main reasons given for not currently using a computerised cashbook were either 'not owning a computer', or 'lacking the motivation to put a computerised financial package on their computer'. Some producers initially attended a CCRK&A workshop to determine whether the adoption of computers or of a computerised cashbook package has value in their situation. The subsequent non-adoption indicates that they feel they are not going to derive any additional benefit from using a computer or a computerised cashbook package, considering the expense, learning processes and labour requirement to keep their computerised cashbook up-to-date, compared to their existing system, (which in some cases was no structured financial record-keeping system).

Uses and Advantages:

- All attendees currently using a computerised cashbook, consider it an extremely beneficial aid to record-keeping, with the majority of these also considering a computerised cashbook to be a beneficial tool in decision making. Participants believed that improvements in record-keeping and decision making have led to improvements in their farm management.
- Producers identified the main advantage of a computerised cashbook was that it enabled them to be more aware of their cash position (87%). Cash position is a major consideration when making decisions for most producers. Increased awareness of cash position due to maintaining a computerised cashbook, indirectly provides more accurate information for making better informed short-term decisions and enables producers to implement liquidity management strategies.
- Computerised cashbooks generate information that can be utilised on-farm or off-farm. The main uses on-farm were to 'track expenditure in different cost categories' and to 'monitor bank account balances when considering a financial decision'. Improved ability to track major areas of expenditure provides the potential for producers to formulate cost control strategies more effectively.
- The main use off-farm was to supply information to their accountant for taxation purposes.

Enterprise Analysis:

- Eighty per cent of those using a computerised cashbook, are allocating income and expense to particular farm activities to allow enterprise analysis. The use of enterprise analysis provides a corner stone for making rational decisions regarding resource allocation on the farm. Some producers use this facility for monitoring individual enterprises while others use it for identifying the costs associated with specific projects.
- Both these uses are an indication of a computerised cashbook being utilised for management rather than solely for data capture for taxation purposes. The use of an enterprise comparison facility provided the opportunity to assess the performance of individual activities. This was not considered when using a manual cashbook system.

IMPACT OF THE DECISION SUPPORT WORKSHOP:

Attendance:

- Ten per cent of the Phone Sample had attended a Decision Support Workshop. The DS Workshop addresses more advanced technical skills and management concepts compared to the CCRK&A Workshop. This proportion is encouraging considering the course content, and the shorter time the workshop has been running compared to the CCRK&A Workshop.

Competency:

- Spreadsheet competency was assessed indirectly by observing how participants were using the skills taught in the workshop. The results provide evidence that DS Workshops have been successful in developing skills, such as retrieving templates and entering data when utilising DPI templates (75%), but less successful in developing the more complex skills required to create their own templates (40%). These skills would include designing the structure of a spreadsheet, developing formulae and performing calculations for decision making or data manipulation.
- In terms of assessing competency, these results may be seen as 'worst case' due to the method used. Some producers, especially those not currently using spreadsheets, have not had the motivation or the opportunity to use or create any templates, but may still have been competent in the skills taught at the workshop.

Adoption:

- The Decision Support for Farm Manager's Workshops have had a positive impact on the adoption of spreadsheets for record-keeping and decision making.
- Some attendees(40%) had been using spreadsheets prior to attending the workshop. This group felt the major benefits provided by the workshop, were improved knowledge and understanding of spreadsheet use in farm management, and access to the DPI Templates.
- Workshops have influenced a large proportion of attendees to use spreadsheets. 85% of the participants surveyed currently use spreadsheets to varying degrees, with the majority saying that attending the workshop influenced them to use spreadsheets. This is a high rate of adoption of a complex technology, and indicates that, with suitable training, producers perceive that computer based record-keeping and spreadsheet analysis can provide relative advantage in their farm management.

Uses and Advantages:

- The main perceived advantages of spreadsheets were:
 1. Ease of setting up a record-keeping structure, eg. cattle weight records.
 2. Ability to perform mathematical calculations, eg. additions and subtractions in budgets.
 3. Ability to conduct 'What If' analysis due to the ease in which variables can be changed and resultant calculations performed, eg. calculate impact of various levels of sale price on feedlot profitability.
- The main uses of spreadsheets were closely related to the perceived advantages. They included:
 1. Keeping records
 2. Data processing involving mathematical calculations, ie preparing budgets, calculating average weights,

3. Performing 'what-if' type analysis to cost or compare options.

- Many producers used spreadsheets in all 3 ways. A spreadsheet structure may be developed to be used for record keeping, and then calculations may be performed on the data. The processed information may subsequently be used in ‘what if’ analysis. eg. Cattle weight records may be kept. Average Daily Gains may be then calculated. Daily Gain may then be manipulated in ‘what if’ Analysis.
- ‘what-if’ type analysis indicated use of spreadsheets as an aid to ‘tactical’ decision making. There were only isolated examples provided which could be classified as ‘strategic’ decision making involving the introduction of a new enterprise, or a major change to farm activities.
- Most producers see limited scope for enterprise changes given their physical resources and they see commodity prices and seasonal conditions as being beyond their control. Hence, they place little value in long term forward planning or strategic decision making.

Financial record-keeping:

- The Cashbook and Cashflow Budget were the major financial records kept in all 3 sample groups. Many producers stated that they kept minimal financial records before attending a CCRK&A Workshop, then improved their financial record-keeping after the workshop, with 60% adopting a computerised cash record-keeping system. In the group that did not adopt a computerised system, there were instances where producers commented that the materials supplied in the workshops had improved their manual cash record-keeping system.
- The impetus for improving financial records was often provided by external influences, such as taxation requirements, or pressure from a bank. Initially, the use of financial records for internal farm management was not the primary objective for the majority of producers. However, as producers become familiar with the capabilities of the software, particularly the ease of retrieval of information, they realise that this information has the potential to assist in farm management. This includes providing figures which comprise the basis on which budgets for both management and financial institutions are formulated, and to identify areas of major expenditure in an effort to formulate cost control strategies.

Physical record-keeping:

- Cattle weights and numbers were the main physical records kept in all 3 groups - the CCRK&A, DS and Phone Samples. The DS and CCRK&A Workshop Samples keep more structured records, particularly on a computer-based package, compared to the Phone Sample.

How Records are used:

- Most short term management decisions are based on ‘seasonal conditions’ and ‘cash position’. Producers use records as a reference when making a decision, given current environmental conditions eg. ‘How did we go last time we planted sorghum with that rainfall at that time of season?’ This demonstrates that records are used for tactical decision making given a current situation. Records were also used for selection processes with cattle, especially if figures had to be kept for external bodies such as Breedplan or Breed Societies.
- The use of historical records for long term (greater than 1 year) forward planning involving strategic decision making, was not evidenced. This could be where producers define where they want to be in 5 years time, then consider their different options on how to achieve their objective. This disregard for long-term forward planning is due to the opinion expressed by most producers that it is environmental conditions that dictate agricultural production, and vagrancies in season are beyond producer control. Hence, forward planning is difficult and would provide little benefit.
- Producers currently affected by drought conditions indicated that survival in the short-term is their primary objective and long-term development was not currently being considered. This is

consistent with the low incidence of strategic decision making involving future options, and the greater emphasis by producers on short term tactical decision making.

Rural Training Grant:

- There was a level of awareness of the Rural Training Grant in all 3 sample groups. However, the proportion of producers who apply for the Rural Training Grant is low, with an even lower incidence of those actually receiving the grant.
- A major reason why producers do not apply for the Grant is that they are unsure of their eligibility and where they can access information concerning the grant. Without definite guidelines, producers are unwilling to 'waste their time' filling in forms when they are uncertain as to whether they will gain any benefit from it.
- Misunderstanding of what the Grant is given for was evidenced by numerous comments confusing the Rural Training Grant with the Rural Traineeship Scheme. Producers may be aware of the Rural Training Grant, but assume it consists of placing young unemployed people on their property, in which they may be uninterested and hence, don't follow the issue further.
- There was discontent expressed by a number of producers that the Government Schemes rarely assist the productive or careful landholder, and are instead aimed at the producer who has overcapitalised or is inefficient. The publication of a more rigorous outline of eligibility criteria, and easier access to explanations of what the Grant entails, would enable greater self-determination by producers of eligibility. This would increase the proportion of eligible producers who would apply for the Grant.

Attitude Towards Computer Adoption:

- Twenty-three per cent of the Phone Sample currently use a computer for farm management. Although some producers (35%) said that they never intend to use a computer, the majority(75%) of the sample indicated that they regard the use of computers on-farm as positive.
- Producers considering the purchase of a computer often attend an FBM Workshop to assess the potential value of computers before making the decision to buy. Workshop attendees who subsequently purchase a computer, must consider that the workshop has adequately demonstrated computer applications which have practical on-farm uses. This represents a sizeable financial commitment, and they are determined to get value from their investment in new technology, so make considerable effort to derive benefit.
- Computer adoption in the rural community is likely to increase in the future, given the influences that producers are subject to. These include: Pressure for complete financial records from lending institutions, increased acceptance of computerised records from accountants, use of computers by children at school, and increased promotion by the computer industry.
- The demand for easy access and retrieval of historical information, and the continual development of easier to use software will further promote use of computers on-farm.
- The wider acceptance of computers in the general community will have subsequent affect on computer based approaches in agricultural extension.

Impact on Teamwork:

- The Husband and Wife are the major type of management unit in the 3 sample groups, with the wives usually the record-keepers in the management team, and the husband mainly responsible for making decisions.

- There has been little impact on the role of team members by attending either the CCRK&A or DS Workshop, although there were benefits to teamwork. Using a computerised cashbook benefited teamwork by increasing the awareness of cash position and affecting subsequent implications on decision making within the entire management unit. Spreadsheets benefited teamwork where good communications exist between the decision maker (usually the husband) and the spreadsheet operator (usually the wife) and both parties are involved in the day-to-day management. However, spreadsheets provided little benefit where the individual possessing the spreadsheet skills, had difficulty in defining management problems and/or extracting information from the decision maker (Husband).
- This highlights the importance of attracting both members of the management team to FBM Workshops. At present, CCRK&A Workshops are mainly attended by Husband and Wife teams, thus promoting entire management team participation in using computerised cashbooks on-farm. The DS Workshops have attracted the Husband and Wife to a minor extent, with the 'Wife Only' comprising the major proportion (50%) of attendees. This is an area that needs to be addressed as no wife in this study was individually responsible for on-farm management and decisions, so may have difficulty in obtaining maximum benefit from a DS Workshop.
- The decision maker (husband), may see the CCRK&A Workshop as primarily a book-keeping course suited best for the team member responsible for keeping records (wife), so envisages the Decision Support Workshop in the same perspective, rather than a decision analysis course, so sees limited benefit in attending. Where the husband has responsibilities for both record-keeping and decision making, he is more likely to attend the DS Workshop.
- To maximise benefit from attending workshops, continued effort needs to be directed at developing and promoting workshops that encourage participation by all members of the management team. This will encourage better communication within the unit, and lead to better on-farm decision making.

Opinion of fee:

- The CCRK&A attendees had an extremely positive view of the workshop fee (\$150). This indicates that the course process and content are providing value for money and considered valuable in developing useful and practical financial record-keeping skills.
- Fifty-five per cent of the DS Sample attendees considered the workshop fee (\$200) to be Well to Very Well spent. This lower, but still positive, opinion of course value, indicates that some producers feel they are not benefiting from using spreadsheets to as great an extent as using a computerised cashbook. This may be due to an inability to construct and manipulate a spreadsheet to assist in their decision making concerning a specific management issue.

Training Needs of Producers:

- Producers found it difficult to define training needs aimed at improving their management skills. In an effort to assess what management attributes should be aimed at in future training activities, producers were prompted to identify what characteristics should be displayed in good managers.
- Most producers identified Personality Traits e.g. Common Sense, Honesty as the most important characteristic in a good property manager and indicated that these are innate qualities and can rarely be developed by training.

- For most producers, improving management entailed production based improvements, such as increasing the carrying capacity of their property, and rarely financial management strategies. These producers identified their training needs as practical based workshops or field days to provide input into how to improve the production potential of their property. This creates the opportunity to promote workshops which are aimed at production based problems such as improving pasture quality, and then incorporating and developing financial concepts which need to be addressed in considering these issues, such as assessing the profitability of pasture development. This will involve developing the concept of strategic decision making and long-term planning in improving management.

Social implications:

- FBM workshops have also provided indirect benefits. The workshops provide an avenue for the development of networks of rural people interested in management issues and the adoption of new technology.
- These workshops have increased the education opportunities available to producers, for many, these courses were the first formal education since leaving school.
- The increase in confidence in women who feel that they are better equipped to contribute to management of the property, results in improved communication between husband and wife as a management unit and is another benefit of workshops difficult to assess.

Awareness and promotion of workshops.

- There is a high level of awareness of CCRK&A Workshops in the general population, with 'Word of Mouth' indicated as the most frequent source of awareness, although producers surveyed often could not describe details about the workshop or how it could benefit them.
- There was less awareness of the Decision Support Workshops, possibly due to less promotion by producers who have attended a workshop, the workshops have been going for a shorter time, and have been completed by fewer people. Producers may not promote the DS Workshop because they do not consider its utility as good as the CCRK&A Workshops. This could be due to Decision Support Workshops being a more abstract concept than CCRK&A Workshops. Producers can relate a computerised cashbook to an existing system, but have difficulty explaining how spreadsheets work, and how they can assist in management, without a practical demonstration.
- The availability, content and advantages of FBM workshops, particularly of the Decision Support Workshop, need to be promoted. Opportunities need to be explored whereby spreadsheets can be demonstrated to an audience allowing them to see how spreadsheets work, and how they can be beneficial in their situation. This would include demonstrations aimed at specific industry groups eg, Field Days and Industry meetings.

RECOMMENDATIONS:


- Compile a promotional package describing all workshops the DPI conduct. This would comprise an outline of what each course involves (from CCRK&A to Resource Identification and Mapping), the benefits each course provides, and how they all relate as an integrated package.
- Introduce follow-up Decision Support Workshops. These will be aimed not just at developing new skills eg. Macros, but at developing specific spreadsheets / templates for a producer's particular situation. These are likely to include 'comparing feeding options (sell, agist or feed)', 'financial analysis of purchasing another property', and 'budgeting.'
- Emphasise the importance of entire management units attending the CCRK&A and Decision Support Workshops.

- Continue the use of computer based learning approaches in FBM Workshops.
- Develop the concept of using historical records for forward planning. This will entail developing budgeting analysis for poor, average and good outcomes, and anticipating what will be management strategies for each scenario. Foster the concept of strategic thinking in producers.
- Continue creating awareness of the Rural Training Grant.
- Develop promotional material and packages such as feature articles in media, especially for Decision Support Workshops.

APPENDICES

APPENDICE I: On-Farm Survey Questionnaire

ON-FARM SURVEY

Identification Number  1.

Date:

Time:

Introduction

Random sample of people who have attended a FBM '*Computerised Cash Records Keeping and Analysis*' and/or '*Decision Support for Farm Managers using Lotus 1-2-3*' Workshops.

Objectives:

1. To find out if people are using what they learnt from the DPI Farm Business Management Workshops. If they are using what they've learnt. If they aren't - why not?
2. To determine if the course(s) has helped them to improve their farm management.
3. Identify any suggestions for the improvement of the service provided by the DPI Farm Business Management section and the development of better courses for the future.
4. Identify marketing concerns - inconsistencies, marketing trends, complains/positive comments concerning different buying/selling options.
5. Identify Business/Financial concerns in property management.
6. Identify the adoption of computer use in property management.
7. Identify the most useful/used records (financial and physical) kept by land-holders, how these records are kept, and how these records are used in decision-making.
8. Identify the acceptance/awareness/adoption of the Rural Training Grant.

Components of the survey:

SECTION 1. BACKGROUND INFORMATION

SECTION 2. QUICKEN

1. Using Quicken
2. Not using Quicken
3. Competency with Quicken

SECTION 3. SPREADSHEETS


- 1. Using Spreadsheets
- 2. Not using Spreadsheets
- 3. Competency with Lotus


SECTION 4. ALL ATTENDEES


- 1. Teamwork
- 2. Record Keeping
- 3. Management
- 4. Marketing

BACKGROUND INFORMATION

1.


(a) Which DPI Workshop(s) have you attended?  2.
(QUICKEN = 1, LOTUS = 2, BOTH = 3)

(b) Who attended the Quicken Workshop?.....  3.
(HUSBAND = 1, WIFE = 2, HUSBAND & WIFE = 3, INDIVIDUAL = 4, OTHER COMBINATION
eg. Mother and Son = 5))
AND/OR


(c) Who attended the Lotus Workshop?  4.
(HUSBAND = 1, WIFE = 2, HUSBAND & WIFE = 3, INDIVIDUAL = 4, OTHER COMBINATION
eg. Mother and Son = 5)

.....


2.


(a) How did you find out about the Quicken course?  5.
(Word of Mouth = 1, Media = 2, Field Days = 3, DPI letter or extension officer = 4, Accountant = 5,
At computer shop where bought Quicken=6)

AND/OR


(b) How did you find out about the Lotus course?  6.
(Word of Mouth = 1, Media = 2, Field Days = 3 ,At Quicken Workshop = 4 , Notice from DPI = 5)


3.

(a) Who influenced you to attend the Quicken course?.....  7.
(My decision = 1, Accountant = 2, Bank Manager = 3, Neighbour = 4, DPI Extension Officer = 5,
Family member=6)


(b) What influenced you to attend?  8.
(Looking for ways to reduce accounting fees = 1, Wanted to improve financial record-keeping = 2, Interest in
computer use = 3; Looking for a better computer financial package than already had = 4)


AND/OR

(c) Who influenced you to attend the Lotus Workshop?  9.
(My decision = 1, Accountant = 2, Bank Manager = 3, Neighbour = 4, DPI Extension officer = 5
Family member=6)


(d) What influenced you to attend?.....  10.
(Access to DPI Templates = 1, Wanted to improve/create record-keeping = 2, Had been exposed to
spreadsheets previously and wanted to learn more = 3. Learn how to incorporate Quicken data into
spreadsheets = 4, Interested in computers for on-farm = 5)


4.

(a) How many 'support/development' Quicken Workshops have you attended?  11.
(NONE = 1, 1-5 = 2, >5 = 3)


(b).How long since you last attended a Quicken Workshop?.....  12.
(<6 months = 1, 6-18 months = 2, 18-36 months = 3, >36 months = 4)

AND/OR


(c) How many 'support/development' Lotus Workshops have you attended?.....  13.
(NONE = 1, 1-5 = 2, >5 = 3)

(d).How long since you last attended a Lotus Workshop?  14.
(<6 months = 1, 6-18 months = 2, 18-36 months = 3, >36 months = 4)


5.

(a) What is your opinion of the Quicken course fee?  15.
(MONEY VERY WELL SPENT = 1, MONEY WELL SPENT = 2, NEUTRAL = 3, NOT WELL SPENT = 4)

AND/OR


(c) What is your opinion of the Lotus course fee?.....  16.
(MONEY VERY WELL SPENT = 1, MONEY WELL SPENT = 2, NEUTRAL = 3, NOT WELL SPENT = 4)

6.


(a) Do you currently use a computer in any capacity in your farm management?  17.
(YES = 1, NO = 2)

If YES, go to SECTION 2: QUICKEN


If NO, go to 6(b)

(b) Do you intend to use a computer in farm management?  18.
(In the next 6 months = 1, 6-12 months = 2, Sometime = 3, Never = 4)

If NEVER, go to SECTION 2: Part B, #2


(c).If you were using a computer in farm management, would you use Quicken?  19.
(YES, definitely = 1, MAYBE = 2, NO = 3)

AND/OR


(d) If you were using computers in farm management, would you use spreadsheets?  20.
(YES, definitely = 1, MAYBE = 2, NO = 3)

Go to SECTION 2: QUICKEN

QUICKEN


1. Do you currently use a computerised cashbook system?  21.
(YES = 1, NO = 2)


If NO, go to PART B


2. Do you currently use Quicken?  22.
(YES = 1, NO = 2)

If NO, go to PART B


USING QUICKEN

1.
(a) Were you using Quicken before you attended the workshop?  23.
(YES = 1, NO = 2)


(b) **If YES**
How long before workshop did you start  24.
(<6 months = 1, 6-12 months = 2, >12 months = 3)


Did the workshop provide any further benefit  25.
(YES = 1, NO = 2)
If YES, give examples (i.e. improved skills, can now reconcile etc.)
(Improved understanding of the package = 1)


.....  26.


(c) **If NO**, did attending the workshop influence you to use Quicken?  27.
(YES = 1, NO = 2)


2.
(a) List the most common uses you have for Quicken
Examples: (YES = 1, NO = 2)





- Entering transactions  28.

- Reconciling  29.

- Monitor individual category totals  30.








- Keeping records for accountant  31.

- Creating reports  32.

- Preparing Budgets.....  33.
- Management planning.....  34.
- Knowing cash position.....  35.
- Other: specify.....  36.










(Memorised reports = 1, Invoicing (Quickbooks) = 2)

- (b) What use have you made of the information generated by Quicken?
 (eg. Compare individual category totals and adjust production accordingly)
 (YES = 1, NO = 2).


- Negligible.....  37.
- Give reports to Accountant.....  38.
- Look at balance when considering a financial decision  39.
- Give reports to bank  40.
- Create cashflow budget  41.
- Loan reporting and tracking  42.
- Look at expenditure in different categories eg. R&M.....  43.


3. What are the major advantages in using Quicken in your situation?

Examples: (YES = 1, NO = 2)


- Saves time  44.
- Presentation - neat and professional  45.
- Saves money paid to accountants.....  46.
- Allows more efficient tax planning.....  47.
- Forces you to take notice of financial position  48.
- Easy access to required information especially balance  49.
- Ease and accuracy of reconciling.....  50.
- Don't have to do calculations  51.
- Other: specify.....  52.


4.


- (a) Can you use class lists (to group together associated categories)?  53.
 (YES = 1, NO = 2)


(b) Why do you use classes this way?  54.
(To compare income and expense of different enterprises = 1, To track costing of a particular item of plant or machinery = 2)


5.


(a) Have you set up a budget facility?  55.
(YES = 1, NO = 2)


If NO, why not?  56.
(Unreliability of industry - can't project figures = 1, Dissatisfied with Quickens budgeting facility = 2)

If YES, do you complete budget reports?  57.
(YES = 1, NO = 2)


(b) Do you compare actuals with projected figures on your budgets?.....  58.
(YES = 1, NO = 2)


(c) How often do you assess your actual position against your budget?  59.
(Monthly = 1, Quarterly = 2, Half yearly = 3, Yearly = 4, Never = 5,
When considering a financial decision = 6)

(d) How do you use this budget information?
Off-farm (Accountant = 1, Bank Manager = 2, Consultant = 3, Other = 4).....  60.

On-farm (Identify cash surpluses/deficits, Modify farm activities - purchases/sales
- explain changes)  61.
(Identify prioritising payment of bills - create cashflow = 1, Rationale differences - can we modify production = 2)

6.

(a) Overall, do you think Quicken has been beneficial to your record-keeping?  62.
(VERY = 1, MODERATE = 2, MINIMAL = 3, NOT AT ALL = 4)


(b) Overall, do you think using Quicken has aided in making decisions?  63.
(HELPS IN MOST = 1, HELPS IN SOME = 2, HELPS OCCASIONALLY = 3, NO USE AT ALL = 4)


NOT USING QUICKEN


1. What is the reason(s) you do not use Quicken?.....  64.


(Haven't got a computer = 1, Find Quicken package unsuitable for situation = 2, Time priority - haven't had time/motivation to put Quicken on = 3, Intimidated by computer = 4)

2.

(a) Do you record cash inflows/outflows in a manual cashbook ?  65.
(YES = 1, NO = 2,)


(b) Do you reconcile your cashbook ?  66.
(YES = 1, NO = 2,)


If YES, How often do you reconcile?  67.
(FORTNIGHTLY = 1, MONTHLY = 2, QUARTERLY = 3, YEARLY = 4, OTHER, Please specify = 5,)

3. Even though you are not currently using Quicken, would you like to see if you can remember the skills taught at the workshop?  68.
(YES = 1, NO = 2,)


If YES, Go to PART C ; **If NO**, Continue to SECTION 3.


COMPETENCY with quicken


1. Can you enter transactions ?  69.
(YES = 1, NO = 2,)


2. Can you reconcile ?  70.
(YES = 1, NO = 2,)

3. Can you create reports ?


(a) Cash flow  71.

(b) Itemised Category  72.

(c) Filtered Itemised Category  73.

(d) Job/Project  74.
(YES = 1, NO = 2,)

SPREADSHEETS


(a) Do you use Spreadsheets?  75.
(YES = 1, NO = 2)


If YES, continue to PART A

If NO, continue to PART B

USING SPREADSHEETS


1.


- (a) Do you use Lotus?.....  76.
(YES = 1, NO = 2)

- If NO**, What spreadsheet do you use?.....  77.
(First Choice spreadsheet = 1, Excel = 2, Quattro = 3, Microsoft Works = 4)

2.


- (a) What are the main advantages you gain in using spreadsheets?

Ease of comparing options  78.

Ease of calculating costs  79.


Record keeping structure.....  80.


- (b) Give examples of how you use spreadsheets in decision making


Tracking costs  81.

Comparing viability of different options.....  82.


3.


- (a) Were you using a spreadsheet before you did the Lotus Workshop?  83.
(YES = 1, NO = 2)


If YES, describe how the Workshop provided further benefit ?  84.
(Promoted understanding = 1)

If No, did doing the Workshop influence you to use spreadsheets ?  85.
(YES = 1, NO = 2)

4.

- (a) Overall, do you think using Spreadsheets has aided in making management decisions?  86.
(HELPS IN MOST = 1, HELPS IN SOME = 2, HELPS OCCASIONALLY = 3, NO USE AT ALL = 4)


- (b) Overall, do you think using Spreadsheets has aided in record-keeping ?  87.
(VERY = 1, MODERATE = 2, MINIMAL = 3, NOT AT ALL = 4)

Give reasons for your answers:  88.


(Uncertain how to use spreadsheets to best advantage = 1. Time priority - haven't had the time/ motivation to use spreadsheets = 2, Haven't got a spreadsheet on my computer = 3)

NOT USING SPREADSHEETS

1.


- (a) What problem(s) or reason(s) have prevented you from using spreadsheets since attending the workshop ?  89.


(Uncertain how to use spreadsheets to best advantage = 1, Time priority - haven't had the time/motivation to use spreadsheets = 2, Haven't got a spreadsheet on my computer = 3)

- (b) Do you intend to use a spreadsheet in your record-keeping or decision-making system  90.

(IN THE NEXT 6 MONTHS = 1, 6-12 MONTHS - 2, SOMETIME = 3, NEVER = 4)


2.


- (a) Do you find a manual record-keeping system preferable to a computer-based system  91.
(YES = 1, NO = 2,)


- (b) Could I ask you why you prefer a manual system to a computer based system? *(Reasons)*.....  92.
(Its faster for me than a computer = 1)


COMPETENCY with SPREADSHEETS


1.


- (a) Have you used any DPI Templates ?  93.
(YES = 1, NO = 2)
If YES, which ones ?


Feedlot.....  94.


Fencing cost  95.




Selling options.....  96.

Property purchase option/interest.....  97.

Other, please specify  98.



- (b) Have you modified any DPI Templates ?  99.
(YES = 1, NO = 2)


If YES, could you show me HOW ?  100.
(Budgeting format = 1, Herd records = 2)








- (c) Have you created any of your own templates ?.....  101.
 (YES = 1, NO = 2)
- If YES**, could I please have a look ?  102.
 (Budgeting format = 1, Herd records = 2)
- (d) Are there any templates that you'd like to see developed - problems you'd like to be
 able to look at alternatives on a spreadsheet ?.....  103.
 (Template to incorporate the information supplied in the 'Ausmeat Assessment Summary' = 1
 Cattle Enterprise options (eg. buy stores, breed own etc) Grain or grass = 2)

ALL ATTENDEES


TEAMWORK in management


1. Who is involved in the management of your property ?.....  104.
 (HUSBAND = 1, WIFE = 2, HUSBAND & WIFE = 3, INDIVIDUAL = 4 OTHER COMBINATION
 eg Mother and son)
- 2.
- (a) Who 'carries the most weight' in keeping records ?  105.
 (HUSBAND = 1, WIFE = 2, HUSBAND & WIFE = 3, INDIVIDUAL = 4 OTHERS, please specify= 5)

- b) Who 'carries the most weight' in making financial/management decisions ?  106.
 (HUSBAND = 1, WIFE = 2, HUSBAND & WIFE = 3, INDIVIDUAL = 4 OTHERS, please specify= 5)


- (c) On what evidence are most management decisions based ?
- Seasonal conditions  107.
- Cash flow/financial position  108.
- Trial and error on what you think may be good  109.
- Asking friend/relative/consultant  110.
- Setting goals to analyse alternatives  111.
- 3.
- (a) Who enters the Quicken transactions into the register and reconciles
 the accounts?  112.
 (HUSBAND = 1, WIFE = 2, HUSBAND & WIFE = 3, INDIVIDUAL = 4 OTHERS, please specify= 5)
- (b) Who uses the reports (eg itemised category, cashflow etc)?  113.
 (HUSBAND = 1, WIFE = 2, HUSBAND & WIFE = 3, INDIVIDUAL = 4, Accountant = 5)


AND/OR


(c) Who enters information into the spreadsheets? (i.e. record-keeping).....  114.
(HUSBAND = 1, WIFE = 2, HUSBAND & WIFE = 3, INDIVIDUAL = 4 Accountant = 5)

.....
(d) Who uses the spreadsheets? (i.e. for decision making and analysing options)  115.
(HUSBAND = 1, WIFE = 2, HUSBAND & WIFE = 3, INDIVIDUAL = 4, Accountant = 5)


4.


(a) Has attending the Quicken Workshop changed the role of team members ?  116.
(YES = 1, NO = 2,)


(b) Has Quicken benefited teamwork ?  117.
(YES = 1, NO = 2,)

If YES, How ?  118.
(Increased awareness of financial position of both parties = 1)

AND/OR

(c) Has attending the Lotus Workshop changed the role of team members ?  119.
(YES = 1, NO = 2,)





(d) Has Lotus benefited teamwork ?  120.
(YES = 1, NO = 2,)

If Yes , How ?  121.
(Increased awareness of both partners of costings = 1)









RECORD KEEPING


1.

(a) What type of records do you keep (YES = 1, NO = 2,)


- (i) **Financial**
 - 1. Cash Flow Budget.....  122.
 - 2. Gross Margins.....  123.
 - 3. Net Worth  124.
 - 4. Profit/Loss  125.

(ii) Physical


- 5. Cattle Weights or numbers.....  126.
- 6. Rainfall  127.
- 7. Paddock Record  128.
- 8. Inventory  129.
- 9. Wages.....  130.
- 10. Crop yields  131.
- 11. Timing of husbandry practices  132.
- 12. Machinery parts usage.....  133.


(iii) Others, Please specify  134.


(b) How do you keep these records? (eg. Paddock, Dairy, Logbooks, on spreadsheets, in cashbook etc)


Financial records on Quicken.....  135.

Work Diary  136.

Manual Notebook - columns and headings  137.

On spreadsheets  138.

On database  139.

(c) How often do you refer back to information in your records.....  140.


(Daily = 1, Weekly = 2, Monthly = 3, Yearly = 4)


(Allow for different records are referred to with differing intensity)


.....


.....

(d) How do you use these records: describe examples of how these records assist in your decision making? (Examples: Cattle Weights, Calving Records - Selection criteria?)

Subsequent reference (check-up) when making a decision.....  141.


Negligible ('up-top')  142.

Selection criteria for cattle.....  143.

Timing of subsequent husbandry practices  144.


General

1.

























(a) Have you heard of the Rural Training Grant ?.....  145.


(YES = 1, NO = 2,)


If NO, go to Question 2


(b) Did you apply ?.....  146.

(YES = 1, NO = 2,)

	If NO , why not ?		147.
	<i>(Unaware of details - eligibility etc. = 1, Couldn't be bothered filling out the application form = 2)</i>		
(c)	If you applied, did you get the grant?		148.
	<i>(YES = 1, NO = 2,)</i>		
2.	What skills, knowledge or attributes would you consider your son/daughter need to become a good farm manager ?		
	Practical Skills 	149.	
	Business and Marketing skills.....		150.
	Education 	151.	
	Personality Traits (Motivation)		152.
	Empathy with land		153.
	Computer literate 	154.	
	Experience		155.
3.			
(a)	What is the next step you wish to take to improve your management ?		156.
	<i>(Production based (eg. > Herd quality, improve pastures etc) = 1, Skills based (eg. Bookkeeping) = 2, Computer knowledge based = 3, Financial based (eg. buy property, loan knowledge, improve cashflow) = 4)</i>		
(b)	What areas would you like to know more about to improve your management?		
	<i>(YES = 1, NO = 2,)</i>		
	Markets and Marketing		157.
	Off-farm Investments		158.
	Coping with Variability.....		159.
	Finance Options - Evaluating.....		160.
	Investment Appraisal.....		161.
	PMP.....		162.
	Diversification Options		163.
	Tax Planning		164.
	Information Systems		165.
	Drought Recovery		166.
	Risk Management.....		167.
	Farm safety/legislation		168.
	Improved pastures esp legumes.....		169.
	Financial jargon eg. when approaching banks		170.

Soil management.....  171.


OTHERS, please specify.....  172.

4. Describe any other workshops that could be run that you would consider attending?  173.
(*Practical Short Courses - industry specific = 1, Introductory type computer based course (eg. Windows) = 2*)


MARKETING


1.


(a) Can you list your main sources of market information i.e. if you were selling cattle, sorghum or cotton how would you establish the best possible price?

Phone Meatworks/seed merchants.....  174.


Phone Agents  175.


Magazines and Newspapers  176.


Industry Marketing Board (eg. AWB).....  177.


Radio Program.....  178.

Other farmers/word of mouth.....  179.

Visit Sales.....  180.

(b) What is your opinion of the quality of this market information?  181.
(*Very reliable = 1, Usually reliable and accurate = 2, Often unreliable and inaccurate = 3, Totally unreliable and inaccurate = 4*)

(c) Can you nominate any sources of information on likely market prices in 12 months time?  182.
(*YES = 1, NO = 2*)

If YES, please describe your sources  183.
(*Refer back to historical trends = 1, Forward selling /futures contracts = 2*)

NOTES:

APPENDICE II : Phone Survey Questionnaire

PHONE SURVEY

Phone survey: General population

Identification number:  184.

A sample of approximately 100 people selected at random from a list of around 2500 farmers and graziers from the Central Queensland region.

Introduction


‘This is Rowena Eastick from the Rockhampton DPI speaking. I’ve been employed by the Farm Business Management Section here to conduct a phone survey about different aspects of property management. This is an effort to see how the DPI can further improve its service concerning Business Management in the Rural Industry’.

Objectives:

- Identify Business/Financial concerns in property management
- Identify the adoption of computer use in farm management.
- Identify the awareness in the rural community of DPI FBM workshops.
- Identify the acceptance/awareness/adoption of the Rural Training Grant
- Identify the most useful/used records (Financial and physical) kept by landholders and how these records are used in decision making.
- Identify any suggestions for the improvement of the service provided by the DPI FBM section.
- Identify marketing concerns - inconsistencies, marketing trends, complaints/positive comments concerning different buying/selling options.


Questions

1.

(a) Are you aware of DPI Farm Business Management workshops?  185.









(YES = 1, NO = 2)

If YES, go to (b)





(b) How did you find out about them?  186.

(Word of Mouth (who) = 1, Media = 2, Field Days = 3, DPI letter or extension officer = 4, Other= 5)

2.













- (a) Have you attended a DPI Farm Business Management Workshop?  187.
(YES = 1, NO = 2)
If NO, go to # 3.
- (b) Which one?  188.
(LOTUS = 1, QUICKEN = 2, BOTH = 3)
- (c) What is your opinion on the cost of the workshops?  189.
(MONEY VERY WELL SPENT = 1, MONEY WELL SPENT = 2, NEUTRAL = 3, NOT WELL SPENT = 4)
- (d) Are there any other workshops that could be run that you would attend?
(YES = 1, NO = 2)
- Practical short courses - industry specific  190.
- Basic introduction to computer  191.
- Word processing.....  192.
- Animal Nutrition  193.
- Developments with pasture improvement  194.


3.

- (a) DPI Farm Business Management Workshops are computer based.
Do you consider this:  195.
(Positive = 1, Negative = 2, Neutral = 3)
- (b) Do you use a computer in any capacity in your farm management?.....  196.
(YES = 1, NO = 2)
If YES, go to (c); If NO, go to (d)
- (c) What influenced you to use a computer on-farm?  197.
(Wanted to improve (speed up) record keeping = 1, Previous exposure off farm eg. neighbours, at work etc = 2, Initiated by children at school = 3, Farming getting more towards being a business - need computers for future = 4))
- (d) Do you plan to buy a computer  198.
(<6 months = 1, 6-12 months = 2, Sometime = 3, Never = 4)






4.

(a) What are the most useful (or used) records you keep? (*YES = 1, NO = 2,*)

- (i) Financial**
- 1. Cash Flow Budget..... 199.
 - 2. Gross Margins..... 200.
 - 3. Net Worth 201.
 - 4. Cheque butts 202.
 - 5. Cash Book 203.
- (ii) Physical**
- 6. Cattle Weights or numbers..... 204.
 - 7. Rainfall 205.
 - 8. Paddock Record 206.
 - 9. Inventory 207.
 - 10. Crop Yields and husbandry practices 208.
 - 11. Cattle sale returns and husbandry practices  209.
 - 12. Machinery R&M, hours, fuel..... 210.






(iii) Others, Please specify
..... 211.

(b) How do you keep these records? (*YES = 1, NO = 2*)


- Financial records on Computerised Financial Package..... 212.
- Work Diary 213.
- Manual Notebook - columns and headings..... 214.
- On spreadsheets / database..... 215.
- In folders in filing cabinets..... 216.


(c) Could you describe examples of how these records assist in your decision making?

(*YES=1;NO=2*)


- Subsequent reference (check-up) when making a decision 217.
- Negligible ('up-top') 218.
- Selection criteria for cattle 219.
- Timing of subsequent husbandry practices 220.
- Use previous figures to compare with future options. 221.


5.

(a) Do you record cash inflows/outflows in a cashbook.....  222.
(YES = 1, NO = 2)


(b) Do you reconcile your cashbook on a regular basis?  223.
(YES = 1, NO = 2)


If answered Yes to #3(b), complete parts (c) -(e) below


(c) Do you use a computerised cash book system?  224.
(YES = 1, NO = 2)


(d) Do you use a computer based physical record-keeping system?  225.
(YES = 1, NO = 2)


(e) What software do you use? (YES = 1, NO = 2)


Quicken  226.


Lotus/Excel  227.

Phoenix.....  228.

1st Choice.....  229.


Quattro  230.


Microsoft Works  231.

Other.....  232.

6.


(a) What skills would you consider your son/daughter need, to become a good farm manager? (YES=1;NO=2)

Practical Skills  233.


Business and Marketing skills  234.


Education  235.

Personality Traits (Motivation).....  236.

Empathy with land.....  237.

Computer literate  238.

Experience.....  239.

























7. Who is involved in the management of your property?  240.


(HUSBAND = 1, WIFE = 2, HUSBAND & WIFE = 3, INDIVIDUAL = 4, OTHER COMBINATION

eg. Mother and Son = 5)

8. What areas would you like to know more about to improve your management?

(YES = 1, NO = 2)

Markets and Marketing		241.
Off-farm Investments		242.
Animal Nutrition		243.
Finance Options - Evaluating.....		244.
Investment Appraisal.....		245.
PMP.....		246.
Diversification Options		247.
Tax Planning		248.
Information Systems		249.
Drought Recovery		250.
Pasture Improvement.....		251.
<i>OTHERS, please specify.....</i>		252.
9. <i>(Describe the Rural Training Grant)</i>		
(a) Are you aware of these grants?		253.
(YES = 1, NO = 2,)		
(b) Have you ever applied for the grant?		254.
(c) Did you receive the rebate?.....		255.
10. <i>(Describe interest in Marketing 'Project')</i>		
(a) Can you list the main sources of market information i.e. if you were selling cattle, sorghum or cotton how would you establish the best possible price? (YES=1;NO=2)		
Industry Marketing Board eg WB.....		256.
Radio programs		257.
Phone buyers direct -meatworks/seed merchants.....		258.
Phone agents.....		259.
Magazines and newspapers		260.
Other farmers/word of mouth.....		261.
Visit Sales.....		262.
(b) What is your opinion of the quality of this market information?		263.
(Very reliable = 1, Usually reliable and accurate = 2, Often unreliable and inaccurate = 3, Totally unreliable and inaccurate = 4)		
(c) Can you nominate any sources of information on likely market prices in 12 months time?.....		264.
(YES = 1, NO = 2)		

If YES, please describe your sources  265.
(Refer back to historical trends = 1, Forward selling /futures contracts = 2)

APPENDICE III: Methodology

THE SAMPLE:

A: On-farm survey

CCRK&A Sample: Computerised Cash Record Keeping & Analysis workshop using Quicken:

Population 449, Sample size selected: 30

Sample size interviewed: 25 (5 couldn't arrange a suitable time, although they were willing to be part of the sample)

($25/449 = 5.6\%$ Sampling intensity)

DS Sample: Decision Support for Farm Managers Workshop using Lotus:

Population 101, Sample size selected: 20

Sample size interviewed: 20 ($20/101 = 20\%$ Sampling intensity)

5 people were part of both samples, therefore 40 people in total were surveyed.

B: Phone Survey

Population 2436: Cattle (75/1430), Crops (45/1006)

Sample size selected: 115

No. Of interviews completed: 81

No. Of people who declined to be interviewed: 7

No. Of people who were willing but couldn't arrange a convenient time: 4

No. Of people uncontactable: 23

SURVEY STRUCTURE AND DATA ANALYSIS:

Survey Coding:

This was a semi-structured survey, where answers were coded on the basis of discussion type responses given by the producer.

These responses were then categorised, and listed as options for the 'revised' survey question, and then coded. eg. 1 for Yes, 2 for No, and left blank if no response was given. An explanation and examples of how responses were coded is given in Appendix IV.

These options were then not offered as a question i.e. 'Do you give reports to accountant', but were to be given as a volunteered response. There is concern that relying on primarily volunteered responses may have prejudiced the results towards the conservative side. On the other hand, if the questions were mainly of a prompted nature, this may have led to exaggerated results in the statistics.

Statistical Analysis and Presentation of Results:

The responses were analysed using the 'Statistix' package, resulting in frequency distributions for each answer code.

These distributions are expressed as percentages of the sample, with 95% Confidence intervals given with some results allowing extrapolation of these findings to the population.

In some instances, a CHI²TEST was performed on the data to observe if there were any significant differences..

Comments producers have made which seem to exemplify the results have been added in appropriate sections to emphasise the findings.

Organisation of the Questionnaire:

The On-Farm Survey (Refer Appendix I) comprised of 4 sections:

Background Information

CCRK&A - Quicken Questions

DS - Spreadsheet Questions

All Attendees

The DS sample were asked all sections, but their CCRK&A section responses were not included in the data analysis. These people could be considered to provide supplementary information on Computerised cashbook use, comprising a third group CCRK&A responses from those who have been to both a CCRK&A **and** DS workshop, and could be expected to have higher level responses to the Computerised cashbook section than those who have been to the CCRK&A workshop only. These results have not been presented in this report.

The Phone Survey (refer Appendix II) was not divided into sections except questions concerning FBM workshops were not asked to producers who hadn't attended a workshop.

Competency:

This was assessed by getting the producer to display a few simple skills on the lap-top computer taken on farm (was offered to both the Computerised cashbooks user and non-user groups). These skills consisted of -

- 1) Entering a transaction (of their choice).
- 2) Describing the steps involved in the reconciliation process, and
- 3) Getting out a couple of reports e.g., cashflow, job/project.

The producers were given the option of using their computer if they wished.

APPENDICE IV: Survey Coding

Example (Refer to Survey Code No's 28-52)

Questions:

'What use have you made of the information generated by your Computerised cashbook ?'

'List the most common uses you have for your Computerised cashbook.'

Responses given in discussion included:

a) *'Mainly give reports to accountant''*

Answer would have been coded as:

'Keeping records for accountant'(31) and *'Give reports to accountant'*(38)

b) *'Use the category Report to look at expenses for seed, fuel and R & M'*

Answer would have been coded as:

'Look at expenditure in different categories eg, Repairs & Maintenance'(43) and also

'Monitor individual category totals'(30)

c) *'Look at cattle sales and adjust to fit in financial year with respect to tax planning'*

Answer would have coded as:

Allows more efficient tax planning (47)

d) *'Use the Job/Project Report to compare how our 2 properties are going and where we should allocate our resources'*

'Assess when cattle are coming off the feedlot to try to plan our repayments'

Both these answers would then have been coded as:

'Management Planning' (34)

e) *'Look at balance to see if we can afford an option eg. Clearing a paddock, and try to work out when we'll be able to afford it'*

This was categorised as both:

'Management Planning'(34) and *'Knowing Cash Position'*(35) responses.

APPENDICE V: Competency in Spreadsheet Skills

	Entire Sample (N=20)	Spreadsheet Sample (N=17)
Used DPI Templates	75 ₍₅₁₋₉₁₎	88 ₍₆₄₋₉₉₎
• Feedlot template	45 ₍₂₃₋₆₉₎	53 ₍₂₈₋₇₇₎
• Fence cost template	25 ₍₉₋₄₉₎	29 ₍₁₀₋₅₆₎
• Cattle Market Ready Reckoner	25 ₍₉₋₄₉₎	29 ₍₁₀₋₅₆₎
• Financial - interest, property purchase	25 ₍₉₋₄₉₎	29 ₍₁₀₋₅₆₎
Modified DPI Templates	20 ₍₆₋₄₄₎	24 ₍₇₋₅₀₎
• Herd Record	5 ₍₀₋₂₅₎	6 ₍₀₋₂₉₎
• Budget	10 ₍₁₋₃₂₎	12 ₍₂₋₃₆₎
Created own template	40 ₍₁₉₋₆₄₎	47 ₍₂₃₋₇₂₎
Templates to be developed		
• Ausmeat	15 ₍₃₋₃₈₎	18 ₍₄₋₄₃₎

APPENDICE VI: Areas to increase Knowledge

Table: Areas to increase knowledge

	CCRK&A %	DS%	Phone (%)
Markets and Marketing	44	40	17
Off Farm Investment	28	20	5
Coping with variability	0	0	-
Evaluating Finance Options	20	10	5
Investment Appraisal	0	5	1
PMP	8	15	11
Diversification Options	16	20	5
Tax Planning	8	10	6
Information Systems	0	0	1
Drought Recovery	4	0	1
Risk Management	0	0	#
Farm Safety/Legislation	12	10	#
Improved Pastures	36	30	16
Financial Jargon	16	20	#
Soil Management	8	5	#
Animal Nutrition	32	20	10

APPENDICE VII: Phone Survey Comments

PHONE SURVEY COMMENTS:

1. We own a computer, but don't use for farm records - wife uses it mainly for Word. Wife keeps the records, but husband mainly responsible for decision making.
2.
 - Records don't really help with decision making, 'There are too many variables - think you can pop-up answers with a computer, but it does not work'. The environment is the major determinant.
 - 'A good manager needs a calm steady head and a thrifty outlook on life - certainly not any of the fancy things the DPI and fancy talkers come up with.'
 - market economists are ineffective - they view their data as economics, but it is more political than anything eg. the 1984 beef slump was due to the activities of Ayatollah Komeni.
3.
 - 'Own a computer, but too much hassle to get into it and boot it up.'
 - Picking the markets is more luck than good management - you get contradictory statements even in the same paper. All the intelligence we are able to access, but whether we can believe it or not is another story'.
- 4.
5. I don't think you need to know those bloody records - don't use any records for decision making because I don't keep any'.
6.
 - 'If were younger, computers would definitely be the way to go'.
 - 'Keep absolutely no records, cheque butts/invoices/account statements all get chucked together to go to the accountant'.
 - 'Too old, not interested in further skills or knowledge'.
7. Keep all receipts in a heap, record outflows on cheque butt. When selling, it is due to 'necessity to pay bills rather than shop around chasing markets'.
8.
 - All income set aside in different folders on file, e.g., cattle sales, refer to quite often to compare prices. Keep bank statements, cheque butts, sale records etc., to give to accountant in May for Preliminary Tax Return.
 - 'It would be a game man if tried to pick the market even for three months'.
9. We look at rainfall records to see when was the last time we planted in that amount of moisture, can we do it again assuming the same yield but considering different prices.

10. Keep daily gain records, Breedplan, associated records - use for cattle selection e.g Semen tested bulls and c.f.a. cows. Also look at gains to determine which paddock which mob should be in or if we should send some off to a feedlot.
11. A lot of good management depends on the weather.

- 12.
- Record crop husbandry practices, look back to see ‘Can we plant on that moisture, or not?’
 - Keep Cash Flow budget for the bank, but most financial records kept on cheque butts.
13. We reconcile weekly before we go to town to move money between accounts where and when necessary.
- 14.
- Keep records associated with Brahman Breedplan e.g., weaning weights etc., used primarily as selection criteria with decision making. Have to keep records with the stud to select for what bull buyers want.
 - A good manager needs good practical experience, and not all those certificates and degrees.
 - I think computers are positive, but I’m near retirement, so wouldn’t be considering getting one for the place.
- 15.
- Keep Breedplan record sheets - use these to aim for goal of calving rate of 90% - culling criteria - if cow doesn’t have a calf every 12 months without good reason, she’s gone..
 - Keep work diary ‘It is the most important thing on farm’.
 - Management ‘skills’ - ‘Must be able to visualise, projections, have a goal to aim for , thinking about the future - can’t just sit on your dunghill and do what your forefathers did’. need Education to promote a higher level of thinking’. - ***Problem to get farmers (usually of a low standard of education) to think about forward planning. They may use records to compare what they are doing now with what they used to do, but seems very few use records to compare what they may do in the future to what they are doing now.***
 - Even ‘in the last 10 years, the Ecology of the country is changing - forefathers did not really understand the environment - we need to develop awareness of sustainability with the land through more understanding of the surroundings’. ***For most producers, to improve management means to improve production potential through improved strategies eg, Nutrition, Pasture - Improving their financial management is not a high priority.***
16. ‘
- Main thing that holds me back from attending the courses is timing - having to look after kids during the day’.
 - Thinks that two days together is a bit of a trial - have each day a week apart so can go and play a bit with what you have learnt. Feels the need for a general computer literacy course, know of a lot of people who are interested in computers but don’t know where to start - ignorant of capabilities’. ***Are we teaching computer skills or management skills or does on follow the other?***
 - Templates very useful - amazing how can see how just a couple of days can make the difference between profit and loss in a feedlot.
 - Wants to know ‘Best way to approach/present things to the bank, especially to those bank managers ignorant to the way of the land.
 - Quicken used all the time - graphs very handy visual aid to look at expenses.

- Selling methods unpredictable - had a mob of cattle, 8 decks went calm, four meatworks - the ones to work less \$100/head after all the down-grading, but 'Once they are over the hooks, you can't prove them right or wrong'.
- Good manager - open-minded, don't stay with old methods.

17.

18.

- Uses irrigation schedule and crop GM to see what has worked in past, e.g., what yield on what watering.
- Use crop GM to compare cotton, wheat, sorghum and increase/decrease plantings accordingly.
- Use diary to compare chemical use and success rates.

19.

- Records don't really help in decision-making - we aim at a certain number in particular paddocks, and this is dictated by the season.
- Predicting market trends 'Absolutely impossible - never ever trust predictions'.

20.

- Considers computers are of 'No value at all on the land - too many variables'.
- Don't keep any records apart from cashbook - keep it all in the brain and gut feeling depending on the season. eg. Look at conditions in Feb./Mar, can we carry the breeders - if not, sell steers and spayed heifers.
- Get market information from newspapers(The Land, Stock Journal(SA), QLD Country Life), DPI brochures , Grain Grower etc. Don't really want to know anything more about management as am only a couple of years off retiring.
- 'Anyone with diplomas, degrees, etc., not much good for anything'.

21.

- 'If were running a more sizeable place - computers would definitely be some benefit, used to use one when was a butcher'. *Size of operation.*
- 'At end of my management career, so not much else I really want to know. There is a place in the industry for computers with no doubt'.
- Decision-making is season dependent - when it rains we'll buy some more cattle.
- Used records to find Belmont Reds the best in feedlot, so crossing their D'Masters with Belmont Reds instead of straight Brahman(??)

22.

- 'Referring back to records is a big help - look at rainfall patterns back to 1960 to compare timing/yields/prices etc., of husbandry practices/crops'.
- Cheque butts are our primary financial record - can place every cheque back to 1950's'.
- Wants to know more about Tax Reduction e.g., spent lots of dollars trying to find water, but can't claim on tax.
- Also basic bookkeeping course. *Basic Bookkeeping course, manual compared to computer.*
- 'There should be an increased awareness of assistance available e.g., RAS'.

- 'Where are all the Department of Primary Industries extension people - very hard to get one-on-one on farm service.
- Meatworks - 'the processors not in very good stead, need more competition - send 'dingo' bulls straight to works - a whole beast gets down-graded even though one side may make a quality grade'.

23.

- Computers will be a necessary tool in years to come.
- Have two properties - compares the running cost of each - has multi-columned expenditure sheet which he gives to accountant each month..
- Keep cattle records - weight, time to achieve that weight, aiming for 4 tooth Jap Ox.
- Keeps manual notebook to note down time of year ,weights, bruising etc. to compare with averages for the year
- Wants to know when DPI will find something to kill Parthenium weed.

24.

- Has done Quicken course, but does not use it as didn't feel 'cottoned onto it enough' in workshop. Would like a basic computer literacy course - haven't gone to Quicken as still feel intimidated by computers. Was impressed by spreadsheets but haven't got into computers yet - was hoping to start 1st July.
- Keeps feedlot records - initial weight, weight gains, - try to calculate FCR etc.
- Uses expenditure book to compare feed costs, e.g., At moment using peanut shell, but then too expensive and have to go through recalculating. 'Properties have to be run as a business'.

Financial/Business Concerns

26

Suggests that >75% would get out of the district if they could - in a few years, will be a 'property for sale' abundance, but the prices won't be there (*property turnover*).

Superannuation concerns - don't want to still be on the land at 60, but 57 years old now and hasn't got enough put away. Over the last few years, hasn't had anything to spare to contribute.

Provisional Tax - margins in Primary Production are so narrow, most people also have substantial loans to repay, but when finally do have good years, the Provisional Tax will prevent people 'catching up' and 'getting ahead'.

'Seasons make a mockery of budgeting', but he does a meticulous one each year and usually 'adjusts' at 2 months to see how he's going - can't understand how producers survive without a budget - need to forecast to account for worst situation. Can even save you dollars in other ways (eg. saved around \$1000 on establishment fees when applied for a loan, as he had already done all his figures and bank had not much else to do).

Capital Gains Tax - increase awareness of planning options.

Computer use

Tried Lotus but wouldn't condense what he wanted onto one page (zoom in XL?), also tried AME Pro, didn't suit.

Uses 'Works for Windows' spreadsheet.

Uses a cashbook package from 'Software Magician', from surfers, but is a problem in that has only five ways to disperse an account (e.g in his 'Purchase Journal', has 'groups' Cattle, Horse, Accountant fees, but can only give five 'categories' to each.

Has 'Agware' package - where he does his cashflow budget. He then transfers this to a spreadsheet. But, looking for a better package as finds it a problem with 'updating' cashflow budget. Says there's a mistake in package.

Finds the budget also helps him plan his production cycle (eg. how much seed, fertiliser going to use - where and when?)

Said he had a look at Quicken but didn't think it'd suit his needs - I explained Quicken would help overcome his '5 category limitation'.

Rural Training Grant

Has previously had some assistance with RAS, so interested in finding more about grant - needs to be a bit more aware about eligibility.

Suggestions for courses

Feedlot type course - variables, options (Braford Society/??)

Tax planning

Computer Use

Uses spreadsheets extensively to compare options - especially feedlotting and 1° the budget to forward plan (made up his own).

'Financial management just as important as the physical production aspect'.

Main Reports off cashbook 'Deposit source detail report', 'Journal Disbursement Code Report', 'Bank Reconciliation Report'.

Has just completed a 'Saltbush Course' - is trialing 'Cash Magic' and 'Herd Magic', but seem a bit complex - a lot of money when probably won't use it to its potential.

After paying big money for a package, then have to pay nearly half again if want follow-up service option.

Marketing

Will hope never to sell through the yards again 'The charges are exorbitant' and 'the collusion is bloody terrible'.

Now sells 1° straight to works, but they'll start getting too much power soon - no comeback!

Thinks CALM will be way of future, more work for producers, but 'keeps the industry honest'.

Hard to even forecast prices in a week (eg. in June, Jap Ox got \$3.05/kg, then by July, couldn't even get a quote for them')

'Have got no faith in those people going around predicting trends'.

27.

- Confused with the Rural Training Grant - associates it with the Rural Traineeship Scheme. *If people just hear the term 'Training Grant', they tend to assume it is the Traineeship Scheme and think you are trying to push having someone placed.*
- Plan to buy a computer if the drought lets us stay on the land.
- Look at records for forge crops such as seed varieties, prices, diesel used on each years plantings, how many bags of seed were used to decide if worth doing again

28.

- 'Too old (62) to worry about improving my management'.
- Just keep cheque butts - its mainly the accountant who does the financial stuff

29.

- Uses Saltbush 'Herd Magic' for stud records - keep weights, performance recording, Breedplan records, Pregnancies, Scannings ,used as an aide to 'eye' for selection,
- Still uses manual cashbook.

30.

- 'At 65, I think computers are a bloody menace, but they are essential for the next generation'.
- Bank statements are the main financial records used in decisions - mainly to look at cashflow position
- Keep diary of prices when cattle bought/sold, when put onto/off forage.
- 'If I had a Floor Price (eg. similar to wool) for the Beef Industry, then might have a better grasp of where you are going'. Gripe about weight and grade basis - 'no control over grading is at the hands of the meatworks - very unsatisfactory, you have no real comeback'.

31.

- RTG 'They have no intention of letting you have it'.
- Most useful records are the Stud records and Quicken-to track transactions.

- With respect to decision making - use these records to compare 2 properties and to look at investing somewhere else. Use the stud records to track good bulls through offspring, put the weaner heifers onto cottonseed to try and speed up 'genetic turnover' - can breed earlier as increase weight by 40 kg (compared to those not on feed)
- 32.
- Use historical figures to project Cashflow Budget
 - Cattle records for selection criteria e.g. Reds do better than Grays
 - Work diary allows organisation of when to perform husbandry practices eg, How long since last gave Botulism vaccine
- 33.
- 'The idea of computer based record keeping is great, but having the workshop only in computer format is detrimental'. What about manual bookkeeping system?
 - Look at records to see when we had the bulls in and when the cows calved. Also to look at we spent that much last year - why have we spent more this year eg, spraying
34. Quicken provides the main records that influence our decision making - primarily through manipulating Cash Flow.
35. Mainly just keep records for Brahman stud book.
- 36.
- Use an ag. consultant to draw up budget, give a summary report on how we are going every three months and at end of year.
 - The basic bookkeeping skills learnt by Trial and Error - thinks a manual bookkeeping course would be beneficial.
- 37.
- Did a computer course in 1988 with intention of keeping on-farm records but got disillusioned when found out how quickly a computer/software package become obsolete and needs upgrading.
 - Mainly look at the records for costing and at cash flow and if there is a surplus, do R & M he's been putting off eg, fencing. Don't use records for actual planning/projections as that all depends on the weather.
- 38.
- 'We would have a computer if we could afford it - it is one of our priorities when it rains'.
 - Just started doing a Cash Flow Budget on recommendation from the bank.
 - Do a farm plan ahead for 6 months - prioritise when we are going to do things , which helps with cash flow projections.
 - Follow season and prices for proportion of grain/cattle, track costs of growing eg. Irrigated wheat and consider that decision for next year.
 - Ring up best farmer in the district for advice when trialing crops etc.
 - 'Use a Department of Primary Industries Aerial Map for paddock measurement and it is a very useful tool - 'Bloody oath'.
 - 'QIDC - those bastards'.

- Promote DPI courses- I only heard about it after the course had been held (he didn't realise that the workshops were a continuous project - thought it was a one off event)

39.

- Wants to know more about soil testing - knowing how to read the results and what they mean - land capabilities/what to grow.
- Look at cashbook 'When did we sell that mob and what bills did we pay with that money?'

40.

- Nothing more he wants to learn 'Retiring soon'.
- 'Go to the sales to see for yourself what prices are like, then in the report on the sale in the paper, it is nothing like you saw there yourself - tend to only quote on top pens'. Biloela yards are run like a bloody hillbilly show'.
- Just keep all invoices, receipts, sale dockets etc and give it all to the accountant. Don't keep any records, so they don't help in decisions.

41.

- Will buy a computer when the drought breaks.
- Yes, I've heard about the Workshops but I wouldn't be able to tell you what they are about.
- Financial records - keep receipts from meatworks, at end of financial year, add up all the income. Track expenses eg. Hay, from the bank statements.
- I suppose I should put records down on paper, but most of it's up top.

42.

- Will buy a computer when it rains.
- 'Days of just chucking into the Grain Board are gone - need to know more about marketing'. 'All I wanted was this Rural Training Grant and the Interest Subsidy Grant - cost me money for the accountant to do the presentation - don't want to discuss anything to do what that RAS Scheme', eg. Employed three men before drought - son worked for Hastings Deering. With drought had to lay off the employees, get son to come home. Told him it would be work for no pay so handed over half the property to him for extra incentive. Son and wife had nest egg from off-farm employment, so property was declared ineligible for RAS, so now are using up their savings.
- Continually going back to records, especially the crop ones e.g. When we had that rain in March, I looked back to see when has been the latest we had planted Sunflower, and saw we had finished planting by 7 March previously, then had to consider if we had frosts and when we eventually harvested.

43.

- Was influenced to get a computer as wanted to improve record-keeping and had heard the Department of Primary Industries courses were really good.
- Use Works for Windows for recording cattle numbers etc - want to get into Quicken but waiting for the drought to break. Don't really use these records for decision making

44.

- We tried computers but felt they were a bit hard to use. Son bought us a financial package (can't remember what it was called), but the computer wasn't good enough to handle it.

- Look at previous trends eg, When we planted, when we put the bulls out when making decisions.
- 45.
- Uses Phoenix, currently doing a management course through CAT, wants to get into spreadsheets.
 - When we are in a similar situation to a previous one eg. When spraying a crop, how lush, so high, this time of the yes,, we refer back and this helps us make a subsequent decision.
46. Don't use records for decision-making - that is left to head office (Consolidated Pastoral Company in NT), just send them records they require - cashbook. Any areas I would like to know more about I just access information from the DPI.
47. Wife does books, husband and son do the rest
48. Main financial record is the bank statement
- 49.
- Need more knowledge about Animal Nutrition, especially now it is so difficult to access the Beef Husbandry Extension officers.
 - Main financial records are the Grain Board Statements and the bank Statements
 - Cattle Record Book - when we are supplementary feeding, we track how many cattle through the lot . Know how much grain we can store or keep on the place, so work out how much we have to but in for those cattle.
- 50.
- If had a bigger place, would get a computer - primarily for son to be 'with it' when he takes over.
 - Keeps two cashbooks -
 - 1) For accountant/Taxation - 15 itemised columns reconciled at end of year.
 - 2) Up-to-date balance, write in whenever draws cheques etc.
 - Improve knowledge on new trends in Farm Technology (field days).
51. We have got a computer, but the kids mainly use it for games. Will get around to putting the farm on it one day, at the moment we only work on the place - we don't own it.
- 52.
- Computer use 'Depends on Age'.
 - 'These weather experts talk to us about El Nino - don't know what they are talking about - why didn't El Nino affect the bloke 10 miles down the road who got rain while we didn't'?
 - Record keeping consists of 'whenever I come back from town, I empty out my pockets, put all docketts, invoices etc., into a bag and take to accountant. I tried a cashbook but accountants fees were still the same, so didn't do one again'.
 - 'No man on the land should be allowed to diversify e.g., sugar cane farmers going down the drain, so go into watermelons etc., put the small fruit growers out by out-

competing . Markets have a fine balance, diversifying upsets this - diversify only if into a unique market niche.

- 'How can you get neighbours to comply with regulations about noxious weed control, over-clearing country - turning my country into a salt pan'?
- 'The sooner they get rid of computers and technology the better off we will be - more employment'.
- If you're not getting rainfall, you can tell by looking at a paddock what your stocking rate should be - not some 'Farm Plan'
- I deal with one agent for everything to do with cattle - he just takes expenses off my account - so don't really keep track of my inflows/outflows
- records aren't much good in looking up what you did 5 years ago when we've had no rain for 5 years.
- DPI Post Mortems on your cattle are good - not that I agree with what they tell me all the time.

53.

- Want an Excel Follow-up and a Word Workshop.
- Went to one workshop without owning a computer and it was pretty much useless - really need your own computer to get the most out of the workshops.

54.

- 'I am too old for computers, but my son has got one and he does all of the books'.
- 'Records don't assist in decision making - the weather/season governs us completely'.
- 'Would not have a hope in hell of predicting prices - it depends on the multi-nationals and policies - Gough Whitlam killed the beef industry overnight - you can't just go over to America and insult them like he did and expect it not to upset our markets'.
- Everything to do with the Department of Primary Industries extremely positive.
- Get hold of bank statements when want precise values, and get a balance sheet off the accountant at the end of the year.

55.

- 'Feel the Department of Primary Industries should circulate/liaise a bit more with producers - tend to go to the same few all of the time so I don't think they are getting a very accurate view of progression on-farm. The 'Shed Meetings' are very good and important for keeping in touch with new trends, but should be more 'Goodwill Visits' like from Chemical/Machinery firms.
- 'I think the Department of Primary Industries should be more positive towards innovators, eg, last year sowed sorghum in August and the Department of Primary Industries wrote in paper 'It was a desperate measure', but it wasn't, I had checked all my records and thought it would work but Department of Primary Industries came over very disheartening -they could have at least come out and looked at the crop'.
- Do a Cash Flow Budget - using conservative estimates, set myself a target eg, where I want to be in January

56.

- 'Physical records not as useful as the financial records, especially considering have management as well as taxation implications'.
- 'I don't use a computer here, but they are used by head office - I am only the manager'.
- 'I helped conduct a management course a couple of years ago and had assumed most people would be eligible for RTG, but very few were - was at RAS standing committee meeting in Brisbane a short while ago and it was reported that 70% of people who had applied had got RAS, but I have not really seen or heard evidence of that'.
- 'The regionalised structure of the Department of Primary Industries is a bit of a concern - period for consolidation rather than restructuring. There seems to be a lot of communication problems within getting information out of the Department of Primary Industries. a lot of valuable research is going begging'.
- I actively promote DPI courses to those I perceive need them - especially the management courses.
- Main records are Cash Book to keep track of monthly expenditure and see if we can modify our expenses anywhere, and also our Cattle Book, which we use to predict turn-off for the coming year.

- A good manager nowadays needs to be good at decision-making, can get by without practical skills to some extent- can hire some-one to do those tasks eg, Welding
- There could be a problem with fore-casting in the beef industry - knowing too much could create an early slide eg, If you knew the prices were going to go down in 2 months, the slide would start next week.

57.

- Can't give you an opinion on the use of computers as I've never used one.
- Use bank statements to keep track of cashflow.

58.

- 'The rural economy is no longer market driven - if it was, the market would have collapsed by now'.
- A select few can get assistance but the ordinary man who has watched his finances and not over capitalised has no chance at all. Looked at buying a farm for my sons, but did not think I would be able to service the debt, so watched someone else buy it, they get in financial strife and then get eligible for RAS, so my sons are stuck without a farm of their own and we are using up our cash resources - our superannuation - no wonder I am bitter.
- 'Is someone controlling the weather? Stanley Dao wrote in the 'Cosmic Conspiracy' that Dr Tessler demonstrated it was possible to control the weather'.
- We are losing the youth off of our farms - should be a type of 'Young Farmers Scheme' to keep sons on the land. Maybe they will go back to the land, but it will probably be as employee for some big multinational, e.g., Japanese.
- 'If it was a good season, people would have more time for management and decision making - at the moment people are too busy surviving'.
- 'Most of us around here call budget sheets for bank - 'liar sheets' - Einstein himself couldn't even predict trends'.
- You bet records assist in decision making eg, We trialed 5 varieties of oats to find out which was the best one for our situation. Even keep neighbouring cattle records when I can access them , so I can compare them with our records eg, Feed mixtures, what rates of chemical application were used.
- Its pretty futile at the moment - everything hangs on the weather - I don't hold out much hope for us.
- Watching all these guys on TV - the ones whingeing are the ones who've bought second and third properties - they're bloody well off. If the cities found out , it wouldn't do the plight of farmers any good.

59.

- 'We need to know what a computer can actually do - we are not aware if they can help with producers on-farm'. 'We want to get a computer but don't have the time to learn how to use it - we have a \$2.5-3 million turn-over/year and some months will have 200 accounts, some with up to 50 invoices on them and that is not including doing the tax, compensation, chemical accounts, wages and machinery log books. We need someone to come out here for a few days, set up everything for us and explain how it is going to benefit us and how best to use the computer'. Money is not the problem - its just accessibility, need something simple that I can access, but also the girls know how to work it.
- 'Don't have a cashbook as such, all invoices checked against accounts, they are paid, coded, then sent to accountant. We have 5 filing cabinets belonging to different order sections.
- The main record we use all the time is our budget - refer to it whenever considering a major decision.

- We forward sell a proportion of our cotton - we look at a price we can manage on, make a little profit versus budget costs - be satisfied with that and not be greedy - that's where you come unstuck waiting for the maximum price.
- Keep intending to go to a Workshop but just can't afford to take 2 days off.

60.

- 'Have a cotton farm, huge turnover, we seem to use Quicken all of the time, it is our right arm, don't even keep books anymore, it is just wonderful'.
- Mainly use Quicken for record-keeping compared to decision making.
- Nothing on RTG application form about being means tested - filled out all the forms then ran me around before telling me I was ineligible.
- 'Alan Jamieson is a really a brilliant teacher - one of the few computer experts that can get to grass roots'.
- 'Want to know more about rural software - publications to know what is around'.
- Impossible to keep track of chemicals on paper - tried with Lotus but now getting into 'Cotton Computer System'

61. A good manager is one who knows what is going on his property without relevance to figures'. I don't rely on any figures or numbers.

62. 'Computers the way to go, especially if have young boys coming up on the farm'.

63.

- 'Marketing with grain an absolute grey area - last few years have sold through the Grain Board, but now things are changing with the freeing up of the market'.
- 'Want to know how to use spreadsheets on Phoenix - have paid my \$450 consultancy fee to Graeme Spacko but hard to catch him'.
- Use the budget to keep trying to forecast ahead, comparing previous figures with what we expect in the future.
- would like a workshop on Phoenix - would going to Excel help with the spreadsheet part?.
- A good manager needs the ability to delegate and organise.

64.

- Have my name down for a PMP Workshop but haven't heard much back about it.
- Bank manager keeps a Budget.
- Keep records such as feedlot rations and fertiliser applications to look back on if I need to

65.

- 'Always haunting the Department of Primary Industries, eg, John Agnew about accessing more information, eg, pasture trials'.(Want an invite to 'Duckponds trial'??)
- Keep one book for income and another for expense.
- A good manager doesn't necessarily need practical skills - I can pay some-one to do that.
- I visit the store sales, see what lines and prices are like and tell buyers 'I've got that line for that particular price, rather than having to take stock through the yards and cop a hiding.'

66.

- There's nothing more I really want to learn to improve my management - the main restraint is season.
- Was aware of the Grant but did not apply as didn't think I would be eligible as I don't owe the banks any money - these grants just seem to help the banks get their money back, not the producer who has been watching his finances'.

67.

- 'I have got a computer, but don't know how to use it - the young fellow plays games on it'.
- Can't predict markets at all - sold grain last year for \$80/t, now I'm buying it back at \$200/t
- Thinks the Department of Primary Industries should provide a financial service to assist with lending information when approaching a bank - so that the producer has at least an idea at how much he should be paying to borrow X amount of money at a certain place at a certain credit rating - know what they're up against instead of getting taken for a ride by banks.

68.

- 'It might take you just as long to put it in the information into a computer as into a manual book, but the easy accessibility and regaining of information is the big saving'.
- Financial management still has to come from the head and gut.
- Records help with decision making especially Tax Planning and with the feedlot - shows that Herefords are Very good compared to Braford's and Santa Gertrudis
- 'Jesus Christ himself could not predict the market price in 12 months'.
- The Rural Training Grant - that is virtually ungettable

69.

Thought the cost of the workshop was very reasonable, especially because it was subsidised by the CWA.

70.

The old man persists with using computers as seems to have worked out a system to keep the farm records, but I think they are very inefficient'. Takes you too long to work out what you have to tell the computer to do before you can access what you want.

71.

- Workshops on opportunity lot feeding - costs, considerations etc. Workshops on grain marketing, eg, forward selling, futures have already attended Bill Holmes course on Futures Marketing.
- Went to Quicken Workshop to assess how computers might help, and the workshop further influenced me into buying a computer, but didn't think Quicken would be totally suitable, so went to Phoenix instead. Just starting to try to use the Livestock Register and Commodity Account.
- The budget one of the main records we use, especially in trying to project ahead.
- Starting to look at 'Wheatman' - protein levels, yields, fertiliser requirements
- Would like a Word Processing Workshop.

72.

- 'Use Quicken just about every day - know where you are, where you are going'. eg, If you need money at a certain time for a particular good.
- Print out the months income/expense from Quicken and type into Lotus.
- The accounting stuff to us is as important as the work outside.
- 'Lotus templates are excellent'.
- Need to know more about grain marketing, especially with deregulation - so many avenues to look into, especially with 2 or 4 different crops.
- 'We are really pleased with what the Department of Primary Industries courses do for us - the bank and accountant pleased also. Has really improved our business acumen and made the financial professionals we deal with more aware that we know what we are doing, especially in the drought, we have been able to sleep at night because we know how we are going - mainly due to Quicken'.

73.

- 'Have just taken over the place - at the moment, trying to do up a five year plan e.g., so we can prioritise when our money comes in, where we are going to spend it. I don't know how people survive without having some type of long term plan to work to achieve set goals. farming is getting like a business and not a lifestyle nowadays'.
- 'Bought a mapping kit and went to QIDC about RTG, but they are not involved anymore'.

74.

- 'Have got a computer - wife and kids use it, but have not had time to learn about it to put to farm.
- 'I am going to try to diversify - value adding approach, going to sell an edible product - sell my beasts straight to consumer to cut out middle-men'.
- You're a fool if you say you've got nothing more to learn - I'd like to know more about genetics and breeding lines.

- 'Have not heard of RTG, but RAS has got it all wrong - should be helping the person that is productive, not the one that is too far gone'.
75. Not really too many areas I want to know more about to improve my management as I am in semi-retirement.
76. Wants a manual bookkeeping course - would have no idea where to start - we just keep the docketts of things we buy/sell.
77. Don't really need records to help with making decisions - you can see at a glance on a day-to-day basis what needs to be done.
- 78.
- 79.
- Have been to a Mapping workshop but not an FBM one.
 - Did a *budget* in May using what I thought were gettable figures and by end of May had to change everything over.
 - I look at where spending all my money, but little scope to increase production e.g., pumping water - fuel bill rose. Look at where you are going to need money and how you go about getting it - sell cattle, or prioritise cutbacks e.g., get rid of fencing contractor.
 - Looked at Quicken five years ago when first looking for a computer package, but didn't think it was suitable especially for transferring figures for a budget, but I have heard its better now..
 - Went to Phoenix - got into computer cashbook as no manual one is big enough to have enough columns for how I wanted to split up my categories
 - Keep records of weights on forage sorghum and irrigated oats.
 - We try and have a truck of fats into Springsure every fortnight and hope we get a good average over the year - it tends to have an evening out effect.
 - The main thing we are looking for at the moment is info. on irrigation for turning of cattle - compared to using our irrigation resources for cotton.
- 80.
- 'I would not like to see the Department of Primary Industries cut back any more in any way, shape or form as I think they are doing a bloody good job'. Need more work on pasture experiments - too hard for us as individuals to trial different species.
 - Cheque butts are the main record of source of expenditure.
- 81.
- I'd like a computer but can't afford the bastard, especially if I didn't have to type a real lot as neither my wife or I can read or write real well.
 - 'Why don't they let us grow hemp?' The people that smoke drugs are probably all no good anyway.
 - Two years ago, spent \$80,000 on contour banks, then last year, 14 inches of rain washed them away
 - 'Sloppy disks'. Difference between owner/manager and worker/manager..

APPENDICE VIII: On-Farm Survey Comments

ON-FARM SURVEY COMMENTS

These are general comments people have made whilst being interviewed - they illustrate attitudes and recommendations from producers who have been to a FBM Workshop. Comments which seem of note, or of a 'summary type' have been under-lined.

No. 1

Generally unhappy with DPI service - say its very good when you get it (eg. queries to Nick Macleod), but where's the taxpayer's money going - its a Government Department, should be providing a service, but can't get Extension Officers one-on-one to on-farm.

Conduct more short courses practical orientated - all this expertise in the DPI, but doesn't get into producer groups enough. (eg. propagation course, disease recognition and control).

Should develop more awareness of computer (and other) courses run by the DPI (eg. Aware there's a spreadsheet course offered, but don't know what a spreadsheet does or how it can be used. Likewise with other courses (eg. PMP - what exactly does it entail?).

Need to continue to target industry specific groups to increase awareness of workshop availability and content - relevant examples to industry. Nick Macleod promoted the Quicken course well originally.

Influenced to attend the course as accountant had suggested it might save them money, plus it was 'timely' - just when we had a few days to spare.

Don't use Quicken as found it tedious entering each transaction in step-by-step procedure. Would have liked to be able to type an entire transaction, press 'Enter', and for the components to be entered into the right field. I kept getting lost tabbing across each field.

Keep diary to track when last sprayed, fertilised etc.

Financial records consist of all invoices for each month going into separate plastic bags.

No. 2

Had problems setting up classes compared to categories - waiting for follow-up workshop.

Initial motivation to buy computer was for kids at school, the use for on-farm was merely a spin-off from that - external 'pressures/forces' on farmers to adopt computer use.

Don't use Quicken much for decision-making, related to size of operation - 'know in mind' eg. have interest/shares in Mango Cannery, so when picking for some-one else, arrange with owner to keep a percentage of fruit picked for their interest in the cannery.

Don't do budget as have little financial pressure (no loan), has other income (i.e. teacher).

Interested in spreadsheets when I showed them, had heard a bit about them, but not sure what they were capable of. ***How do we promote spreadsheets on paper/leaflets etc - need to be more illustrative of what they can do.***

Intend to use Quicken more, but haven't had time to get into it - two further aims:

Reduce provisional tax load (eg. at May, spend extra on fertiliser).

Look at negative gearing.

Only reason went to workshop was convenient timing - it was in June holidays, so had time off from teaching, and wanted to start 'anew' for next financial year.

No. 3

Uses 'Farm Manager' Manual Cashbook - system previously relatively disorganised and accountant suggested if kept better books, especially reconciled, may save dollars. So producer did so, and the fee went up, hashed it out with accountant and ended up getting \$200.00 taken off fee, but disappointed wasn't an

obvious and instant reduction. *Incentive to go to Quicken originated by trying it reduce accountant fees - but fee reduction doesn't happen much.*

Very intimidated by computer use, - sometimes consider up-grading, especially with kids at school, but don't know where to start - left floundering with computer jargon (eg. A drive, C drive, flopping and hard disk).

Uses diary to record when experimenting with certain aspects of production to determine whether we will try that treatment again or not (eg. Record amount of water applied to each block, if get good yields, repeat application amount next year. Also split fertiliser applications - decrease N in second half of year).

Keeps a Spray Manual for Australian Market Exporters.

Evidence for decisions -

Experimenting eg, Trial a wasp to control bugs compared to poison

Availability of resources eg, Chemicals, pickers

Access to information eg, Field Days, DPI

Marketing:

Prices for produce 'in lap of agents' once get to Sydney/Brisbane/Melbourne.

Queries why is purchase of fax machine not sales tax exempt?

1. Argument against: it is not used in actual production of mangoes.
2. Argument for: It is used in Marketing of product (gets a fax of prices after each days trading).

No. 4

Had been doing accounts by hand in triplicate (copy also required for father-in-law's accountant in Melbourne).

Started computer use via TAFE D-Base 4 course.

Aiming to use spreadsheets with Sunbeam Scales - can't afford connector/transformer at moment.

Thinks the Rural Training Grant leaves a bit to be desired - 'did not get the grant because she's not classed as a Primary Producer, even though she keeps all the records, she's only the manager's wife!'

Queries about herd recording packages - particularly considering value for dollars.

Keeps financial records on Quicken and cattle records on Dbase - but has problem getting husband to tell her exactly what he wants recorded and analysed.

Quicken aids in making decisions mainly with the feedlot - how much we've spent compared to how many we've sold.

Would like a workshop on assessing the Ausmeat Feedback sheets, and a subsequent template incorporating this info.

Another example of how records have helped with decisions include

'when we were fertilising, our calving and stocking rates were higher, when we compare them to the last lot of years (even before the drought) since we've stopped fertilising, these rates have gone down. So, we intend to start fertilising again when we can afford it.'

'record certain marketable traits, such as age/weight, and dressing percentage, and compare these between different crosses we are trying eg. Belgian Blue, Limousin

Marketing:

'Grazier cops market inconsistencies' (eg. buyers telling producer 'Your beasts will make Jap Ox', but then only 2/30 made the grade once at meatworks. Was buyer's fault, but the grazier ended up paying the 'misquote').

No. 5

Had looked at 'Cookie Jar', but preferred Quicken as better value for money.

Create budget via Cash Flow Report (set-up budget not adequate), due to financial pressure from bank.

Suggested there should be follow-up spreadsheet workshops, especially to assist to creating individual specific templates (i.e. didn't get around to using spreadsheets straight away, want to now get more out of them, but have forgotten or feel unsure, about what to do to create templates.)

Use the fence costing, feedlot and Cattle Market Ready Reckoner. templates mainly. The feedlot one especially has helped us assess management decisions concerned with feeding cattle. Spreadsheets haven't helped us much in record-keeping, mainly because I don't think we've used them properly to their full potential.

Used the Lotus beef templates as a guide for setting up our own d-base herd record on 1st Choice. (Eg. Tag No, Calving/Weaning etc).

Queries about respective herd-recording packages, have demo of Herd Magic (\$1200) for linking with Breedplan records - can a spreadsheet do the job instead?

Uses computer to compare options.

Example 1: bought another property - compared interest rates loan options, then incorporated into budget how much they have to make off home property to pay for the other one.

Example 2: compared weed control options with costs of Herbicide compared to the costs of cultivating instead.

Use cattle records for selection criteria eg. tick load, bottle teats, genetic line.

Although also produces lucerne (hay) and some grain, doesn't keep yields etc, but wants to get into that when more time to play with spreadsheets.

No 6

Converting to Quicken didn't save money to accountants fee - disappointing but are demanding more from accountant now.

Speed and accuracy of Quicken major advantage - 'don't need shares in white-out'.

Another major use is tracking of loans - Fixed payment at first of each month (scheduled).

Use of classes inadequate as difficult to allocate costs to particular enterprises, ended up having too much in overheads (eg. R&M for machinery etc), so for the time spent allocating stuff to classes, weren't getting enough out.

Uses Quickbooks (invoicing), mainly uses the 'Ageing Report'.

Used historical records to assess whether they could afford to buy out their partners - so they did.

Spreadsheets/Database for Decision Making

Had created an 'Auger Spreadsheet' - compared different loads - multiple calculations, wouldn't have done it to compare so many options if had to had done it by hand.

Compared the cost of contract baling to doing our own on the place.

Set up calculations to look at whether it would be worth while to get into irrigation systems - compare the additional costs with the additional income.

If notice lucerne blocks have given a poor yield, and the computer backs up our observations, we might try a new variety.

Unfortunately the husband wasn't there so couldn't get better grasp of their spreadsheet set-up.

Used Agware package as aid to deciding to get out of cotton

No. 7

- Did Quicken as a workshop organised for cotton growers (years ago), promoted by Department of Primary Industries circular
- Had not realised it was computer based, so were not really prepared for a computer course, but 'The couple of booklets given out were really helpful' - 'Make Your Farm Officer Work For You', 'Financial Physical Record-Keeping' 'These dramatically improved our cashbook, even the accountants commented on the improvement'.
- *A one day basic bookkeeping course (for some people who have not done even a manual cashbook before going to Quicken, they find it hard to 'visualise/grasp the concept' of categories how associated with cashbook columns, i.e., Targeting improvement in Financial Record-Keeping for those without a computer (gets away from concerns that FBM workshops to computer based skills).*
- The main reason we don't use Quicken is that we have not got a computer - 'circumstances of cashflow have prevented purchase'. 'We lost \$11000 due to hail after missed out on insurance by two days'.

Uses records to look at

Crop G.M's and determine how much of each to plant e.g., cotton of wheat/sorghum.

1. Compares success/failure rates of chemical applicants.
 2. Bought the farm next door to increase water allocation after taking idea to ban manager to work out so I could have the figures in black and white - *financial option/property purchase template would have been helpful.*
 3. Have just got into cattle - kept observations over the years in carcass competitions in trying to assess which would be the best crossbred to go with.
 4. Have a problem with bell-vine in the cotton - am going to try zero-till with 2,4-D for weed control in the future.
- Workshop in integrated Pest and Weed Management. Also, futures and forward selling.

No. 8

- Used Quicken course as Introduction to How Computers Could Help on Farm - had been thinking of getting a computer. Wanted to see what software was around and if it would help on farm.
- Currently use First Choice but are in the process of upgrading hard drive to fit on better spreadsheet.
- 'Didn't explain well enough when introducing the course, found it hard to grasp where the workshop was heading - should have improved OH display association with manual book '(was one of the first workshops - presume the Department of Primary Industries has improved on that).

- Has Quicken set up for Accounts - 1. Rentals, 2. QIDC, 3. Other Investments, 4. Farm Turnovers.
- 'Couldn't manage without Quicken. 'It is good to get figures in a hurry to help make decisions'. Also, can just get a print out of what you want and put it through the fax machine - easier than getting out the relevant pages in a book.

Spreadsheet use

1. 'Spreadsheets don't really help much with decision making - just keeping records for costing.'
 2. Create record-keeping structure for Wages(itemised esp for Superannuation), Pre-bought chemicals, Crop-dusting, Power for irrigation , Tenancy dates and rates in off-farm enterprises.
 3. Grower payments - ginnery costs, levies
 4. Reference for costs e.g In 1993, Round-up cost \$260/drum. In 1994, it cost \$180/drum
- Had been using First Choice spreadsheet before going to Lotus workshop - didn't think the workshop provided much additional benefit as all the examples were cattle orientated.
Target groups - big demand from cotton growers.
 - 'Farming is a business today and no way around it'. Other records - irrigation schedule, crop duster hours. Applied for RTG , should make it more clear your are not eligible.

Other Courses

1. Wants to know more about Futures/fwd selling.
2. Practical courses on Test/Soil Analysis - explain the analysis, the theory behind the results. What the results mean.
3. Database course.
4. Interpreting weather patterns cloud types etc.

No. 9

- Had developed own Accounts system in database but wanted cheaper and easier alternative, so looked into Quicken.
- Uses Profit/Loss and Balance to create Budget 'You need records to see where you've been and a Budget to see where you are going'.
- Quicken is simple and easy to use. It doesn't help much in making decisions - mainly use spreadsheets with respect to management planning via the Budget.
- Quicken has benefited teamwork in that it has made my wife more assertive with respect to record-keeping.

Spreadsheet Use

1. Wants template on Feedlot Least Cost Ration eg, aiming for Jap Ox, gain of 3 kg/head/day. Uses feedlot spreadsheet to get idea of how lines of cattle are performing - look at conversion rate to help project how much can afford to pay for domestic cattle. Doesn't use classes - asked 'How can I compare my two feedlots with cattle or pasture'?
2. Follow a mob of cattle onto feed and assess how much money we're making (my own template) - had used DPI template as a guide whether we should get into feedlots in the first place , so at least now we're not going as far backwards as others in the drought.

Other Courses

1. Human Resource Management (conflict resolution - Buyers/Sellers).
2. Animal Nutrition.
3. Database

No. 10

- Had been 'stuck at home' (wife with young kids) and 'brain hungry' wanted something worthwhile to do so wanted to put farm onto computer.

Consider social (psyche) aspects of women at home - want to do something to feel useful and more in touch with what is happening on the property.

- Wants spreadsheets to put on information to help with budgeting. .Don't use spreadsheets much for decision making, except with looking at feedlot options.
- Use the Budget Reports (Actual/Projected/Diff) whenever considering a decision e.g., was going to buy a calf crush but poor cash flow so no go. Use the budget as a year plan and try to follow it.
- The main use of the spreadsheet is for budget for Bank Managers.
- Wants template on cattle movement/stock numbers.
- Use the Quicken P/L statement to compare to budget all the time.

Comparing options;

1. Husband looks at Inc/Exp of cattle, knows how many bulls he needs to buy over a certain period then works out the average price he is going to pay for each bull to cover requirements - rather than pay \$6000 for one bull and only have \$2000 to buy another two bulls.
 2. Used spreadsheet to record trial data between two groups of cattle - ended up finding out that reds put on more weight than greys, so now changing herd composition.
 3. Would use Gross Margins if had crops in , but not an option at the moment with the drought.
 4. Main goal at the moment is to improve cow quality in an effort to upgrade the herd .
- 'We worked on those bloody RAS forms for two weeks - complete waste of time'.
 - Workshop: Human Resource Management 'went through four people for a job - can't work out if they are going to be any good or not', also dealing with buyers/agents.
 - Want to know more about laws/regulations/financial jargon e.g., were getting timber off a property for a set of yards on that property, which we had on Lands Department Lease, then found out we had to pay for it and had not budgeted for that cost (might not even built the yards if we knew).

No. 11

- Started Quicken as trying to reduce Account fees. Had bought computer with 'Delta Cashback Program' and thought it was rubbish so was looking for a better option.
- 'Try every three months to take figures to Accountant to try to reduce provisional tax burden - Quicken makes it that much easier'.
- Filtered Cat Reports 'Make you very conscious of where your money goes'. - ***but then what do producers do about it?***
- 'Up-to-date balance lets you know when you can transfer money to another account'.
- Still confused about classes - wanted to know if he could track how much an item e.g., small plane was costing - ***confusion with class/enterprise setup.***

Spreadsheet use

1. Main use of spreadsheets is to utilise the templates, mainly with costings eg, Vehicle cost - Blade plough, Tractor.
2. Compare feed types e.g meatmeal supplement , molasses and urea
3. Compare cattle marketing options e.g Paddock to Yards.
4. Compare hiring a blade plough to buying a dozer.
5. Don't use as record-keeping structure - eg. All cattle records kept in notebook

- ‘Bought a Bobcat on lease after looking at budget and Quicken figures’. Refer back to figures whenever there is a query e.g., when is medical benefits due?
- Look at cattle book for stock description for projected income e.g., two tooth steers - when you will get income from them.
- RTG ‘It bloody well stinks, even get stirred up enough to write a letter to Parliamentary Inquiry.’
- ‘Quicken - it is the be all and end all - simple for idiots’.
- Doing a Rural Leadership Management Course.

No. 12

- Had a computer and was looking for a package we could use on-farm, but haven’t got around to doing much with the computer since - mainly as a word processor. ‘Just haven’t got round to putting Quicken on the computer.’ The husband and father the main ones involved in the management of the property - the wife intended to get involved via the computer and workshops but hasn’t really got round to it.

No. 13

- Think cost of workshop great when considered it was a ‘per unit’ price - *promote unit cost, especially when really need the full management team at workshop if we’re trying to promote better decision making and not just better record-keeping.*
- Have not set up a budget because aren’t financially pressured, but main reason is because we don’t know where to start. - *Develop concept of budgeting - what are they used for, how do they help on farm, where do you get figures from.*
- We are looking at getting a computer for piggery records and were having trouble reconciling with manual cashbook so Graeme Harris showed us the light.
- Mainly use the Quicken figures for the accountant’s benefit - haven’t really used it for management at all, probably because haven’t spent enough time with it - get the son (at School) to enter a lot of the transactions. Wife not really involved with the management of the place ‘One day I’ll get her to come down to the sheds’ - the husband and wife both feel they should combine better together to improve the management of the place..

Comparing options examples:

1. Had been continually repairing the shed, the cost was mounting so compared option of renovating whole shed with stainless steel although the initial cost was high, worked out (paper and calculator) we should save in the long run.
2. Compared cost of buying pig feed concentrate pre-mix to that of buying different grains(trucked from Biloela or Monto as options) to make up a mix determined by nutritionist. Want to develop this sort of stuff on a spreadsheet.
3. Keep manual records of Cattle and Pigs. Pig book particularly important in selection of replacement stock - look at farrowings, matings, litter size etc for gilt selection. eg, If the gilt is visually a good type but is from a litter of less than 8, then we don’t use her for breeding - looking at performance traits to aim for improved P2 Site requirements.

Management

1. Personality types - *seem to think a good manager comes down to personality traits eg, innovative, determined.*

No. 14

- Does not do a Gross Margin as all crops are forage ones - how do you account for that between cropping/cattle enterprise.

- . Have got a simple cattle enterprise - basically know what we have to do , its just the season and finances which determine when and how we do it. e.g Its dry now, so wean earlier
- Does not use Quicken as only has an old version and other things seem more of a priority updating at the moment - might come with better seasons. At moment, am working two jobs in town to keep some cash flow.
- Wants to know if there's an off-farm investment producers can have a vested interest in e.g A chain of butchers shops(for graziers), bakeries(for croppies)

No. 15

- Was concerned at auditing and every time husband went to find something, he had to hunt around for ages - wanted a package with easy accessibility to information
- Apart from impressed with how easy Quicken was to use, knowing had the Department of Primary Industries back-up was major decider in starting to use Quicken
- 'Knowing the balance in an instant is itself worth the price of Quicken and the workshop'. Uses Quicken to compare profit on feedlot at grass-fed, to prioritise forward purchase at grain/fodder, and to organise provisional tax.
- Management decisions based on economics, feed availability, availability of resources, and cashflow.

Record-Keeping / Options

1. With the feedlot, have paper every where, look at conversion rates of different lines (European crosses are the best but hard to get), follow all cattle through to meatworks, compare dressing percentages (identify by ear tag as knocked in box)
 2. Keep rotation records of different types of forages we try.
- Places priority on paying off debt - uses Quicken to plan debt reduction so can pay it off then buy more property. At the moment with the Feedlot, there is paper everywhere, want to be able to follow cattle etc., on a spreadsheet - has name down for course.
 - RTG - 'It's a farce.'
 - Good Manager 'needs good financial management or wouldn't survive, be innovative and have practical skills'

Other Courses

1. Feedlot
 2. Word Processing.
 3. AMLC Feedback Assessment
- 'Is there some type of service that could be run as an on-farm back-up service? eg. Follow-up workshop on farm, to help you set up categories etc'. *A lot of places I went to 'While you are here, have a look at this, explain this etc.*

No. 16

- Quicken Course Fee - good considering for 2 people and that cost of Quicken Package very reasonable.
- Balance and cost(s) of a particularly figure very accessible.
- 'Wouldn't be keeping inflows/outflows if did not have Quicken'. 'Use Quicken records mainly for comparing profit/loss for cattle - doesn't really affect decision making' - some enterprises don't have substantial scope to change production i.e., cattle breeding.

Quicken Uses

1. Have a yardstick on which we compare weight gains, \$/kg, for different groups of cattle, then use Quicken to compare income/expense for that group.
 2. Look at balance to see if need to promote production e.g Sell a few cows.
 3. Look at graph for main expenses.
- Management decisions based on finances, environmental conditions and markets e.g Usually a price jump at the end of the financial year. Use cottonseed to finish cattle, otherwise would've had to sell as stores and didn't think that was the right option.
 - Next step to improve management is to buy one place, compared to the 3 separate ones we've got at the moment.
 - Other workshops I'd like to attend are short practical courses such as Spaying, preg. Testing, Dog training

No. 17

- Rang the Department of Primary Industries asking about what was the best type of computer/what were relevant software relating to on-farm use? Had not really heard about the courses till she rang up - *expose course availability and what they involve more.*
- Am presently attending an Ausmeat Feedback Course - how to interpret sheets, interested in putting on spreadsheets - *template Ausmeat.*

Quicken Use

1. 'Use it to track fodder expenses - look at the cost the drought is having.
 2. Use the Job/Project Report to compare the two properties, adjust proportions of different categories of stock eg, breeders compared to fats.
 3. Create a Cash Flow Statement to give to accountant for Tax Preparation.
 4. Look at Filtered Categories - 'didn't spend money on fertiliser or seed last year, so in May we spent up on these areas'.
 5. Easy to access and collect figures to apply for **Fuel Rebate.**
- Set goal, eg, Want to finish cattle to a certain grade in a certain time - look at the cost you have to pay out eg, \$50/head/grain, to get extra \$100/head when makes the higher grade.
 - Records - Breedplan associated.

Management Options

1. Decisions based on Price, Seasonal Conditions and Financial Position. eg, We are selling bullocks today compared to a few weeks ago a) The price is good now: b) Its starting to get dry: c) Its the start of the financial year.

2. Property 1 - Coastal country - this is run based on what Grandad has done since 1850. Compare this to Property 2 - River country where we have tried to be more innovative, and we've been able to turn off 2 tooth Jap Ox - you can see in the Job/Project Report that this one makes us more money.

Know more about

1. AMLC Feedback sheets - how to read them and adjust line accordingly.
 2. Loan application/repayments - went to three different places but couldn't compare them because conditions were different.
- 'Books/booklets that come with the workshop are a bonus' ***Having the right thing developing simple 'instruct manual'***.
 - Suggest Department of Primary Industries should 'create more awareness of workshop distribution'. ***New angles for promoting our workshops.***

No. 18

- Had not been previously keeping a manual cashbook, so found some of the financial concepts difficult to grasp in the workshop eg, categories/cashbook columns.
- ***Classic example of demand for 'follow-up' service by Department of Primary Industries.*** Although she still came to a follow-up workshop, still felt a bit intimidated to voice her concerns and needed substantial one-on-one assistance to set up her books.

No. 19

- Uses Quicken for nursery to keep accounts payable - income (Accounts receivable are on another computer). Was starting to use computer for home farm records until husband took it.
- Wants to update complete nursery spreadsheet - currently has old package on it developed especially for the nursery approx. 15 years ago.
- Did have Lotus on home computer but husband took that
- 'Workshops very useful and easy to follow'.

Quicken Use

1. Monitor individual category total eg, seed, fertiliser, pots - look at total cost to produce a saleable item.
 2. Look at maintenance costs for a part machine to see if it is worthwhile to keep repairing, or buy a new one.
 3. Itemised fuel costs, couldn't work out why were so high, then realised we were losing heaps to evaporation, so moved the fuel tanks - reduced expense.
 4. Isolate a retail area to see how production is going in that aspect - adjust market push.
- 'The whole exercise of record-keeping is a whole lot easier and more efficient'.
 - Quicken has helped definitely with financial decisions - at the end of each month we have a director's meeting to determine how much money to put aside for tax and determine other payment priorities.
 - Use spreadsheet to keep track of ins and outs eg, if someone orders 200 trees, even the workers can look at stock/plants on hand to forward plan buying of equipment eg, pots, tasks that need to be done.
 - Noticed that the majority of the people at workshop were wealthy land holders - 'what about aiming at the people QIDC is worried about - those that have missed simple schooling'.

Other Courses

1. Basic bookkeeping, Business management course.

No. 20

- Had been using another package (Money Manager) then saw a Quicken demonstration. Was very impressed with reporting facility. Had been using P.C. Calc and saw Lotus was better for transferring over Quicken information.

Quicken Uses

1. Compares predicted and actual cashflow and transfers these across to Lotus
2. Puts Quicken figures onto Westpac's cashflow format which saves costs in administration fees. Gives graph to bank at how account balance has fluctuated over the year.
3. Look at budget to prepare for queries from the bank, eg, We spent his much, why? Cattle sales were up because of drought, fuel bill didn't arrive until June etc.
4. Look at adjusting enterprise eg, we are better off increasing breeder numbers and selling stores compared with trying to fatten cattle (worked this out mainly by looking at production capability of the land type)
5. Look at account balances to assess whether we can afford this repair, or should we try and hang on a little longer,: Can we afford to purchase new bulls or work our other ones for another year ?
6. To help prepare submissions for loans, overdraft facility
7. Use historical figures to project for cashflow - look at difference between fuel and fodder in different situations eg, rain or dry.

Spreadsheet Uses

1. Put figures into feedlot spreadsheet and it wasn't an option.
2. Use spreadsheet for record-keeping cattle weights - now going towards Reds as our records for price received consistently showed Santa's were fetching an extra \$30/head over Brahman.
3. Found a 'lost steer' and used records to show weaning weights, birth date etc. to show was ours.

Other Courses

1. Database.

No. 21

- Benefits of Local Networking - very important for continued record-keeping development - motivating group leaders
- Feels that 'Computers are here to stay' and is way to go for on-farm.
- Had been keeping 36 column ledger manual and says would probably have found Quicken more difficult if hadn't previously been doing a manual book - 'recommends that people do a basic book-keeping manual to understand cashbook principles'.
- Use scheduled transactions to keep track of when payments are due so can transfer money between accounts. Look at balance to see if can afford option e.g., clear paddock.
- Have tried to use spreadsheets, but problem with lack of input from husband - don't know what to create, or to analyse - don't even know what templates he'd be most interested in. Content to use the DPI Crop Management Notes and check out with DPI fellows to compare options available.

Use Records

1. Keep track of different oat variety's yield - stripped for grain and also for hay , and compare year to year.
 2. Cattle weights, prices etc. to use for selection criteria.
- Need a one-on-one visit from a computer person to set up system for individual needs with conference with husband. *Problem with getting management teams along, or even to contribute to the setting up of records on computer, especially considering the husband is likely to be the main one to use the records/spreadsheets for decision making.*

No. 22

- Again, illustrates the advantages of a powerful 'network' - greatly influenced by local users..
- Next major aim to improve management is to buy another property.
- Thinks the money is well spent 'the husband does not'. *Problem? Whole unit acceptance. Getting the husband to contribute to setting up the spreadsheets.*

Quicken Uses

1. Does a budget for QIDC Interest Subsidy Loan.
 2. Planning payments - when cattle due to come off feedlot, prioritise repayments.
 3. Look at balance to see whether can buy stuff, or put it off.
 4. Classes set up to track costs for particular item of machinery eg, Steiger, D7, Case Tractor,: to proportion fodder costs etc associated with the drought.
 5. Major advantage in that you are more aware of your spending pattern.
- Disappointed doesn't reduce account fees - *Proportion of sample influenced to use Quicken with possibility of reducing account fees, but often not the case.*
 - 'Quicken has revolutionised my record-keeping'.

Spreadsheets Use

1. Uses spreadsheets for tracking costs, e.g, how much have to sell cattle for on feedlot to make money. Do not use spreadsheets much for comparing/analysing options.
2. Template - drought feeding ration.
3. Set goal e.g., wanted to buy a Steiger - evaluated what we could afford, time threshold to get debts cleared etc. Wants to set up paddock records etc., on spreadsheet but hard to get the information out of husband.

No. 23

- Workshop structure good in that can 'read-off' other people who have similar enterprises as yourself. Help you set up, talk over hassles, etc. *Promote 'will generally be people at workshop who are in same boat as you e.g., computer in/experience, enterprise set-ups.*
- Had been using Quicken before workshop, but developed better categories/ classes etc. *How to set up classes a concept that needs to be concentrated on. If people have gone home after a workshop and started to set-up their books, by the time they come to a follow-up workshop, too much hassle to 'reset-up'.*

Quicken uses

1. Scheduled transactions -
 - (a) Night before the mail, check that no outstanding bills that should be sent off the next day. Then, the night of the mail, bills that come in, schedule their payment.
 - (b) At end of month, calendar reminder for superannuation and Income Tax payments.
2. Use to track amount of fuel used for diesel rebate.
3. Get summary report to accountant in March for Tax Planning.

4. Tracking Financial investments/shares etc.
5. Payroll Report for ATO Group Certificate.

Advantages

1. Saved \$1000 in accounts fees in first year.
2. 'Because it's so easy, you keep things up to day, so you have a more accurate knowledge of your financial position'.

Spreadsheet Use

1. Mainly use spreadsheets for budgeting - change variables (differences between expected and actuals) and see how affects bottom line.
 2. Try weather predictions - using rainfall and SOI, do graph to look at trend for next three months - if it looks as if going to be dry, sell cattle, check bore levels, order fodder/salt blocks etc.
 3. Lease payment options.(then put values back into Quicken)
 4. To select desired line of cattle to sell i.e., do a graph of cattle weights and select the group of beasts which have a similar line to that which you are aiming for - go for premiums with even lines ..
 5. Own templates - Bore Water Levels; ATO Wages Book Set-up; Rainfall; Machinery Costs per Hour
- Cattle weights still kept in manual notebook.
 - Next step in management - Water allocation/Bore distribution - using Autosketch to identify and address watering needs - trying to disperse cattle to other available water and away from existing watering points.

No. 24

- Found out about Quicken through yarning with LCD group members.
- Intends to get computer when boys go to school in couple of years time
- 'I keep up to date with my balance from auto-teller machines'. 'Just send cheque butts to accountants - wouldn't save anymore time or money if was doing a cashbook as the accountants would have to check anyway'.
- Keep records if doing an experiment or trial e.g., cattle on irrigation or fertiliser - look at weight gains and see if it is cost effective.

Other Workshops

1. Animal Nutrition - assessing soil nutrients, supplements required - at what time to give them for biggest effect for least cost.
2. Weather prediction for long-term ag. production e.g El Nino, SOI - what do they mean for producers ?

Marketing

- Gripe about that when the works split the carcass, one half may make the grade, while the other half won't, but overall, the full beast would've made the grade/weight

No. 25

Spreadsheet Use

1. All Ausmeat Feedback sheets go onto spreadsheet, then look at percentages that went as different dentition, percentage which make Jap ox etc., over the long term to see if the herd is improving.
2. Keep cattle records(paddock, sex etc) and to track HPG treatments for regulations
3. Track diesel rebate.

4. List of tax concession receipts
5. Keep all records for MRC Research I'm doing on the side - great for speed of calculations for the trial data.
6. Spreadsheets at the moment mainly used for record-keeping - which we then use as a tool for decision-making.

Quicken Use

1. Record tax taken out of wages and sent to ATO.
2. Track Repairs and Maintenance for itemised machinery.
3. Compare enterprise profitability - Commercial/Stud/Feedlot - Opportunity and Commercial/ Goats/Horses
4. Quicken has benefited teamwork more than Lotus as it is the finances discussion which gets everybody together.

Areas to Know More

1. Political availability of Overseas Markets.
2. Animal nutrition - the most cost effective way to feed them what they actually need at a specific time (how to follow protein level in pasture by sampling rather than just saying 'it is getting dry, lets give them a lick'.

Suggestions for Improvement

1. Department of Primary Industries field days - let producers have more direction, rather than the same speaker saying the same thing he has said for last three years.
 2. Increased awareness from Department of Primary Industries how not to go over Export Residue Levels (trade issue, not health issue).
 3. 'Going from one-on-one to group corporate plan is doing Department of Primary Industries out of a job. Too many in middle management and not enough on-farm services'.
 4. Need to change the venues for producers feedback on issues i.e., not at University. The North Australian Conference at ticks, buffalo fly, residue and ponded pasture, mainly attended by academics, not producers.
- 'The thieving accountant said our fees would be cheaper if bought a computer cashbook package'. It hasn't - 'pissed off'. ***Why do accountants fees not decrease in most instances?***
 - Got into spreadsheets 'Brain Hunger
 - Price for workshop good considering two people go ***UNIT COST***. 'Most people would not use Lotus to nearly its full capacity, so not as good value for money'.
 - Before using Quicken, either made a profit or didn't at the end of the year, but now, can make each enterprise accountable.
 - 'Whenever try a new venture, we set it aside as a class to see if it is going to be worthwhile'.
 - 'Do a *budget*, but it is out of date in a week'.
 - With respect to decision making, mainly use Quicken as an historical tool to know where problem spots are and pay more attention to that area. ***Not really for forward planning: differentiate between decision-making and forward planning (budget?)***
- No. 26**
- 'Absolute Bargain' - course costs. 'Love getting rid of the kids for a couple of days, work solidly and get finished with it' - as compared to TAFE courses.

Quicken uses

1. Look at vehicle R & M and 'turn it over'.
2. Check up for bill repayments - it has stopped us getting double charged a few times.
3. Showed Cash Flow Report to bank manager in March so told to spend more.
4. Get graph of Income/Expense to show to partners - means more to them than just a lot of figures.
5. Assess cash position when applying for a loan.

Classes

1. Have problems allocating chemicals, R&M to particular crops.

Spreadsheet Uses

1. Compare different freight and company options for rates to transport Cray's to different locations.
 2. Keep records of industry contacts.
 3. Hope to start tracking costs and cray yields from each of the different ponds (Over 20) to try and identify at which stage juveniles are best to be introduced into the ponds.
 4. Also hope to compare feed options for the crays.
- 'I just can't say enough good about the Department of Primary Industries workshops - I would go to any they put on'. *Had not been involved with the management of the place before, now feels 'a part of it' - psychological aspects of being involved and not 'just the wife'.*

No. 27

- Justin (young son, Rural Sc. degree) wants to convert farm records onto computer, but just works as employee - very hard to get father interested. Has started using spreadsheet for: Gross Margins; Depreciation Schedule ; Livestock Schedule ; Assets and Liabilities, but needs more feedback from father. Hadn't been to the DPI Workshop, so showed him the templates - big bonus he thought.
- Most decisions made by his father who keeps most of it 'up top'.
- RTG 'it is ridiculous'. My labour is worth more for the time it would take to fill the form in.

No. 28

- 'Started Quicken as wanted to save time from doing manual cashbook, didn't end up that way because bloody accountant wouldn't accept Quicken, so had to go back and manually do years entries again'. (This accountant has since changed his policy due to increased pressure from a number of producers who implied they would take their business elsewhere if he didn't 'play the game')
- Thinks workshops are great. With respect to tutors, nearly 'one-on-one' to not let you get stuck but don't do the work for you - make us learn'!
- 'Finished the Quicken course, then went down town and bought the package'.
- 'Drought to a lot of cockies is like labour pains to a woman - as soon as it rains, they forget about the pain and go back again instead of using preventative methods' - Strategies and management.
- Also uses spreadsheets even though hasn't been to a course - keeps list of each machine with corresponding parts, part number, how many we've got in stock etc. so we can organise in advance when we need to get parts.
- Each paddock has its own book - cattle numbers, category eg. 4 t bullocks, date husbandry practices done etc., so when we're talking to a buyer we can tell them how many of a particular line of cattle we've got at any given time.

No. 29

- Tim Ryan huge influence on getting a computer, kept saying 'You should have a computer'.
- Workshop cost good considering per unit - two day format very good. 'Bamboozled after first day, but slept on it and everything okay the next day'.
- 'Tim Ryan and Department of Primary Industries were amazing - wouldn't have a computer if it wasn't for them'. 'Love the Lotus manual - written in a language the lay person can understand'.
- Spreadsheets mainly for budgeting - haven't got round to putting on paddock records etc. yet Keep these in Notebooks - Wheat / Sorghum / Cattle with associated husbandry practices, yields etc.
- Spreadsheets only aid in making management decisions via budget. When considering an alternative option e.g., ostriches, influenced by encouraging income figures - but from documents etc., not by applying onto a spreadsheet to analyse pros and cons, looking for enterprise not affected by rainfall.
- Workshop on using packages e.g., WheatMan.

No. 30

- Had tried Saltbush and Phoenix - too expensive, plus back-up service also expensive and hard to access (Saltbush/Armidale). Quicken was cheap and Department of Primary Industries offered a course which is easy to attend and back-up service easy to get
- Got into Lotus for budgeting - was also bonus that templates were a big help, very good, especially Feedlot.
- ***Even though went to Phoenix, still illustrate that Quicken is an 'easy adoption' prospect, people get initially motivated to use it because it is cheap, then have the option of progressing to other packages eg, Phoenix.***
- Problem with getting accountant to accept Quicken, but he's come around now.
- 'Were not keeping a book previously - Quicken gave us the first insight into the use of historical figures, especially for budgeting' - ***Conceptual linking somewhere in Quicken workshop.***

Spreadsheet Use

1. Use spreadsheet for budgeting - if over budget at first quarter, shuffle around cattle sales. Budgeting is the main way in which spreadsheets have aided in management decisions.
 2. Created own structure to record feedlot results - we identify good versus bad doers: have decided Brahman Cross and Droughtmaster are the best lines. Use the Sorting tool to identify which cattle are saleable.
 3. Look at taking 280 head off paddock to put into feedlot to manipulate cashflow - look at cost to put on feed for 70 days, then if have to keep in for another 30 days, decide whether to accept the additional costs or look at another option eg. Agistment.
- Has gone to Phoenix, mainly because wasn't happy with the budgeting set-up in Quicken and transferring info. to Lotus..
 - Got the RTG for Quicken and Lotus courses in previous years, and the grant paid for half the Phoenix package.
 - By assessing feedback from various feedlot competitions, are trying to improve the quality of lot cattle by introducing Limousin crosses.

No. 31

- ‘Had been keeping manual book, but in a mixed farming enterprise, just did not have enough room/columns to keep all the categories I wanted’.
- ‘Could probably learn Quicken out of a manual, but good to get feedback from a group in a workshop situation conglomerate ideas’. *Promote workshop interaction.*
- It is good in that it tells you where dollars are going, but it does not tell you how to put the dollars in there.
- Use Quicken budget for when need money - see if will have cattle ready by then e.g., in two months time, or if have to put into a feedlot for two months. Quicken helps in looking whether it is profitable to feed cattle or not by looking at how we went last year.

Record-keeping

1. Experiment with different spray rates and mixtures - weed type, sprays conditions etc., to work out what will work next time.
 2. When did we plant? How long was that cold spell? etc.
 3. Crop field records - if notice a drop in yield in paddock, check root development, soil test.
 4. Keeps Stock Book - movements, husbandry practices, joining, branding, bull age - assess when we need to buy more bulls.
- Next step - wants to look at diversifying with enterprises that have large ‘Value Added’ eg. Ostriches

No. 32

- Wife only uses Quicken for personal use, but father uses Quicken for on-farm - its the father and 2 sons who make most of the decisions and use the computer. I would have been better off speaking with them but they were away that day..
- ‘Government will never let farmers get too far ahead - even when we do have a good year, we get taxed to the hilt - the government is too scared to let farmers get too powerful as they are such a strong group’.

No. 33

- ‘Was looking for accounting package and rang Tim Ryan, he explained the features of Quicken and it was what I wanted’.
- ‘Quicken course also good as is a relevant ‘Introduction to computers course’ you are learning skills you are actually going to use, the tutor ratio is helpful’.
- Wife only uses for personal use, but sister-in-law uses Quicken for farm books but a bit of friction between the 2 apparently so don’t really communicate much with respect to management.
- Wife did have Quicken set up but had not used it for 12 months, as it broke down. Is hoping to get back into it for this financial year.
- Getting into Leucaena and hope to start recording weight gains etc.

No. 34

- Had been doing manual system, but with four properties, very time consuming, so looked for computer package - tried Saltbush, but incompatible with accountant, so tried Quicken.
- Went to Lotus with main aim to transfer cash flow from Quicken to a spreadsheet to make budget projects for bank, but Quicken - Lotus importing a pain in the neck.

Quicken Use

1. Quicken tracking costs - have just made a new set of cattle yards, set it up as a class to use as cost reference for later years.

2. Track Wages - Worker's Compensation
3. Never used to reconcile with manual book, but do now.
4. Ease of recall - never went back to look at 36 column cashbook.
5. Ease of creating projects - budget.
6. Amazing to look at individual costs. eg, bankcard charges, Fuel Costs
7. Set up 3 different properties as classes to isolate costs.

Lotus Advantages

1. Mainly for cashflow projects - regulate spending, especially at end of financial year.
 2. A paddock spreadsheet with cattle numbers on it - associated with condition, eg, if its dry , we decrease stocking rate.
 3. Trying to get cattle weights downloading onto spreadsheet.
 4. Any major expenditure, keep track.
 5. Historical reference.
- RTG 'Most of those schemes don't help the efficient farmers'.

Template

1. To compare contractors to own labour eg, Have 5000 acres to plough - cheaper to get contractor if buying one.?

Extra Comments

1. Have got a lot of good things out of the DPI, but am missing the one-on-one situation, and need more 'producer trial' type things eg, PMP groups
2. Need to increase community awareness of weed control, and more assistance eg, Tax relief. Make Parks and Wildlife more accountable rather than just letting the stuff run wild.

No. 35

- Tim Ryan sorely missed - he was helping create farm budget, which led to us getting Quicken. *A bit of a problem with consistency with contacts, especially out at Emerald - just starting to develop 'flow on assistance' when your contact leaves the area. eg, Tim Ryan*
- Mainly wanted spreadsheets for budgeting.
- Feels that the course cost is a bit expensive - that we are 'probably not getting the people who need the courses most'. Resistance with husband, had to buy computer out of personal money, not through farm.

Spreadsheets Advantage

1. Cattle records (weight gain etc.)
2. Cattle/paddock recorded on spreadsheet - know how well they do on different feed types eg, 1.8 kg/day on dry feed bladeplough - they don't do that well on buffel surprisingly.
3. Budgeting

Decision Examples

1. Had a wheat crop, were going to put weaners on it, but since the price was going up, we decided to harvest the wheat instead and put the weaners onto cottonseed/sorghum mix (from sorghum we had stored previously). *(Did this on paper would be an ideal example to create on spreadsheet if had follow-up workshop.)*
2. When we did decide to feed out this ration, we rang up to get prices to get the feed mixed, but was too expensive, so have now decided to buy our own mixer. i.e., quoted \$4000 to mix 100t of grain compared to \$16000 to buying own mixer. *(Did*

they consider costs like depreciation, labour etc., seemed to just look at like 'if we mix our own grain for the next four years then we are ahead'. (4 x \$4000).

3. Here, we can get steers fat by 22 months, so it is too good for breeders, so we're looking at buying another property for breeders, and keeping this one for crops and cattle fattening.

No. 36

- Had not been keeping a manual cashbook, so when we decided to start keeping financial records, thought we may as well do it right the first time and learn with a computer as that is the way things are heading. For a non-computer and non-financial person, the workshops are 'Easy to Learn'.
- 'The problem was that we didn't have a computer when we did the Quicken workshop, so when finally got computer and Quicken, we had forgotten heaps'
- Had just got computer upgraded to windows, was waiting for Jo Frith to come out and help set it up - *Follow-up service, most producers seem to need some help in setting up categories and classes.*
- Uses the Department of Primary Industries Crop Management Notes a lot. Main record is the 'Wage Book' - by recording employees hours, where, when etc. can track what paddocks have had what done to them.
- Also, the DPI, Pacific etc run a lot of crop variety trials here, so we get first hand info. about plantings etc.
- Maybe I should keep more records, but we seem to do all right without them.

No. 37

- Not motivated to use Quicken or Lotus at the moment as are currently in a partnership which we are a bit dissatisfied with. When get out of the partnership, might reconsider doing the books.
- Have just started a feedlot, so will have to consider computer records - definitely spreadsheets.
- Not real impressed with Quicken workshop and all the detail you were required to enter i.e., 'This screw into this category, this nail into this one etc.' 'I don't have the time for all that fiddling around'.
- Records don't really help with decision-making, most of its in the head, but that might change if we get into feedlots in a big way.

No. 38

- Hated the calculating in manual cashbook so went to Quicken.
- Before the end of the financial year, alter expenses, sales etc. Look at category report to find where most of our money is going eg. Seed and Fuel, Repairs and Maintenance
- 'I didn't like the budgeting part of Quicken, and heard Lotus was a better option - but had considerable difficulty transporting data from Quicken to Lotus'.
- Quicken is good in that it supplies hard concise information to talk about - have figures to back up the discussion. We can identify how close the money situation is and are now looking at getting into an overdraft.
- Have tried to use spreadsheets - mainly for budgeting, but probably need a follow-up spreadsheet workshop - the workshop environment very motivating compared to all the distractions at home'.
- Improve management - develop suckered country (bladeplough), and fencing off smaller plots to feed off cattle..

No. 39

- Course fee a bit expensive - would not even consider going at the moment - financial priorities elsewhere. *A lot of people in survival and not developmental mode at the moment.*

Decision Option

1. We looked at how much we had spent over the years on carting cattle and grain when using contractors - took a lot of digging back though cheque butts. We compared this with purchasing and working our own truck for two years. (Also had to consider availability of other trucks in the area when you want to shift grain.) *Did this all manually - would've loved Quicken but just not a financial priority at the moment.*

Historical Records

1. Tractor Diary - paddock conditions.
2. In GMs have to consider logistics eg, if can handle that amount of harvesting etc., four summer crop, might look at spreading out to winter crop. Consider paddock history eg, chickpeas might not be most financially viable crop, but put them into boost soil nitrogen.

No. 40

- Thought the 'freebie' 'With or Without workshop that AJ ran was really good - he's so approachable, always happy to help with inquiries.

Spreadsheet use

1. Before I go to a bull sale, I get all the classifications based on EBV's and put these on a spreadsheet to sort them - this way I know exactly what I'm looking for before I get to the sale.
2. Use Herd Magic for cattle herd record-keeping structure. Other records I need I can access on Quicken.

This paper outlines the findings of the final survey in a three stage evaluation of Farm Business Management Training Activities in the Central Region of Queensland Department of Primary Industries. The project is titled 'Evaluation of Training Activities to Improve Business Management Skills of Farm Families' and is funded by RIRDC and DPI.

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