Costs and Benefits of Diversification
Whole Farm Case Studies

A report for the Rural Industries Research and Development Corporation

by Campbell White & Associates Pty Ltd and Alan Black

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Foreword

Farm diversification signifies the introduction of non-traditional sources of income to the pre-existing farm business. Non-traditional sources of income can be derived through development of alternative agricultural and non-agricultural enterprises.

Farm diversification is encouraged by both federal and state government agencies as a valid form of rural adjustment in response to the increased risk and uncertainty that has characterised the Australian farming sector since the early 1980’s. However successfully diversifying an existing farm business to incorporate alternative enterprises is not an easy task. As with any new business undertaking, there are many potential traps and pitfalls that may leave a farm business worse off than if it had not diversified.

This publication sets out a series of 10 whole farm case studies from across Australia, examining the costs and benefits of diversification. In addition to detailed cost benefit and financial analysis of diversification, the case studies also document the personal experiences of each farming family, and the lessons they have learnt through diversifying their farm business.

It is hoped that the insights and experiences documented through the case studies will prove useful for other farming families that are considering diversifying their farm business. This publication is not intended as a "how to" guide for farm diversification, but more simply as a document to raise awareness of issues, especially the potential financial impacts, that may otherwise be overlooked in the challenging task of diversifying a farm business.

This report, a new addition to RIRDC’s diverse range of over 800 research publications, forms part of our Future Agricultural Systems R&D program. The program aims to identify important impediments to the development of a globally competitive Australian agricultural sector and support research that will lead to options and strategies that will remove these impediments.

Most of our publications are available for viewing, downloading or purchasing online through our website:

- downloads at www.rirdc.gov.au/reports/Index.htm
- purchases at www.rirdc.gov.au/eshop

Peter Core
Managing Director
Rural Industries Research and Development Corporation
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The authors gratefully acknowledge and appreciate the assistance, the hospitality, the time and the openness in relating experiences and in allowing access to personal financial details, that was willingly devoted to this project by all of the Case Study participants:

Tony and Merilyn Jenour from Evedon Park Bush Resort;
Mos and Liz Howard from Farmhouse Cheeses of Kangaroo Island;
Ian and Margaret Clark from Portee Station;
Ian and Rhonda Milburn from Glenloth Game;
Fred and Coral Davies from Stoney Creek Oils;
Phillip and Lucy Headlam from Forester Lodge;
Jim and Caroline Street from Blaxland;
Tom Soles from Midlands Aquaculture;
Terrey and Barbara Johnson from Bantry Grove;
Michael, Helen and Gemma Cripps from Alcheringa.

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Executive Summary

This report summarises the findings of 10 case studies of farm diversification from around Australia. The case studies set out to document the experiences and issues faced by each farming family as they moved from a non-diversified to a diversified farm business. Each case study also incorporated a detailed cost benefit analysis of the investment in diversification, this was complemented by a comparison of financial indicators of the diversified business versus the non-diversified business.

Farm diversification can take a variety of forms. Two types of diversification are commonly recognised: agricultural and non-agricultural. Agricultural diversification includes the introduction of a wider range of output options within a traditional farming enterprise. For example, prime lamb production added to wool production, or the introduction of non-traditional crops and livestock such as agroforestry, deer farming and aquaculture. Non-agricultural diversification includes enterprises such as farm-based accommodation and recreation, on-farm processing and or direct marketing of food and fibre, and passive diversification where land and/or buildings are leased for non-agricultural purposes. Value-adding is a form of non-agricultural diversification, where the farmer takes control of processing and or marketing of their primary product in order to capture the value that is added as the product moves along the production chain towards the final marketed product.

Farm diversification is encouraged both within Australia and in other major agricultural producing countries around the world as a legitimate strategy to reduce the financial risk and uncertainty, exacerbated by declining terms of trade, that many farmers have experienced over the last 2 decades. However, diversifying an existing farm business to incorporate alternative enterprises is not a risk-less exercise. Diversification often involves significant financial outlay, development of new skills, access to new resources and most importantly an ability to create or respond to new market opportunities.

The specific objective of the project was to undertake quantitative economic analysis (cost benefit and comparison of financial indicators) of the impacts of diversification for a series of 10 case study farms. The project also set out to document the experiences of the case study farmers, through the whole process of diversification. This included:

- their reasons for diversifying;
- the process of choosing an appropriate enterprise for diversification;
- experiences in establishing the new enterprise;
- issues with ongoing management, such as staff management, ease of incorporating the new enterprise into the existing farm business, and marketing for the new enterprise;
- and lessons learnt along the way.

The 10 case studies were drawn from across the southern states of Australia, and were chosen to reflect a range of diversification options. The location of each of the case studies is shown in the map on the following page, and a brief description of the diversification options undertaken by each farm is given in the table that follows.
Figure 1. Location map of case studies.

Table 1. Case study descriptions

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Before diversification</th>
<th>After diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burekup, WA.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Farmhouse Cheeses of Kangaroo</td>
<td>Dairy</td>
<td>Dairy, specialty cheese production</td>
</tr>
<tr>
<td>Island, SA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Portee Station</td>
<td>Sheep station</td>
<td>Sheep station and Farm tourism</td>
</tr>
<tr>
<td>Blanchetown, SA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Glenloth Game</td>
<td>Sheep and cropping</td>
<td>Sheep and cropping, Squab and Game processing</td>
</tr>
<tr>
<td>Wycheproof, VIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Stoney Creek Oil</td>
<td>Cattle and cropping</td>
<td>Cropping and Health food oil products</td>
</tr>
<tr>
<td>Talbot, VIC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Forester Lodge</td>
<td>Cattle, Sheep, cropping</td>
<td>High value irrigated crops, cattle and sheep</td>
</tr>
<tr>
<td>Waterhouse, TAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Blaxland Walcha, NSW</td>
<td>Cattle, Sheep, cropping</td>
<td>Backgrounding pigs, cattle, sheep, cropping</td>
</tr>
<tr>
<td>8. Midlands Fish</td>
<td>Cattle, Sheep, cropping</td>
<td>Trout aquaculture, sheep</td>
</tr>
<tr>
<td>Guyra, NSW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Bantry Grove</td>
<td>Cattle, sheep</td>
<td>Vineyard and cattle</td>
</tr>
<tr>
<td>Blayney, NSW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Alcheringa Marron and Damaras</td>
<td>Sheep, cropping</td>
<td>Marron aquaculture, Damaras stud, sheep and cropping</td>
</tr>
<tr>
<td>Three Springs, WA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The cost benefit and financial analysis of the case studies highlighted a wide range in the level of investment in diversification, as well as a wide range in the time to breakeven and returns from investment in diversification. A summary of the results of the cost benefit analyses is shown in Table 2 on the following page.
### Table 2. Cost benefit analysis of diversification case studies

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Costs</th>
<th>Benefits</th>
<th>Benefit Cost Ratio</th>
<th>Estimated years to breakeven</th>
<th>Years since diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evedon Park Bush Resort</td>
<td>$1.2 million</td>
<td>$997,557</td>
<td>0.86</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Farmhouse Cheeses of Kangaroo Island</td>
<td>$133,210</td>
<td>$132,904</td>
<td>0.99</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Portee Station</td>
<td>$500,000</td>
<td>$94,355</td>
<td>0.19</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Glenloth Game</td>
<td>$2.3 million</td>
<td>$896,455</td>
<td>0.39</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Stoney Creek Oil</td>
<td>$250,000</td>
<td>$1.7 million</td>
<td>6.92</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Forester Lodge</td>
<td>$327,000</td>
<td>$742,000</td>
<td>2.30</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Blaxland</td>
<td>$184,000</td>
<td>$196,000</td>
<td>1.10</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Midlands Fish</td>
<td>$793,000</td>
<td>$913,400</td>
<td>1.20</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Bantry Grove</td>
<td>$374,000</td>
<td>$338,000</td>
<td>1.00</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Alcheringa</td>
<td>$153,000</td>
<td>$226,400</td>
<td>1.50</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

The cost benefit ratio calculated for each case study indicates the level of benefits as a proportion of costs up to the year 2000. A cost benefit ratio of 1 indicates that the benefits received to date cover the costs. A cost benefit ratio greater than one indicates that the benefits received to date are greater than the costs, and a cost benefit ratio less than one means that the benefits received to date are less than the costs and the business is yet to breakeven.

The key messages to come out of the case studies are:

- Successful farm diversification requires thorough planning and a realistic assessment of personal objectives, skills, resources and market prospects.
- Choosing the most suitable form of diversification is a critical decision and is influenced by many factors. Thorough investigation of diversification options helps to reduce risk.
- The structure of the farm business needs careful consideration when diversifying into new enterprises.
- The case study farms with the shortest time to break even, generally have a much lower level of initial investment in diversification. These farms also tended to choose a form of diversification that generated a steady income almost immediately from start up.
- Expansion of the diversified business should occur gradually, in line with the ability of the business to generate cash flow to support the expansion.
- One of the most common themes throughout all of the case studies was the importance of developing and maintaining good business relationships.
- Successfully marketing your product is critical to the success of the business. Regular feedback from clients helps to ensure you are providing a top quality product or service and helps to gauge the success of your marketing strategy.

The case studies highlight the fact that there is no single correct path that will ensure success in undertaking farm diversification, however there are some common elements that can help to reduce the risk.
Thorough planning, investigation and assessment of diversification options.

- This includes assessment of personal and family goals, skills and objectives as well as an assessment of farm resources and possible complementarity and impacts of the proposed new business on the existing farm business and resources. How much time will be involved in running the new business? How will this impact on managing the rest of the farm business? Will you need to employ staff or contract people?

- Develop budgets and undertake cash flow, breakeven, cost benefit and general financial analysis of the diversification option. Seek advice from independent consultants and peers. Assess the markets for the new business by speaking to potential clients and develop a good understanding of their needs and your ability to meet these needs.

- Develop a business plan which should be the basis for developing the business and will assist in obtaining finance. Decide on the most appropriate business structure, keeping in mind the relationship with the existing farm business. A common pitfall in developing budgets for new businesses is to over estimate income and to under estimate the costs of running the business. Be realistic in your budgeting.

Management.

- Once you have decided to go ahead with the business, good management becomes the critical success factor.

- Good management includes developing good business relationships with staff and clients and also requires continual assessment and evaluation of the financial health of the business and whether you are meeting your goals and objectives.

Marketing

Marketing your product is essential if your business is to survive. Your marketing strategy needs to identify who your clients are, what sort of product they are interested in, how you can best promote your product to them, and most importantly how you can provide your product to them in a way that satisfies their needs.

The report is concluded with the words of Phillip and Lucy Headlam from Forester Lodge in Tasmania.

"To run any business successfully, you need to have a clear goal and a vision of how to achieve that goal, but most importantly the commitment to achieve it."
1. Introduction

1.1 Background to the project

Farm diversification can take a variety of forms. Two types of diversification are commonly recognised: agricultural and non-agricultural. Agricultural diversification includes the introduction of a wider range of output options within a traditional farming enterprise. For example, prime lamb production added to wool production, or the introduction of non-traditional crops and livestock such as agroforestry, deer farming and aquaculture. Non-agricultural diversification includes enterprises such as farm-based accommodation and recreation, on-farm processing and or direct marketing of food and fibre, and passive diversification where land and/or buildings are leased for non-agricultural purposes. Value-adding is a form of non-agricultural diversification, where the farmer takes control of processing and or marketing of their primary product in order to capture the value that is added as the product moves along the production chain towards the final marketed product.

Farm diversification is encouraged both within Australia and in other major agricultural producing countries around the world as a legitimate strategy to reduce the financial risk and uncertainty, exacerbated by declining terms of trade, that many farmers have experienced over the last 2 decades. However, diversifying an existing farm business to incorporate alternative enterprises is not a risk-less exercise. Diversification often involves significant financial outlay, development of new skills, access to new resources and most importantly an ability to create or respond to new market opportunities.

This project undertook a series of 10 case studies of successfully diversified farms from across Australia. Each case study examined the costs and benefits of diversification along with other financial impacts on the farm business. In addition the case studies documented the experiences of each of the farm families, focusing on the motivation for diversification, the process of diversification, the major impediments they had to negotiate, and how they overcame impediments to successfully diversify their farm businesses.

1.2 Objectives

The guiding principle of the project is to contribute towards informed decision making by land managers about opportunities and approaches for diversification of the farm business, especially:

- diversification within traditional agricultural enterprises to take advantage of a wider range of output options;
- diversification into non-traditional farm crops and/or livestock;
- diversification into other on-farm activities such as rural tourism.

The specific objective of the project was to undertake quantitative economic analysis of the impacts of diversification for a series of 10 case study farms. The quantitative analysis included cost benefit analysis, cash flow analysis and a comparison of financial indicators of farm performance before and after diversification. The objective of the project was also to document the experiences of the case study farmers, through the whole process of diversification. This included:

- their reasons for diversifying;
- the process of choosing an appropriate enterprise for diversification;
- experiences in establishing the new enterprise;
- issues with ongoing management, such as staff management, ease of incorporating the new enterprise into the existing farm business, and marketing for the new enterprise;
- and lessons learnt along the way.
1.3 Methodology

There were a number of key tasks involved in conducting the project. These tasks are described in the following sections.

1.3.1 Literature review of issues relating to farm diversification

The literature review was conducted to provide context for the project and to canvas important issues that may impact on farmers’ decisions or ability to diversify their farm business. A number of the issues and impacts identified through the literature review were used as a basis for formulating the topics covered in our interviews with case study families.

1.3.2 Identifying and selecting case study participants

Potential case study participants were identified through discussions with a number of state government agricultural and natural resource management agency representatives that were involved in new industry development or rural adjustment programs. The project teams' network of contacts with a diverse range of people involved in the agricultural industry also helped to identify potential case study participants. In addition, general media such as rural newspapers, magazines, television, and internet searches were used to identify potential case study participants.

Selection of case studies was based on a number of criteria. We considered it important that each case study covered a different form of diversification option, with the exception that 2 case studies on farm tourism were undertaken at the direction of the Project Managers. The two farm tourism case studies were chosen to cover different farm tourism "experiences". The geographical location of the case study sites was considered relevant with the aim being to achieve a spread of case studies across Australia. The geographical spread of case study sites was intended to provide a degree of regional relevance and also to provide insight into the range of opportunities that exist across different regions. A final and critical criteria for selecting case study participants was the availability of detailed financial records of the farm business over a number of years, and a willingness to make this data available for economic and financial analysis. Each of the case study participants were guaranteed absolute discretion to veto publication of confidential information following a review of the initial case study drafts.

Once potential case study participants had been identified, initial contact was made by telephone to determine interest in being involved with the project. Those who expressed an interest in participating, were sent a 4 page letter describing in detail the aims and objectives of the project and details of what would be required in terms of their time and the information that they would be expected to provide. Once the potential participants had had the opportunity to read the project description and requirements, they were recontacted to determine if they were still interested in participating in the project. From an initial list of around 30 potential participants, the project team finalised a list of 10 case study families.

1.3.3 Case Study Visits

In January 2001, the first case study site visit was conducted with Tony and Merilyn Jenour whose Evedon Park Bush Resort is situated approximately 2 hours south of Perth in Western Australia. The visit involved a 2 stage semi-structured interview process. On arrival at the case study site, the (2) researchers spent approximately an hour with Tony and Merilyn. During this time we asked questions and prompted discussion in order to gain an understanding of the farm history and background, their reasons for diversification and the process of diversification, as well as covering a number of general issues and experiences that they were keen to relate.

Following this first stage of the interview, we toured the farm property to gain a practical understanding of the operation of the farm business and to take a number of photographs. The tour of the farm property also provided opportunity for further questions and discussion. On return from the farm tour, the second stage of the interview focussed specifically on the financial and legal aspects of setting up and running the business. This included obtaining detailed financial records of the farm business. This stage of the interview took another hour or so. At all stages of the farm visit,
the researchers took detailed notes. The total visit took just under 4 hours. Notes from the interview and additional thoughts and observations were compiled into a word document immediately upon return from the case study site visit.

The remaining 9 case study site visits were conducted from February through to early March in 2001. These site visits followed a similar semi-structured format, with visits ranging in duration from 2 to 5 hours depending on the complexity of the business, the time constraints on the farm family, and the researchers and interviewees desire to discuss a wide range of unrelated topics.

1.3.4 Analysis
For each of the case studies, cost benefit and financial analysis was conducted. In order to do this, the researchers collected where possible, financial data describing income and outgoing and capital expenditure for each farm business covering the years prior to diversification and up to the most recent financial year (2000).

The accuracy of financial data available from each case study varied to some extent, however in general financial records were of high quality. In the majority of cases this information could be gleaned from annual business accounts which are prepared for submission to the taxation office. Often a number of the businesses could supplement this data with information compiled by farm business advisory groups, or with computer records of cash flow from business accounting packages. In cases where access to detailed records was not immediately available, the researchers questioned the case study participant to determine as accurately as possible details such as annual income, annual running costs, capital expenditures, volume of sales, prices received and so forth. This data allowed us to develop a reasonable estimate of farm cash flow, which was then provided back to the farmer for assessment as to its accuracy.

For each case study, a whole farm computer spreadsheet was used to model cash flows and to conduct cost benefit and financial analysis. This model allows for the interaction between individual enterprises of the farm to be accounted for. For example if a new enterprise occupies land that previously was cropped, then the model will account for the loss of income that results from the reduced area of the original enterprise and offsets this against any additional income gained from the new enterprise. It should be noted that in the majority of the case studies, the level of "resource competition" between enterprises was minimal. As a consequence, for most case studies the new enterprise that had been implemented to diversify the farm business could be analysed independently of the other farm enterprises without affecting the outcome of the whole farm analysis.

For taxation purposes business accounts depreciate capital expenditure over time and include the appropriate level of capital depreciation each year in the business accounts. Annual depreciation of capital is not appropriate when developing a cash flow for cost benefit analysis. Rather, for the purposes of the cost benefit analysis, costs were calculated as the capital costs invested in the establishment of the business in the year that they occurred and then adjusted to present dollar value.

Similarly, wages in business accounts are counted as a cost to the business, however for the purposes of this analysis, any wages paid to family members were counted on the benefit side of the ledger in the cost benefit analysis. In this sense, the cost benefit results presented in this study represent the costs and benefits to the farming family as opposed to the farm business entity.

The benefits were calculated as the difference between the net annual income for the undiversified farm from the year since diversification and projected forward to the year 2000, and the net annual income for the diversified farm from the year of diversification forward to the year 2000.

All of the costs and benefits were adjusted to present dollar values using a discount rate calculated as the average CPI increase over the period of the analysis.

In addition to cost benefit analysis, a comparison of financial indicators of the farm business before and after diversification, was also undertaken. The financial indicators used as the basis for "before
diversification" were derived from ABS statistics for average farm financial performance in the region of the case study, and for the same farming system (eg Dairy, Sheep and Cropping, Cattle and so on). All statistics were adjusted to per hectare values to allow a valid comparison. The comparison of financial indicators presented in the case study reports, therefore represent a comparison of financial performance against an average farm in the same district as opposed to a direct comparison of financial performance before and after diversification for the specific case study farm.

1.3.5 Options Series Chapter and Final Report
Once cost benefit and financial analysis had been completed for each case study, the individual case study reports were drafted. Each report details the farm history, the reasons for diversification, the process of determining the most appropriate form of diversification and implementing the new enterprise. The cost benefit and financial analysis are used to document the financial impacts that diversification have had on the farm business. This is then followed by a description of the experiences that each family has had in the ongoing management of the diversified business, and the lessons that they have learnt from these experiences.

The draft case study reports were sent to each of the farm families to obtain their comments, criticisms and corrections. Following this, the reports were redrafted to incorporate the feedback from case study participants.

Once the second draft of the case study reports had been completed, a "Farmer Options Chapter" was drafted. This chapter summarises the general experiences and key lessons for all of the case studies, as well as summarising the results of the cost benefit and financial analysis.
2. Literature Review

This chapter provides a review of recent literature on farm diversification. The chapter begins by discussing the various forms of farm diversification, it then goes on to briefly discuss the policy environment both in Australia and around the world that has encouraged farm diversification as a rural adjustment strategy. Following from this, we discuss the reasons that farmers may choose to diversify their farm businesses. Finally, we list a number of critical success factors for farm diversification that have been identified from studies across the world.

2.1 What is farm diversification?

Bowler et al (1996) describe the process of farm diversification as the development of “alternative farm enterprises”, where the term “alternative” signifies the introduction of non-traditional sources of income to the pre-existing farm business. Within this category of non-traditional sources of income, a distinction is generally made between agricultural and non-agricultural enterprises.

Agricultural enterprises are defined as those that derive income from a broader range of outputs, based on existing farm resources (eg. Aquaculture, farm forestry, specialised crops or livestock production). While non-agricultural enterprises are defined as those that derive income from service or processing opportunities that may arise as a consequence of farm location or resources (eg Farm tourism or accommodation, timber processing, distillation of essential oils, manufacture of specialty products). Essentially the distinction is that agricultural forms of diversification are based on primary production enterprises, while non-agricultural enterprises typically rely on secondary or tertiary production enterprises.

The diversity of alternative farm enterprises that have been adopted by farmers across Australia is illustrated in several publications including: “Don’t Dream It – do it! Making money from new farm ideas” (Greg Cahill 1993); “New Rural Industries. A handbook for farmers and investors.” (RIRDC. Dec. 1997). Together these publications describe over 20 case studies of diversification and well over 200 alternative farm enterprises that have been adopted by farmers around Australia.

In the most simple analysis, a farm that has only one enterprise is specialised, while a farm with more than one enterprise is diversified. However the concept of farm diversification is generally understood to encompass factors other than just the number of enterprises undertaken on a farm. For example, Anosike and Coughenour (1990) point out that “diversification as a successful management strategy is more than the mere addition of enterprises, since the enterprises must be selected with respect to how well they complement existing enterprises and how ecologically compatible they are.” They go on to suggest that “(diversification) is important to farmers from the point of view of sustainability. Agriculture is resource intensive (frequent tillage leads to rapid soil degradation), and therefore, the continued viability of a farm depends in part on the farmer’s ability to select an appropriate combination of enterprises for a given agroecological environment. By diversifying, the farmer may use resources more efficiently and promote sustainability.”

The reference to farm sustainability in the above context relates specifically to long term management of the environment, however diversification can also be viewed as a strategy to enhance the overall sustainability of the farm business. By overall sustainability, we refer to management of economic, social and environmental factors that contribute to the success of the farm business. In this sense farm diversification can be seen as a strategy employed by farmers to satisfy a broad range of complimentary and competing goals. These goals have been identified in various studies and include economic, social, psychological and other goals such as leisure time activities, pleasurable work and family living (Anosike and Coughenour 1990; Coughenour and Swanson 1983; Patrick et al 1983; Day 1983; Bennett 1982; Gasson 1973).
This suggests that farm diversification is best described as a combination of complementary enterprises. However the complementary nature of enterprises should not be viewed just in terms of efficient resource use, but also in terms of the long term sustainability of the farm business to the extent that they satisfy economic, social and environmental constraints and goals of the farmer.

2.2 Why diversify?

Since the mid 1980’s, farm diversification has been promoted in the UK and Europe as a key strategy for rural adjustment. Gasson (1988) states that in the UK “The Farm Diversification Grants Scheme which came into force in January 1988 extends grants payable for the setting up of ancillary businesses on or adjacent to farms, to those outside Less Favoured Areas (LFAs). The new policy package is part of the Government’s strategy to try to curb over-production and make the farming sector more responsive to the demands of the market. The role of the diversification scheme is both to introduce new sources of income on to the farm and to strengthen the vitality of the rural economy.”

Shucksmith et al. (1989) highlight similar changes in European agricultural policy to reflect “A realisation that the rural economy is now much wider than agriculture. The development of income and employment outside agriculture, and the development of social and economic infrastructure in the broader rural economy, are recognised as just as important public policy as the maintenance of agricultural production.”

Policy makers in Australia seem to be following down the same path as their British and European counterparts, with recent federal policy initiatives aimed at assisting rural Australia including a “Farm innovation grant scheme”. Under this initiative “The Government will introduce, at a cost of $18.2 million, a new, two-year pilot program to promote on-farm innovation and industry diversification. The program will support and encourage farmers and farmer groups to adopt innovative production techniques and to explore the potential for diversification into new farming activities.” (The Hon. Warren Truss. Federal Minister for Agriculture, Fisheries and Forestry. May 10, 2000).

Complementing the federal government initiatives to promote farm diversification, all of the agricultural agencies across Australia since the mid 1990’s, have had programs in place to support development of new agricultural industries through research, development and extension activities.

Diversification of farm businesses in Australia in response to various problems facing the agricultural sector, was noted in a recent study by Tonts et al (2000). They suggested that “The economic and social difficulties that have been experienced by many Australian farmers over the past two decades are now well documented. Declining returns for traditional commodities (Taylor 1996), rising farm input costs (Smailes 1996), a reduction in government support for agriculture (Higgins 1999), declining levels of socio-economic well-being (Smailes 1997), and severe levels of environmental degradation (Vanclay and Lawrence 1995) are just some of the problems facing Australian producers. In response to these difficulties, a growing number of farmers have begun to diversify their operations by adopting alternative farm enterprises.”

It seems apparent from the literature on rural policy and adjustment, that farm diversification is considered a valid response to risk and uncertainty in farming. It is therefore interesting that a number of farm management textbooks emphasise that far from being a strategy to reduce risk, diversifying farm enterprises can often increase risks due to increased demand on time, management skills and other resources (Hardaker et al. 1997; Haines and Davies, 1987). Haines and Davies (1987) go on to suggest that factors such as loss of primary leisure time, increased workload and inability to meet outside responsibilities can lead to increased stress for individuals and families. This is supported in comments made in recent Farm Forestry case studies in Australia conducted by Campbell White & Associates and Black (1999), where several case study participants noted significant increases in on-farm and off-farm commitments as a direct consequence of involvement in alternative (farm forestry) enterprises. A further issue that was highlighted in this study was the
potentially significant negative financial and social consequences that failure of alternative farm enterprises and/or poor planning and implementation can have on a farming business. Even when alternative farm enterprises are successful, stresses can result in cases where the role of the traditional “bread winner” is taken over by a spouse or partner (Haines and Davies, 1987).

Hardaker et al (1997) suggest that rather than diversifying enterprises on an existing farm, perhaps a more valid response to risk in a farming business would be to diversify enterprises spatially. This recognises the fact that a large degree of risk in agriculture is related to uncertainty in weather conditions and by locating enterprises in different geographical locations a significant amount of risk could be reduced. However, they also recognise that spatially diverse farm enterprises may generate problems with managing businesses in different locations and problems with increased infrastructure costs and economies of scale that would outweigh any resulting reduction in risk.

While farm diversification is encouraged by both federal and state government policies as a valid form of rural adjustment in response to risk and uncertainty, the reality of successfully implementing alternative farm enterprises is that it is a risky business. It is not surprising therefore, that the common theme of all farm management textbooks and case studies dealing with farm diversification is an emphasis on the need for thorough planning and a realistic assessment of personal objectives, skills, resources and market prospects. (Hardaker et al 1997; Haines and Davies 1987; Cahill 1993).

Given this important qualification on the merits of farm diversification as a means to reduce risk and uncertainty in a farming business, it is appropriate to summarise some of the key success factors that have been identified for implementation of alternative farm enterprises.

### 2.3 Key factors influencing successful implementation of alternative farm enterprises

The selection of the most appropriate combination of farming enterprises is a complex decision influenced by many factors. Not only are farmers faced with a range of possible alternatives, but they are required to make decisions when faced with uncertain economic and policy climates (Bowler 1999). A number of studies using a variety of modelling approaches have been used to determine key factors that influence farm diversification decisions. These include Expert Systems models (Bowler 1999); Multinomial Logit models (Damianos and Skuras 1996); Linear Probability models (Anosike and Coughenour 1990); and Linear Programming models which take into account decision making under uncertainty (Pannell and Nordblum 1998).

While these studies have a strong basis in mathematical modelling and decision making theory, their application to farm diversification decisions provides useful insights to some of the key factors that can influence the success or otherwise of diversification choices by farmers.

For example, Anosike and Coughnour (1990) set out to assess a number of key factors that influence a farmer’s choice to diversify. These are:

- Farm size
- Farmers age or stage in lifecycle
- Level of education
- Extent of involvement in off-farm work
- Form of organisation of the business (sole proprietorship, partnership, corporate)
- Tenure
- Agroecological region

They concluded that generally:

- Larger farms were more diversified
Farmers with higher education levels tended to run more diversified businesses

Agroecological regions had significant impact on the ability of farms to diversify

Age, extent of off-farm work, form of business organisation and tenure had no significant impact on farmer’s choice to diversify

While supporting all of these conclusions, Damianos and Skuras (1996) also found evidence to support the hypothesis that farms that had greater access to markets or were less isolated were more likely to be diversified than those that were disadvantaged by distance to markets or poor road infrastructure.

The results of these studies serve to highlight two key factors for success in the implementation of alternative farm enterprises. These factors can be simply summarised as:

- Opportunity
- Ability

Opportunity relates to factors associated with farm size, agroecological region, and proximity to markets. While ability relates to the managerial skills of the farmer. As stated in the previous section, farm management text or handbooks often emphasise the need to undertake a realistic assessment of both the opportunities for new enterprises and a personal assessment of objectives and skills in undertaking the new enterprise.

A good example of this is seen in Haines and Davies (1987) where they recommend a series of logical steps for farmers to undertake when considering any alternative farm enterprise.

These steps include:

1. **Identifying opportunities for diversification and objectives of diversification**

   They suggest that opportunities for diversification are most often limited by markets (or marketability) or available resources.

   In assessing objectives of diversification, they suggest a comprehensive table that can be used to scale personal and financial objectives from highly important (1) to little importance (5) and compare this to the likely impact of the alternative enterprise on each of these factors.

   **Table 3. (adapted from Haines and Davies 1987) Scaling objectives table**

<table>
<thead>
<tr>
<th>Objective</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Long term security</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash generation</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asset growth</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Tax planning</td>
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<td>✓</td>
</tr>
<tr>
<td>Income for other family members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td><strong>Non Financial</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
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<td></td>
</tr>
<tr>
<td>Variety</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peace of mind</td>
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<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
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<td>Social contact</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Privacy</td>
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<td></td>
</tr>
<tr>
<td>Leisure time</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside interests/responsibilities</td>
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<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Existing work skill</td>
<td></td>
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<td>✓</td>
</tr>
<tr>
<td>Nature conservation</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Resource analysis
Land - Do you need to increase land area?
   - Is there a trade off between land taken up by existing enterprises and the new enterprise?
Labour - What will be the new labour requirements?
   - Can you source labour from within the family or will you need to hire new workers?
Capital - Clear concise analysis of capital requirements, sources of finance etc.
   - cash flow analysis

3. Market analysis
Market research
- existence of worthwhile market
- requirements of market
- who is supplying
- what advantage do you have
- what marketing constraints exist

Market plan
- product development
- pricing policy
- promotion and advertising
- place (distribution)

4. Project Appraisal
- business structure, taxes, laws etc
- financial feasibility

In summary, the key to success in any attempt to diversify existing farm businesses is good planning.
3. Costs and Benefits of Farm Diversification - Case Studies

Figure 2. Location of Case Study Farms
CASE STUDY 1

Merilyn and Tony Jenour

Evedon Park.

Burekup

Western Australia
**Introduction**

Evedon Park is situated 2 hours south of Perth and about 15 minutes drive from Bunbury, a major regional centre in the South West of Western Australia. Tony’s father bought the farm in 1963 as two adjoining blocks of land totalling 303ha. They ran cattle for 2 years, and then got into fat lambs. In 1972 they obtained a milk quota and entered the Dairy Industry. At this stage they were milking 120 cows, with a milk quota of around 585 litres per day. In 1979 they bought a further 33ha of scheme irrigated land but in 1984 they sold 2ha of this block along with the dairy and kept the remaining irrigated portion of the block. The total area of the farm is now 335 hectares.

The district surrounding the Jenour’s farm has historically been devoted to cattle grazing and dairy on irrigated pastures, however over the last decade the number of dairy farms in the area has steadily declined. Tony points out that, apart from his farm, the next door neighbour is the only full-time farmer remaining in the immediate area.

The first step towards diversification came in 1984 when Tony and Merilyn moved out of dairying and started a Farm Stay business. In 1995 they diversified their farm enterprises further by establishing effluent treatment ponds and contracting to receive and treat effluent from a number of the surrounding shires. In addition to this, Tony is currently looking at the feasibility of selling worm castings, a by-product of the effluent treatment process, as a garden nutrient/fertiliser.

While developing the Farm Stay business they continued the cattle side of the farm through buying and selling steers. They have recently shifted the focus of the cattle enterprise and are now concentrating on building up a beef herd.

The Jenours believe that the combination of the three main enterprises, Cattle, Farm Stay and Effluent treatment, will enhance the long-term viability of the farm by making the most efficient use of, and gaining the maximum return from the available resources.

**Stages of Diversification - Farm Stay**

**Impetus for Change**

By the mid to late 1970’s, the Jenours realised that they needed to get bigger to remain viable in the dairy industry, and in 1979 they bought additional land to obtain the milk quota that was associated with it. By 1984, Tony had serious concerns about the viability of the dairy industry and the direction in which it was heading. He was concerned that the industry was too political, with the farmers union arguing over shares in milk quotas rather than going out trying to find more business. Tony wasn’t comfortable with the prospect of investing more money in the farm’s dairy enterprise to increase efficiency and returns, given the overall future uncertainty of the industry. He began investigating his options for diversification into enterprises that were less reliant on grazing and cattle.

**Identifying the opportunity & assessing feasibility**

In 1984, Tony constructed a dam across a small valley with a creek that runs through the property. The dam was originally intended to increase his irrigation capacity, but it also created a large lake surrounded on 2 sides by bush. The lake enhances the rural and natural aesthetics of the farm, and Tony realised that there was an opportunity to use the beautiful setting as the central attraction for a Farm Stay business. The proximity of the farm to Perth and Bunbury gave it an advantage for servicing weekend getaways from Perth. The farm is also on the way to the South
West of WA which is a popular tourist destination. This meant it was an attractive proposition as an overnight stay for people travelling further South.

Tony and Merilyn did some preliminary budgeting and decided to start the business with 2 chalets and see how it went.

**Implementation & Issues**

- **Getting started - Description of business, infrastructure and financing**
  The Farm Stay business provides cabin and chalet accommodation for visitors in a secluded bush setting on the edge of a picturesque lake. The cabins and chalets are self-contained, each with a log-fire and continental breakfasts can be provided by arrangement. Visitors can swim and paddle canoes in the lake and bush walk in the surrounding forests. There are 6 cabins and 10 chalets sleeping up to 4 people each. They also have a conference/function centre that is hired out regularly for meetings and small to medium sized functions.

![Figure 3. View across the lake towards the chalets and function centre at Evedon Park Bush Resort.](image)

The business is set up as a partnership between Tony and Merilyn and trades as Evedon Park Bush Resort.

The major capital outlay for the Farm Stay business came in construction and fit out of the cabins. Following the decision to establish a Farm Stay operation, Tony started by building 2 single story cabins on stumps so that they could be easily removed and sold if things didn’t work out.

Given the initial success of the two cabins, the Jenours have progressively increased the number of cabins over the years. They built another 4 single story cabins in 1985, a new house for the farm in 1986 and then a further 10 double story cabins in 1990 and a conference centre/function room built in 1991. There are now a total of 16 cabins on the property, along with the conference/function centre. Tony has constructed or assisted in the construction of all of the buildings.
They have relied principally on bank loans to finance the infrastructure costs of the business. The total capital outlay on the Farm Stay business has been just over $500,000 since 1984. Maintenance of the cabins, furniture and fittings ranges between $10,000 to $20,000 each year.

Several issues that had to be considered in running the Farm Stay business, along with the normal statutory and legal requirements associated with running any business, were Public Liability Insurance and zoning to allow short term accommodation. Short term accommodation was already considered an approved land-use so this did not prove an issue. The Jenours point out that Public Liability Insurance is becoming increasingly expensive, to the point where activities such as horse riding through the bush are prohibitively expensive to insure.

- **Running the business**
  The Jenours employ 4-5 people on a casual basis to do work such as cleaning the cabins and washing linen. Merilyn does the catering, with assistance from a local cook if it is required for larger functions and meetings. Tony does most of the maintenance work, while both Tony and Merilyn share the bookings, bookwork and continual marketing tasks.

  As a result of diversifying their farm business the Jenours acknowledge that they have undergone a major change in skills, lifestyle and experience, although they also acknowledge that they have always been “busy people”. Tony says he has always endeavoured to enhance his education by attending TAFE courses and other relevant training courses when they arise. He has always worked 7 days a week

  Tony maintains close contacts within the industry by attending conferences, workshops and seminars. Last year he and Merilyn went on an overseas study tour to the US, UK and Germany, to look at the farm tourism industry in these countries. Again the key message from this tour was the fact that tourism is first and foremost a service industry, and that servicing clients’ needs is of paramount importance in order to gain repeat business and “word of mouth” advertising. The tour also reinforced Tony’s view that there is a need to get farmers to “think outside the box” when it comes to looking at future opportunities in farming.

- **Sales & Marketing**
  Tony emphasises that marketing is by far and away the biggest issue influencing the success or failure of the Farm Stay business. When he originally set up the business, Farm Tourism in the South West region of WA was fairly lucrative. As an example, in 1984 there were roughly 1000 room nights available in the South West of WA, he estimates that this has now increased to around 2000 room nights, representing a significant increase in supply and therefore competition.

  Tony also suggests that there has been a shift in the type of people demanding Farm Stay accommodation. Originally 40% of their market was made up of families staying over the weekend. These families were typically middle-income earners with a couple of kids. Tony believes that this market has shrunk as a result of the increased competition, but also because people are taking fewer and shorter holidays than they were when he first started out. The “weekender from Perth” market segment now only accounts for 10% of their business and is made up more of professional and semi-professional couples, rather than the couples with young families that originally visited.

  With this decline and shifting nature of local demand, the market for overseas tourists has become an increasingly important source of business to the Jenours, and they work hard to attract this market segment. This involves continual liaison with in bound tour operators who set up package deals with overseas tourists. They aim to attract tourists from places such as Singapore.

  There are a number of levels to marketing which all impact on the success of the business, the first being the marketing of the tourism industry generally, the second is marketing of the Farm Stay industry, and finally marketing of their own business.
Tony is somewhat critical of the WA Tourism Commission, suggesting that it is too bureaucratic, and very protective of itself. This makes it difficult to achieve useful outcomes in terms of changing the focus of the commission away from just promoting the “success stories” of WA, (eg. Monkey Mia, Broome, the Margaret River Wine region and the South West Forests), and getting it to look more closely at ways of developing the tourism industry as a whole.

In the mid 1980’s, Agriculture Western Australia helped to promote and support the Farm Stay industry. They had a small group of people that assisted Farm Stay operators through conducting feasibility studies, and assisting in promotion through publication of booklets and pamphlets and maintaining a register of Farm Stay operators. Unfortunately this group was disbanded in the mid-1990’s, and the Farm & Country Holidays Association of Western Australia (Inc) has taken over a number of the roles that Agriculture WA originally undertook. Tony was president of the Farm and Country Holidays Association for several years.

Tony sees a general lack of professionalism as one of the major hurdles facing the farm tourism industry. He believes this reflects badly on the whole industry, and that by increasing the level of professionalism generally, the whole industry would benefit through increasing numbers of tourists visiting the South West of WA. When discussing the level of professionalism in the industry, Tony cites as an example things as simple as having someone readily available to take bookings and inquiries. A willingness to recognise cultural differences in overseas tourists and to adjust service accordingly is also part of being more professional.

Tony believes part of the problem that farmers moving into farm tourism face, is the significant “cultural shift” that is required to change their focus from being primary producers towards being service oriented in the way that they deal with people.

The Jenours have had mixed experiences with employing marketing consultants, and have had several marketing plans drawn up over the years. They stress that it is important to get the right people, and at the same time it is difficult to find good people to do this type of work, especially because of the personal nature of the business, and the high costs of advertising. They spend anywhere between $5,000 and $15,000 on advertising and promotion each year, and this takes a range of forms from listing themselves in various Tourism Association brochures, to making sure that they are listed in Web search engines on tourism. “Word of mouth” promotion is essential to the success of their business, again reiterating the importance of a professional approach to ensuring that visitors are well looked after and their specific needs catered for.

Stages of Diversification - Effluent Treatment

Identifying the opportunity & assessing feasibility

In 1995 Tony noticed an article in the paper saying that Bunbury had to shift their effluent dumping grounds and that it would cost $600 per truck to dispose of at a new site. He got an engineer to look at treatment options for effluent on farm, did some budgeting, and then put in a successful tender to the council to take on the effluent treatment and disposal work.

As part of the effluent treatment process, Tony has set up worm beds and uses the worms as the final treatment stage in the process of recycling the effluent into a form of garden compost rich with worm castings. He is hoping to sell this as a bagged product to the garden and nursery industry, however this aspect of the business is still in the early stages of development and he is currently undertaking a feasibility assessment for this aspect of business.
Implementation & Issues

- **Getting started - Description of business, infrastructure and financing**
  
  The Effluent disposal business operates with trucks from Bunbury and surrounding regions delivering untreated effluent to the treatment ponds that have been set up on the property. Tony is paid for each delivery.

  The untreated effluent goes through a series of settling and evaporation ponds, with liquid waste drained off after each settling and evaporation period to an adjacent pond. The dried “solids” are scooped out of each pond using a front-end loader at the end of each stage, and then spread onto concrete pads that act as worm beds. The worms then set to work “processing” the dried solids into a rich form of garden fertiliser and compost. Tony hopes to be able to sell this final product either in bulk or bagged form to the garden and nursery industry, adding to the income of the existing effluent treatment business. This aspect of the business is currently undergoing a feasibility analysis.

  The Effluent disposal business is set-up as a trust consisting of the family members and trades as the Evedon Trust. In setting up the Effluent Treatment plant, the Jenours had to have the land rezoned. They experienced a significant amount of resistance from some members of the local community. Community concerns were based on a number of perceptions that included:

  - Potential increase in truck haulage on roads with trucks carting effluent to the farm.
  - Potential problem with smell from effluent resulting in a decrease in land values.

  There were a number of meetings held with the shire and residents to address these fears. The Jenours pointed out that the truck haulage traffic was less than that which would occur if they were still operating as a Diary. They argued that the smell from the treatment ponds would be minimal due to the reasonably small scale of the plant and the nature of the treatment process. The treatment process results in the effluent being dried rapidly through the staged evaporation ponds.

  The shire gave planning approval and allowed rezoning of the land for the effluent treatment ponds. Truck haulage traffic is minimal, and odours from the treatment ponds are virtually non-existent except when standing next to the ponds after delivery of a fresh truck load.

  The capital costs of setting up the effluent treatment business were originally met through loans from the Pastoral company and personal loans from Tony and Merilyn. More recent capital costs have been financed through a further bank loan.

  The major capital items associated with the effluent treatment enterprise include: the sewerage treatment ponds and associated pumps and fencing; road works to allow truck access; drainage cells, mixing beds and fencing associated with the worm farm; and other miscellaneous equipment related to day to day management (eg computers, phones, electrical cabling and so on). The total capital outlay on the Effluent treatment enterprise has been just over $200,000, with a significant proportion of this taken up in road works to the treatment site.

- **Running the business**
  
  The effluent treatment business requires minimal management, with Tony estimating a workload of 1 day a week. Because of the minimal additional time required to manage the effluent business, it fits in well with the Farmstay operation. Initial concerns that odours from the effluent treatment ponds may adversely impact on the tourism operation proved unfounded. The effluent treatment site is well away from the Farmstay cabins, and odours are virtually non-existent even in the immediate vicinity of the ponds. The effluent treatment system has also acted as an interesting attraction for some of the visitors, as a practical example of waste recycling.

- **Sales & Marketing**
Apart from winning the original contract to dispose of the shires’ effluent, the business requires no ongoing marketing. If selling the worm castings by-product proves to be a feasible addition to the business, there would be a requirement for market research and marketing to determine the most effective way to package, price, sell and distribute the product.

**Cost Benefit Analysis and Financial Impacts of Diversification**

The Jenours essentially run 3 different businesses, Grazing cattle and sheep, Farm Stay and Effluent treatment. Each business contributes to their overall goal of long term sustainability through efficient use of the available farm resources and diversification of income streams.

In conducting financial and cost benefit analysis of the Jenour’s diversification activities, we have assumed that the key diversification activities are the Farm Stay and the Effluent Treatment. In other words we are assuming that whether they diversified or not, they would have continued grazing cattle and sheep. Therefore the cost benefit analysis examines the costs and the benefits associated with setting up the Farm Stay and Effluent treatment businesses. The comparison of financial impacts looks at the difference between just grazing cattle and sheep (ie no diversification) and running all three businesses together.

The estimate of cash flow for the Farm Stay business was derived from business tax returns for the years 1995 through to 2000. These figures were extrapolated back to 1984 to give a cash flow running from 1984 through to 2000. 1984 is used as the start year of the cash flow because this is the year the Jenours first began the Farm Stay business. The Effluent treatment cash flow is based on business tax returns from 1995, the year in which the business was established, through to 2000.

In estimating the cash flow for each business we have assumed that capital costs are incurred fully in the year in which they occur. This differs from the normal accounting practice of depreciating capital items over time as is required for tax purposes. Therefore annual depreciation costs were removed from the annual costs of running the business. We have also removed any personal remuneration that has been paid to the Jenours from the annual running costs of the business and included this in the benefit side of the calculation. In this way the analysis gives results for the financial costs and benefits to the Jenour Family as opposed to the costs and benefits to the business entity.

All dollar values were adjusted to present values by using the average annual increase in the consumer price index over the period of the cash flow.

The following graph shows the cash flow resulting from the costs and benefits of diversifying into the Farm Stay and Effluent Treatment businesses.
The cash flow graph illustrates the substantial investment required to establish both businesses, this emphasises the importance of maintaining a reasonable cash flow in order to finance the debt incurred at start up. The present value of costs for both businesses totals $1.16m, while the present value of benefits for both businesses totals $997,557. This gives a benefit cost ratio (BCR) of 0.86 indicating that the Jenours have not quite reached the breakeven point on their investment in diversification. The analysis indicates that they will breakeven (benefits will cover costs) by 2003. In this calculation, the costs are defined as the (fixed) capital costs of the business over time, while the benefits are defined as the net income after (variable) running costs of the business have been deducted.

The Jenour’s investment in diversification will breakeven in 2003, however the important point to consider is what sort of financial situation they would have been in if they had not diversified. Financial records for the grazing enterprise indicate that it has continued to make a loss (averaging $8,000) each year, therefore it is unlikely that they could have remained on the farm if they had not chosen to diversify. This is borne out by Tony’s observation that he and his neighbour are the only land holders in the immediate area that are earning their living entirely from the farm.

The graph shows an average increase in farm income for the first ten years since diversification of around $15-25,000 per year. The recent diversification into effluent treatment has helped to substantially improve the farm’s cash flow, raising the average annual farm income well over $100,000 more than what it would have been without diversification.
A comparison of financial indicators between the grazing enterprise alone (before diversification) and all three enterprises combined (after diversification), gives some indication of the financial impact that diversification has had. The figures presented in the table below are based on an average of financial performance for the years 1995 to 2000.

Table 4. Impact of diversification on financial indicators - Evedon Park.

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<tr>
<th></th>
<th>Before diversification</th>
<th>After diversification</th>
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<td>Farm debt ($/ha)</td>
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<tr>
<td>%Equity</td>
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<tr>
<td>Farm outgo* ($/ha)</td>
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<td>Farm income ($/ha)</td>
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<tr>
<td>Farm profit ($/ha)</td>
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</tbody>
</table>

* Includes financing costs, depreciation and wages.

Table 4 demonstrates that overall farm profitability has improved substantially as a result of diversification. The percentage equity has dramatically reduced in the process of diversification, however this is a reflection of the large investment in diversification, and the ability to service the debt has increased as a result of the improved profitability and increased income. The cost benefit analysis shows that breakeven has already been achieved from the investment in diversification, which would indicate that the level of debt should begin to decline over the next few years and equity level should rise accordingly. This will be reflected in reduced Farm outgo and increased profits.

The financial and cost benefit analysis indicates that the Jenours are in a lot stronger financial position than they would have been if they had not diversified. The analysis suggests that without some form of diversification the Jenours would not have been able to remain on their property.

Summary

Tony and Merilyn recognised the need to diversify their farm business back in 1984 when returns from dairying were declining and the future of the industry in Western Australia was looking uncertain.

The opportunity to move into farm tourism presented itself, and after some investigation they started by building 2 cabins and then gradually expanded business over the years. They had to learn about marketing and promotion, and had to change their approach to business, moving from being primary producers to being service providers to the public. They believe this attitude shift is essential to running a successful farmstay business. Marketing and promotion is an ongoing task and it is essential to keep tourist numbers coming through to cover the running costs of the business.

In 1995 a further opportunity to diversify presented itself in the form of setting up an effluent treatment plant. Again they investigated the feasibility and then went ahead and constructed the plant. The effluent treatment plant is far less intensive than the farm tourism business, in terms of labour and management, and provides a reliable source of income that compliments the farm tourism business nicely. They are looking at further diversifying the effluent treatment plant by selling the worm treated solids as garden compost and fertiliser.

The cost benefit and financial analysis indicates that diversification has improved the long-term viability of the farm substantially. The analysis suggests that the Jenours will breakeven on their investment in diversification by 2003. Significant investment in farm tourism and the effluent treatment plant have substantially increased their overall debt, however this has been matched by a significant increase in farm income which will allow them to service and reduce the debt to
acceptable levels over the next few years. The net impact of diversification on their farm business has been to move from an unsustainable business making annual losses to a business that will be sustainable in the longer term.
CASE STUDY 2

Liz and Mos Howard

Farmhouse Cheeses of Kangaroo Island.

Kangaroo Island

South Australia
Introduction
The Howards are third generation Kangaroo Island farmers. Mos and Liz share their 330ha farm with Mos’ father, while Mos’ brother has a 1020 hectare property on the island and an interest in one of the local wineries.

The farm was traditionally sheep and cattle, with a focus on fat lamb production rather than wool production. For 31 years they were paid by the nearby town of Penneshaw to act as the town water supply, with water provided from a 75 megalitre dam on the farm. This arrangement finished 18 months ago. The family has always had some milking cows and originally they sold cream to “Farmers Union” in South Australia.

Mos left school at 15 to help supplement the farm income through off-farm work. At the time the bottom had fallen out of the beef market and the farm income was pretty low. Mos worked as a shearer for a number of years while at the same time helping run the family farm. In 1985 Mos married Liz who has lived on the island since she was 15.

Liz and Mos Howard’s first foray into diversification was packaging the milk they produced into 1litre cartons and selling to the local market on Kangaroo Island in South Australia. In the early 1990’s they were approached by a cheese maker who had seen their milk cartons in a local shop. He convinced them to move into producing cheeses using the excess milk that they produced. They formed a company with the cheese maker as a partner and built a cheese factory, however they had a falling out with their cheese-making partner over the unequal level of financial and personal inputs to the business and parted ways. They found themselves with a cheese factory, no money (after building the cheese factory) and no idea how to make cheese, so went to a cheese-making course and began from there.

They hit further difficulties early on, when they became embroiled in a legal dispute with a local marketing company over the validity of a “contract” that they had discussed but never signed. The cost of the legal wrangling that ensued forced them into voluntary administration. Finally in 1995 they managed to trade their way out of voluntary administration and 3 years of legal and financial struggles to set up a new company, Farmhouse Cheeses of Kangaroo Island. In the mean time, as a result of dissolving the original milk supply company, they stopped packaging and selling milk and concentrated on cheese and cream production. Recently they have also stopped producing cream due to the costs of replacing outdated machinery and the time involved, and now their whole business focuses on the production of Brie Cheese.

Despite the early difficulties, they are now trading successfully with a brand and a cheese that is recognised around Australia.

Stages of Diversification

Impetus for Change
After working as a shearer for a number of years to supplement the farm income, Mos was very aware of the need to look for alternatives to traditional agriculture in order to maintain the farms’ viability. About 6 months after Mos and Liz were married they decided to try to improve the farm income by packaging the milk they produced into 1litre cartons and supplying it to some of the local stores. The main impetus for diversification has always been to improve the financial viability of the farm.

Identifying the opportunity & assessing feasibility
Originally Mos and Liz identified an opportunity to supply milk to the local market because all of the milk for Kangaroo Island came from the mainland. They thought producing and supplying local milk
would be a lucrative venture, but it was never as successful as they thought due to lack of support from the locals when it came down to competing against the mainland brands. Their business supplied milk to the local market under the name of Kangaroo Island Dairies.

In the early 1990’s they were approached by a man who was a cheese-maker and who had seen their milk in the local stores. He suggested that they could make cheese with any excess milk supply that they had. They formed a company and went into partnership with the cheese-maker.

They originally drew up budgets to assess the feasibility of the business and relied on the cheesemakers’ experience in design, costing and setting up the factory. They have since learnt through experience that the original budgets lacked a lot of detail and missed a lot of costs. They are now a lot more realistic when doing budgets and a lot more aware of the many costs that need to be considered when running a business.

**Implementation & Issues**

- Getting started - Description of business, infrastructure and financing.
  The original intention of the cheese making business was to use excess milk from the existing milk business to expand the range of products that they supplied to local markets. A further attraction of diversifying into cheese production was that they could supply cheese to markets on the mainland as well as local markets. It was intended that the combination of products would help to broaden the income base of the business. They had already found that supplying milk to the mainland markets was not feasible because of the costs and infrastructure required in transportation and competition from the big mainland suppliers. This meant that the milk business by itself was limited in its potential for expansion.

Once Liz and Mos had decided to start up the cheese factory, they established a company. There are several characteristics of a company that attracted them to this type of business structure. First was the limit of personal liability that a company provides. A company is a separate legal entity which means that the assets of the company are owned by the company, and the company is also liable for its own liabilities. Shareholders in the company are only liable for the amount owing on shares held in the company, so if they have fully paid shares they have no liability and are not required to contribute towards a company’s debt. If however a shareholder or director gives a personal guarantee to a creditor of a company (which may often be the case if borrowing money from a bank) then they are liable for that debt.

The second characteristic of a company, which is also related to the company being a separate legal entity, is that because a company exists in its own right, shareholders or directors can leave the company without the whole business being dissolved as would be the case in a partnership.

Once the company had been established, they set about building the cheese factory. The building cost $100,000 in 1991, not including theirs and others labour. The set-up costs for the factory were financed through a bank loan. The factory includes a large metal-clad shed that houses several cool rooms, processing equipment and office facilities.
In the process of building the cheese factory and establishing the company, they soon realised that their partner in the company, while probably very good as a cheese-maker, had little practical experience in running a business. They had a dispute over financial input and general commitment to the business and decided to part ways. The choice of a company as the business structure proved very useful in this situation because the business was still able to continue even though the original partners in the company had split.

Running the business
After splitting with the original partner in the company, they found themselves with a cheese factory, no money and no idea how to make cheese. Liz and Mos enrolled in a cheese-making course at Werribee and learnt how to make cheese.

Soon after they had started making and selling cheese, they were approached by the Kangaroo Island Trading Company to act as a marketing agent and distributor for their product. They were offered a 30 year contract to supply their cheese solely to the Kangaroo Island Trading Company, and were also offered the services of a cheese-making consultant. They entered a series of negotiations with the company over various alternatives to the deal, but were never quite happy with the proposal and never signed the contract. Despite not having signed anything, the Kangaroo Island Trading Company decided to sue them for breach of contract.

A legal battle ensued, and the major lesson that Mos and Liz learnt from this experience was that “it doesn’t matter whether you are right or wrong, money is what buys you success in court.” The cost of litigation forced them into voluntary administration, which was an option that was open to them because of the company structure. Voluntary administration means that the company directors appoint an independent administrator who negotiates with creditors to determine a way to trade out of financial difficulty. In Mos and Liz’ case, they formed a new company and bought out the old company. Their bank was very supportive because they had managed to keep up loan repayments during the 18months of legal wrangling.

Because they changed the company name, they had to change all the company promotional and packaging materials. In 1995 they began trading as Farm House Cheeses of Kangaroo Island. The new company no longer produced milk and focussed on producing cream and cheese.
They stopped producing cream in about 1998 when their separator broke down and they had to look into financing a new one. They consulted their accountant who advised them that the margins were not high enough to cover both their labour and the investment in new machinery to continue making cream. They were disappointed with having to cease production of cream because they enjoyed doing it (even though it was labour intensive) and they were well known for the quality of their product.

Mos and Liz use this experience to illustrate that it is very useful to have an independent adviser, they rely heavily on their accountant and have a good relationship with him, to act as a sounding board. They feel one of the risks of running your own business is getting too involved in the work and not taking the time to critically analyse what you are doing. As they put it, “You have to make decisions with your head and not your heart, even though that can be difficult sometimes.”

The Kangaroo Island Development Board employs a consultant to undertake business development planning with clients. Mos and Liz are thinking of going through this process to see if they can pick up any useful ideas for their business. They are also travelling overseas later this year to investigate different types of cheese making machinery. They have designed and built a number of pieces of equipment used in the cheese factory, and are continually looking at ways to make the process more efficient.

Liz and Mos work full time (7 days a week) in the factory and running the business. They employ 3 other people. One person works 2 days a week and the other 2 work 4 or 5 days a week each depending on the work load.

While they realise that they are very busy, at the moment they enjoy running the business and are happy to keep going. In the long term, they are working towards getting the business to a stage where they can take a less “hands-on” approach and more of a managerial or supervisory role.

They believe the key to getting the most out of the business lies in improving the efficiency of the systems. They have gradually improved the feeding and irrigation systems for the cattle, and cattle numbers are up a bit. They use their own milk in producing cheese and don’t sell any surplus.

**Sales & Marketing**

From the start, Liz and Mos have relied principally on “word of mouth” to advertise their product. Obviously quality assurance is a big issue when selling food products, not only from a health point of view but also from the marketing point of view. Good quality products sell themselves. In order to be able to produce and sell their product they have to have a licence with the South Australian Dairy Authority. To obtain the licence they must adhere to and meet the various criteria of the Hazard Analysis and Critical Control Points (HACCP) Quality Assurance program. This is a food industry standard.

To distribute their product they started first with a distributor in Adelaide. Their distributor in Adelaide had contacts with other distributors in Sydney and their markets and profile developed from there. They emphasise that the relationship with the distributor is a critical part of successfully marketing the product. The distributor provides access to key markets and essentially acts as the promoter of the product. For this reason they prefer to use distributors that only distribute their brand of cheese and in return they deal exclusively through that dealer in each state. By doing this they ensure that the distributor is focussed on selling their brand as opposed to playing them off against other suppliers of the same product managed by the same distributor. Following from their original experience with the Kangaroo Island Trading Company, they have avoided signing contracts with anyone. They insist that in their business, contracts are more trouble than they are worth, and that building a good relationship and trust with the people that you deal with is far more important.

They have displayed their cheese in Royal Agricultural shows and received a number of awards. This assists in the marketing of the product. They believe that the reputation of Kangaroo Island as a producer of clean/green food is growing and this also helps in marketing their product. The
Kangaroo Island Development Board has taken a number of initiatives to promote the Kangaroo Island “brand” with varying success. The Development Board has a principal focus on assisting new industries develop on the island, however Liz and Mos believe they should also focus on developing and promoting existing industries. As an example they cite initial efforts to develop a generic “Kangaroo Island” brand name for all businesses on the Island. This can cause major costs for existing businesses that have already developed and promote their products under their own logos.

Liz and Mos have considered exporting their cheese, but calculated that the costs of complying with the Australian Quarantine Inspection Services QA and export requirements are prohibitive for small producers trying to break into the overseas markets.

**Cost Benefit Analysis and Financial Impacts of Diversification.**

The cost benefit analysis looks at the investment that Liz and Mos made in establishing the cheese factory and the returns that they have achieved from that investment. The financial impact assessment compares financial indicators for the farm business after diversification with that for an average farm in the region.

The first step in conducting the cost benefit analysis was to determine the annual net income for the new enterprise since it started. The cash flow is based on records of income since the start of the business in 1995, and detailed running costs for the years 1999 and 2000. The costs were extrapolated for years in which data was unavailable by estimating the average running costs as a percentage of income earned. The net income of the business plus wages to Liz and Mos were used as the estimate of annual benefits. Costs were estimated as the annual capital investment in the business in the year in which the cost was incurred (ie. capital depreciation is excluded from the running costs of the business). All dollar values were adjusted to present values by using the average annual increase in the consumer price index over the period of the cash flow. The resulting cash flow is shown in the graph below.

*Figure 7. Annual costs and benefits resulting from diversification - Farmhouse Cheeses.*

The graph illustrates the delay in establishing a positive cash flow that resulted from the legal problems Liz and Mos faced. Despite this the cost benefit analysis estimates a present value of costs for the business of $133,210 and a present value of benefits of $132,904. This gives a benefit cost ratio of 0.99 indicating that the business is on the verge of breaking even. The analysis suggests that given current performance the business should break even in 2001. This means that it will have
taken nearly 10 years for the business to breakeven, although this could have been reduced to perhaps seven years without the legal difficulties that Liz and Mos faced.

Figure 8 below illustrates the relative impact on farm cash flow as a result of diversification.

**Figure 8. Change in cash flow resulting from diversification - Farmhouse Cheeses.**

Figure 8 shows the relative reduction in overall farm income in the early years as the business was starting (exacerbated by legal delays). Once the business was established the relative difference in income has improved significantly as a result of diversification. Liz and Mos are now $25-30,000 a year better off in terms of annual income than they would have been if they had not diversified.

To assess the financial impact of diversification we have compared a number of financial indicators for the farm with the average for mixed livestock-crops in the region based on the ABARE Farm Surveys report. These results are presented in the Table below.

**Table 5. Impact of diversification on financial indicators - Farmhouse Cheeses**

<table>
<thead>
<tr>
<th></th>
<th>Average farm (without diversification)</th>
<th>Farmhouse Cheeses of Kangaroo Island after diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Farm capital ($/ha)</strong></td>
<td>$3032</td>
<td>$3308</td>
</tr>
<tr>
<td><strong>Farm debt ($/ha)</strong></td>
<td>$606</td>
<td>$657</td>
</tr>
<tr>
<td><strong>%Equity</strong></td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td><em><em>Farm outgo</em> ($/ha)</em>*</td>
<td>$672</td>
<td>$1050</td>
</tr>
<tr>
<td><strong>Farm income ($/ha)</strong></td>
<td>$799</td>
<td>$1182</td>
</tr>
<tr>
<td><strong>Farm profit ($/ha)</strong></td>
<td>$127</td>
<td>$131</td>
</tr>
</tbody>
</table>

* Includes financing costs, depreciation and wages.

Table 5 indicates that both the farm income and outgo for Farmhouse cheeses after diversifying are higher than the average for a similar farm that is non-diversified. The level of profit is slightly higher than for a non-diversified farm. Overall the impact of diversification on the farm financial indicators is positive when compared to an average non-diversified farm in the same region.
Summary

Liz and Mos first diversified their farm business in the mid 1980’s by packaging the milk that they produced and selling it locally on Kangaroo Island. The move to diversify the business was prompted by poor returns from traditional agriculture, and a realisation that they had to improve the farm income if they wanted to remain farming. In 1990 they were approached by someone that convinced them to set up a cheese making factory to process the excess milk that they produced.

They experienced a number of problems in setting up, including parting ways with the original partner in the business, and then getting involved in legal wrangles with a marketing company. Once they sorted out these initial problems they successfully established Farmhouse Cheeses of Kangaroo Island.

They are now focussed on producing one line of cheese, and have a network of distributors across Australia that market their product for them. The cost benefit analysis indicates that they will break even on their investment in diversification in 2001, while the analysis of financial impacts on the business indicates that diversification is likely to have a net positive impact on their financial situation when compared to similar farms that have not diversified.

The key lessons they have learnt in diversifying are to be very wary of signing contracts with anyone and to check peoples’ claims of experience before going into business with them. Don’t get too big too quick and set your business up in a way that protects your personal assets as much as possible.
CASE STUDY 3

Ian & Margaret Clark

Portee Station.

Blanchetown

South Australia
Introduction

Ian Clark was born in the mid-north of South Australia at Gladstone. His father was a storekeeper and his mother was the daughter of a sheep and cattle dealer. It was Ian’s grandfather (his mother’s father) that first instilled in him the desire to be a primary producer.

Ian went to school at St Peters College in Adelaide, but even during his time at school he always had the underlying ambition to work on a stock farm. When he left school he went to work for his uncle on a property north of the Barossa Valley. He then moved into cattle droving and ended up working on a cattle property near Birdsville for about 18 months. After that he moved back to South Australia to work for a grazier at Melrose. Their association continued when the farmer moved to the Clare Valley where they share farmed. The share farming failed and Ian ended up moving to the South East of South Australia where he helped establish a farm at Keith. From there he moved to Arthur River in the South West of WA and worked on a property for several years. It was in WA that Ian met and married his wife Margaret. When they first started having kids they moved back to South Australia and Ian took over his fathers’ engraving, toolmaking and locksmith business. He ran the business for 8 years before selling it and buying a sheep property “Baldon” in the Mt Lofty Ranges.

They farmed this property for several years until Ian’s son Richard decided that he wanted to get into farming as well. The Baldon property wasn’t big enough so they decided to expand their sheep operation by purchasing Portee Station in 1988.

Portee was first settled in 1841 as a sheep grazing property. The 20,000 hectare property is situated on the banks and flood plain of the Murray River, 10km downstream from Blanchetown and about 2hours drive north east from Adelaide. The station property surrounds the Moorundie Creek inlet which was the site of the home of Edward John Eyre, a famous early explorer and protector of the aboriginal people on the Murray river from 1841 to 1845. The property covers a diverse range of country, from undulating scrubland to the river floodplain.

Similar to many SA sheep stations at the time, the property had been overgrazed since settlement when Ian and his family took it over. They have significantly reduced stock numbers and have embarked on a management program to re establish native grasses and flora. Emu, kangaroo and wombat graze the scrublands in coexistence with the sheep, while bird life abounds around the banks and floodplain of the river.

The Clarks have continued to run the property as a sheep station and are focussed on managing their sheep flock to reduce the micron level of the wool from around 22micron to 18micron and to increase the overall weight of the wool cut. After 10 years of the wool market being in the doldrums, there are now signs that the markets are beginning to pick up again with prices for fine wool continuing to attract a premium over coarser wools.

Stages of Diversification

Impetus for change

The Clarks purchased Portee Station in 1988 and in 1989 the wool market crashed. It was extremely difficult to service their debt having just bought the property and with wool prices so low. By 1993 they had decided that the wool industry was dead and they needed to look seriously at diversifying into another form of agricultural based enterprise in order to survive.

Identifying the opportunity & assessing feasibility
The Clarks had an acquaintance at the time that was involved in the outbound tourism industry and he suggested to them that it could be worth developing Portee as a farm tourism destination. Originally Ian thought the whole thing would be too expensive to set-up and didn’t really give it much thought. Then the chap approached him again with an offer to manage the farm and the tourism business at the same time and live on the property while running it. (Ian was still living on the other property 50kms away). Ian decided then that it might be a good idea and did up some budgets and a business plan to present to the bank. The ANZ bank rejected it without even looking at the figures, but on the way home from the bank Ian dropped in to see a friend who was a bit of an inventor and entrepreneur. Ian’s friend put him onto an accountant he knew, Ian saw the accountant and together they arranged finance through a merchant bank. The merchant bank was eventually taken over by Bendigo Bank and Ian decided to renegotiate his loan with another bank.

**Implementation & Issues**

- **Getting started - Description of business, infrastructure and financing**

Once they had financing, they began rebuilding and restoring the original buildings on Portee. They were under a lot of pressure from the tourism manager to get it done quickly because he said he had a number of guests booked. They managed to rebuild and restore the main station homestead over the course of 6 months from August 1995 through to February 1996. The total cost of refurbishing the homestead and setting up the business was $450,000.

![Figure 9. View across the Murray River Floodplain from a rocky outcrop on Portee Station](image)

The restored station homestead provides 4½ star accommodation with 8 bedrooms and a maximum of 16 guests per night. 4 rooms have a Queen sized and single bed, 2 rooms have a Queen sized bed and 2 rooms have 2 single beds each. Each room has an en suite bathroom, air conditioning, electric blankets and ISD/STD phone. The homestead has a commercial kitchen and licensed dining room. The dining room can be used as a conference room seating up to 20 people comfortably, a meeting room in the shearer quarters seats 16 people, while the shearing shed can also be used for less formal gatherings. Tours of the station are run each day and include: 4wd tours of the paddocks to spot wombats, kangaroo and emu; water runs; boat tours of the wetlands to view the abundant bird life; and viewing or participation in the day to day running of the sheep station, including mustering and working sheep in the yards. Visitors can drive themselves to Portee, or they can arrange to be transferred from Adelaide and driven to Portee or alternatively they can fly to the Portee airstrip.
Once the restoration of the homestead was complete, the manager had a few guests come through in the first few months but these soon ceased. Ian and Margaret realised that the manager of the business didn’t understand the inbound tourism industry. After 6 months they dismissed the management arrangements and assumed the operation of the tourism business themselves.

They had a large debt having just restored the main farm buildings and a limited income with only the occasional guests coming through. To reduce their debt, and consolidate their business interests they decided to focus their efforts on Portee, so sold the Baldon property and moved onto Portee. They refurbished the old shearer’s quarters on Portee as a place to live, and set about running Portee as a farm tourism destination and a working sheep station.

The sheep grazing and wool side of the business is set up as a partnership between Ian and Margaret. The tourism business is run as the Portee Station Unit Trust and a private proprietary limited company owned by Ian and Margaret acts as the Trustee. Ian decided to keep the two business structures separate for several reasons. First for accounting purposes, and second and perhaps more importantly, to leave his future management options open. For example, his son has shown a keen interest in the sheep and wool side of the station, while his daughter is interested in the tourism side of things. The structure of the business allows them to easily be run independently of each other. There is also the flexibility to sell off one of the businesses independently of the other.

- Running the business
  Ian and his family run the tourism and farm side of the business, they employ 3 cooks as required to prepare meals, and occasional labour to help out during busy times of the farming season.

  The focus for the future is to continue to try to increase the occupancy rate and to make sure that the whole business is run on a more sustainable basis. Ian is very keen to continue efforts in regeneration of the native vegetation which has been severely degraded over 150 years from over grazing and cutting scrub timber for paddle steamers in the early years. There are some problems with upstream pollution of the river from management of the Murray Darling Basin generally. Ian hopes that his tourism business helps to raise awareness of the importance of managing the river system to ensure the long term protection of the unique environment.

  The challenge for the sheep side of the business is to develop the flock to a stage where it is consistently producing 18 micron wool, down from the 23-24 micron average that they started with 10 years ago. Ian also hopes to increase the average wool cut per sheep through this process. To this end, they have embarked on a program of artificial insemination and embryo transfer to rapidly improve the flocks’ genetic base. Superior embryos are sourced and transplanted into a surrogate ewe flock. They are currently running about 4000 sheep including 1800 ewes, 1000 wethers and younger sheep.

  Ian suggests that if the wool market had not crashed in 1989, they would never have diversified into tourism. Now that he has diversified he feels confident that the farm business is a lot more sustainable over the long run.
Sales & Marketing

Ian says that marketing has been the greatest challenge for him since starting the business 6 years ago. He has tried numerous strategies and has put a lot of effort into promoting the Portee product. Ian is continually looking for effective ways to market his product. Ian cites as examples of his efforts in advertising and promotion:

- Numerous editorials in newspapers,
- $10,000 worth of free advertising in the Adelaide Advertiser with a stay at Portee Station as one of the prizes in a competition,
- The Channel 9 Today show hosted one of their programs from the Homestead,
- Featured on the Channel 7 Discovery program.
- A web site on the internet.
- Pamphlets and brochures distributed at many travel agents.
- Production of a promotional CD
- Production of a PDF file that can easily be emailed around the world

He says none of these efforts individually have had any noticeable impact on numbers of visitors to the property. However he is convinced that “word of mouth” is an essential part of advertising and promotion. To this end he has recently developed a CD and a PDF file which both feature pictures of the homestead, the facilities and the property generally, as well as general information for visitors. Ian gives these to all the guests so that they can continue to promote for him after they leave, he also emails the PDF file or posts out the CD to people that make inquiries about the property.

Ian suggests that the other key aspect to marketing and promotion is developing contacts and networks within the tourism industry. This includes developing relationships with travel agents, inbound tour operators and wholesalers of holiday packages. He believes that small tourism operators get a bad deal and cites a recent Tourism Expo run by the Australian Tourism commission. To run a display at the expo, the operator had to apply and be accepted, then pay $2,500 for a booth. He estimated that the total cost of attending and displaying at the expo would have been $7,000 and the only way to reduce this would have been to combine the display and share costs with other small operators.

Despite difficulties in finding the most effective forms of advertising and promotion, the occupancy rate at Portee has steadily grown over the last 5 years. They peaked in August of 2000 at 38% with an average of 17.7% for the year, but things have been very slow since the Olympics. The increased cost of air travel and competition for limited tourist dollars by the Olympics saw a slump in months following the Olympics and by February 2001 things were still slow.

Portee can offer a total of 6000 bed nights a year, and needs to fill 600 bed nights (10% occupancy) a year to cover the annual running costs.

Cost Benefit Analysis and Financial Impacts of Diversification

The cost benefit analysis investigates the actual and potential returns on Ian’s investment in diversification through farm tourism. A comparison of financial indicators for the farm business after diversification with those of an average farm in the region, is used to determine whether the farm business is better off from a financial point of view.

The capital costs associated with establishing the farm tourism business are estimated at $450,000 in 1995 which is equivalent to just over $500,000 in 2001. These costs resulted from the restoration of the homestead and the shearer’s quarters and represent the major investment in the business. Ian estimates that the running costs of the business (excluding financing costs) are $116,000 a year. The
following figure presents actual benefits to 2000 and then predicted benefits from 2000 to 2005 based on current trends in income and costs.

**Figure 10. Annual costs and benefits resulting from diversification - Portee Station**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost Benefit Cashflow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>$-200,000</td>
</tr>
<tr>
<td>1996</td>
<td>$-100,000</td>
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<tr>
<td>1997</td>
<td>$0</td>
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<tr>
<td>2004</td>
<td>$700,000</td>
</tr>
<tr>
<td>2005</td>
<td>$800,000</td>
</tr>
</tbody>
</table>

Based on actual income and costs from 1995 through to 2000, the present value of Ian’s investment in diversification is $508,389. The present value of benefits resulting from diversification are $94,355, indicating that Ian’s investment is yet to breakeven with a benefit cost ratio (BCR) of 0.19. This is not surprising given that the business has only been running for just over 5 years, and generating a positive cash flow for only 3 of those years. Not only does the business need to cover annual running costs, but also has to generate enough money to cover the cost of establishing the business before it starts to breakeven.

Extrapolating the current cash flow through to 2005 and assuming the current occupancy rates (20%), indicates that Ian is likely to breakeven on his investment in 2004 (BCR = 1) and by 2005 the benefits from the investment should be in the order of $645,000 giving a BCR of 1.2. Obviously if occupancy rates improve, the business will breakeven sooner. Figure 11 below illustrates the relative impact on farm cash flow as a result of diversification.

**Figure 11. Change in cash flow resulting from diversification - Portee Station.**

Figure 11 highlights the long lead time to improvement in farm income resulting from diversification. It has taken nearly 5 years before the annual farm income has increased above what it was prior to diversification. The difference in farm income in recent years as the business has become more fully established is over $60,000 a year more than if Ian had chosen not to diversify.
Table 6. Impact of diversification on financial indicators - Portee Station

<table>
<thead>
<tr>
<th></th>
<th>Average farm (without diversification)</th>
<th>Portee Station after diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm capital ($/ha)</td>
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<tr>
<td>Farm debt ($/ha)</td>
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<tr>
<td>%Equity</td>
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<td>Farm outgo* ($/ha)</td>
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<tr>
<td>Farm income ($/ha)</td>
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</tr>
<tr>
<td>Farm profit ($/ha)</td>
<td>$1</td>
<td>$6</td>
</tr>
</tbody>
</table>

* Includes financing costs, depreciation and wages.

The analysis of financial indicators shows that farm profit is $5 per hectare greater than for a similar average farm in the region, which is equivalent to $100,000 per year. Obviously there has been a substantial investment in the tourist business in order to achieve this increase. Current improvements in the outlook for the wool industry, especially fine wool, suggest that farm income is likely to improve in the short to medium term. It should be noted however that with many sheep farmers moving into fine wool around Australia, the premium currently being enjoyed for fine wool is likely to decline over the next few years as supply increases.

Summary

Ian was essentially forced to diversify his farm business due to the crash in the wool industry in the late 1980’s. Farm tourism was presented to him as an option and after some convincing he chose to give it a go. Obtaining finance to set up the business required finding a “friendly bank” and it took several approaches before he was successful.

Like a number of others in this case study series, Ian experienced some problems in the first few months of setting the business up. In his case it was related to having someone manage the business that was not really up to the job. Once these initial hurdles were overcome Ian set about building his client base through a variety of advertising and promotional efforts. He considers that marketing and promotion are the keys to successfully running a farm tourism venture, and he is still trying to find the most effective way of marketing his business.

The cost benefit analysis indicates that Ian will most likely breakeven on his investment in diversification in 2004, and the financial analysis suggests that he will be in a much stronger financial position than if he had chosen not to diversify.
CASE STUDY 4

Rhonda and Ian Milburn

Glenloth Game.

Wycheproof

Victoria
Introduction

Ian and Rhonda Milburn have been on their 650-hectare wheat and sheep property near Wycheproof in the Mallee district of Victoria since 1965. The farm has never really been big enough to support them and both Ian and Rhonda worked off farm to supplement the farm income. Ian worked as a youth worker in the surrounding district, and Rhonda has worked as director of nursing in the regional hospital for 16 years.

Ian’s job finished in 1987, which meant he was faced with some fairly stark choices if he wanted to remain farming in the district. He either had to sell their existing farm and get a bigger property, which was not really a viable option at the time, or he could intensify production from the existing farm by diversifying the business.

They chose to diversify the business, and Ian investigated a number of options, one of which was producing and processing squab for sale into the hotels and restaurants in Melbourne. He managed to convince some of the other farmers in the area of the potential for the business and in 1988 he and six other farmers formed the Mallee Squab Producers Association. At the same time, Ian and Rhonda set up Glenloth Game as a company to produce their own squab and to process and market the squab from the other producers in the Association. Their focus on quality and reliability soon gained them a reputation, and at the request of their clients they started producing free-range chickens and ducks under a second company called Glenloth Free Range.

Since 1990 they have let the farm out to a sharefarmer and focussed entirely on running the production, processing and marketing of birds. In 1997 they expanded the business further by building a processing works for export of Ostrich and Emu. They borrowed money from the bank to set this up and then the market for Ostrich and Emu meats and by products crashed the next year. In 1999 they converted the works to handle deer for export.

They currently run 3 companies. “Glenloth Free Range” which grows chickens, ducks, squab, and a variety of other birds. “Glenloth Game” does the marketing of the birds for themselves and other growers in the district. Finally “Australian Game Processors” slaughter and process birds for the domestic market and deer for the export market.

Stages of Diversification

Impetus for change

Ian and Rhonda have owned their farm since 1965, but both worked off farm to supplement the farm income. When Ian’s job finished in 1988, they were faced with several options. They either had to buy a bigger property to gain the economies of scale necessary to run a viable wheat sheep farm, or they had to increase the income on the current farm through diversifying into higher income earning enterprises.

The impetus for diversification was essentially a radical change in their personal economic circumstances, which highlighted the need to develop a secure and sustainable income from the farm business. However Ian is quick to point out that their change in circumstance was really just a symptom of the general economic decline that has been occurring in rural areas across Australia for several decades. He says that the Wycheproof region has been the most rapidly declining area in Victoria over the last 15 years. There has been a dramatic reduction in services and employment opportunities in the region and this has had a drastic impact on the local community including increased rates of suicide. Because of the lack of opportunities, people move to the larger regional
centres or the city with the result that they lose not only young people but also older people from the area who have traditionally taken on leadership roles in the district.

Ian’s desire to help stop the decline in the local community was another reason for building a business through diversification and he is proud of the fact that he is now providing employment for 40 people.

**Identifying the opportunity & assessing feasibility**

Once he had decided to diversify the farm business, Ian investigated a range of different enterprise options. During a visit to a pheasant farm, someone mentioned the idea of producing squab and this sparked Ian’s interest. He did some research on production costs and returns and realised that it had real potential.

One of the issues was generating enough supply to satisfy the markets, so he decided to approach other farmers in the area with the idea of forming a grower cooperative to ensure a reasonable volume of quality supply. Together with six other farmers they formed the Mallee Squab Producers Association in 1988.

Within the first few months of establishing the cooperative, Ian realised the need to undertake some proper business planning. In April of 1989 he received a subsidy from the Department of Industry Technology and Research for 75% of the $6,000 cost of the plan. He says it is the best $1,500 that he spent because the plan was extremely practical and realistic. The plan emphasised the need for quality and reliability of supply, which have continued to be the key to success of the business. It also mapped out what needed to be done to approach clients, even to the point that the consultants that put together the plan set up some initial interviews.

Even with these initial meetings Ian still found that he had to spend a lot of time “knocking on doors” and speaking to people in the restaurant and hotel industry to convince them to try the product.

The other aspect of the feasibility phase that Ian cautions on is budgeting. The initial budget figures that they drew up blew out by more than 100% because of a lot of costs and unknowns that they had simply not considered.

**Implementation & Issues**

- **Getting started - Description of business, infrastructure and financing.** After setting up the Mallee Squab Producers Association in November 1988, Ian and Rhonda built a processing factory early in 1989. The first squabs were produced in May of 1989. Glenloth Game was established as a company to handle the processing and marketing of the squab. The processing factory for the squab has cost about $600,000 to set up and develop over the years. The process has been continually improved and capacity expanded to the point where they now process on average 800 squab per week.

In 1997 they expanded the business further by building a processing factory to do Emu and Ostrich, but the market crashed later that year. In 1999 Ian converted the processing works to handle deer after developing a business relationship with Bilby International, a large Deer processing and marketing company which is based in South Australia. Ian’s company Australian Game Processors is now contracted to kill and process Deer for Bilby International.
It cost around $1.5 million to set up the Deer abattoir and in the last 18 months Ian and Rhonda have spent another $200,000 getting the factory up to export standard. The money to establish the factory was borrowed from the bank, while Bilby International have put some of the money up front to upgrade the factory to export standard, and Ian and Rhonda pay them back.

**Running the business**

Ian is very proud of the fact that his business employs 40 people in the local area. He says it is always a struggle getting good people, and there is a lot of effort that goes into training people up for their jobs. He believes it is essential to treat your employees in the same way that you would want to be treated, and he enjoys a good relationship with his workforce. He makes sure that he pays them on a weekly basis so that they don’t have problems with cash flow, and occasionally “puts money down on the bar” at the local pub to shout them a beer. As a consequence of building a good working relationship with his workforce, Ian says that they are always receptive to new ideas and new ways of doing things. He also believes in the concept of mentoring and developing the skills of young people in the area so that they stay in the community.

Ian says that he is good on the marketing and bigger picture side of running the business, while Rhonda and their daughter run the day to day management and financials. Their daughter Chris runs “Australian Game Processors”. Ian believes that as a family they work well together complimenting each others’ skills. He also considers it is important to recognise your personal strengths and weaknesses in running a business.

The recent development of the export processing works has been a large financial commitment, but having established a working good relationship with Bilby International they see this side of the business growing substantially over the next few years.

![Figure 12. Deer processing works at Glenloth Game.](image)

They have recently received a licence to process field shot deer, which will allow them to increase the through put of the abattoir and increase returns to the business. Ian and Rhonda say it has been a long haul over the last 12 years and they can still only just start to see the “light at the end of the tunnel” in terms of the business covering the set-up costs. However they also stress that making money from the business, while obviously important, is not necessarily their main goal. They get a lot of pleasure through the challenge and achievement of running the business.
**Sales & Marketing**

Ian considers quality and reliability of supply as the most critical components of marketing. This was highlighted in the market research and interviews with potential clients conducted for their first business plan. The Milburns have always focussed on the quality of their products as a number one priority.

Ian has undertaken much of the marketing side of the business. He travels down to Melbourne each week to deliver the birds which also gives him the chance to gain feedback from his clients. He regrets that in recent years the marketing side of the business has been neglected a little bit, with time taken up in developing the new processing works and ironing out issues related to processing. This has meant that they have not followed up as much as they would have liked to in developing new customers. Ian believes he is now only just getting the marketing side of things back under control. They now send out a circular to potential clients with a description of products and prices. The circular is followed up with a phone call and if there is some interest they arrange for a sample to be sent, they then follow up again with a phone call and develop their markets in this way.

Ian believes that it is important to develop an honest relationship with the client by allowing plenty of opportunity for feedback and keeping lines of communication open. This includes giving them early warning of any problems you may be having with supply.

Ian says that there is potential for a variety of new products, but the major constraint is being able to get the quantity and quality of product.

**Cost Benefit Analysis and Financial Impacts of Diversification.**

This section looks at the costs and benefits associated with Ian and Rhonda’s investment in diversification of the farm business. In this section we also analyse the impact that diversification has had on some of the key financial indicators of the business.

Since 1987 the Milburns have invested a total of $2.3 million (present value) in setting up the squab processing plant (domestic works) and more recently the deer processing works for the export market. The present value of benefits from diversification is estimated at $896,455 which gives a benefit to cost ratio of 0.39. The benefit cost ratio less than one means that the business is yet to cover the costs of setting up. The graph below illustrates the annual cash flow that has resulted from diversification.
The graph illustrates the costs incurred in 1988 and 89 when Ian and Rhonda first set up the squab processing plant. The significant investment in 1997 and 98 when they built the deer processing plant puts the business back in the red and it will take a number of years before the business begins to breakeven.

Figure 14 below illustrates the relative impact on farm cash flow as a result of diversification.

The change in cash flow resulting from diversification reflects the continued expansion of Ian and Rhonda’s business. They enjoyed an improvement of over $20,000 a year from their initial diversification into Squab. The further investment into Deer processing has lead to a reduction in annual farm income initially as they bore the costs of financing the expansion, however these costs are now beginning to bear fruit as reflected in the substantial improvement in farm income over recent years.
Table 7. Impact of diversification on financial indicators - Glenloth Game

<table>
<thead>
<tr>
<th></th>
<th>Average farm (without diversification)</th>
<th>Glenloth Game after diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm capital ($/ha)</td>
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<tr>
<td>Farm debt ($/ha)</td>
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<tr>
<td>%Equity</td>
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<td>Farm outgo* ($/ha)</td>
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<td>Farm income ($/ha)</td>
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<td>Farm profit ($/ha)</td>
<td>$66</td>
<td>$277</td>
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</tbody>
</table>

* Includes financing costs, depreciation and wages.

The analysis of financial indicators shows that the overall level of farm profit is significantly greater than that which would be expected for a similar non-diversified farm in the region. The level of farm debt is also higher, but this is offset by higher per hectare income and higher capital value per hectare. The combination of financial analyses indicate that Ian and Rhonda’s move into diversification of their farm business has helped to place them in a lot more financially sustainable position in the longer term.

Summary

Ian and Rhonda decided to diversify after Ian’s job became redundant in 1987. Diversifying the farm business was more attractive than expanding the current farming system by buying more land. Ian and Rhonda investigated a number of alternative enterprises before deciding to diversify into Squab production for restaurants.

They set up a production cooperative with some other local growers and Ian and Rhonda took on the processing and marketing of the squab. This proved very successful in the early years and encouraged them to expand. Attempts to expand through processing and marketing Emu and Ostrich proved less successful and a rethink saw them move into processing Deer for export.

It has taken nearly 12 years for the Milburns to reach a stage where they believe they are beginning to reap the full benefits of their diversification. Ian is proud of the fact that he is employing 40 people from the local area and at the same time, he and Rhonda have enjoyed the challenge of what they have undertaken.

Ian believes that good budgeting and financial management combined with a focus on marketing and building good relationships with clients is an essential component to the success of the business.

The analyses show that the farm is in a lot stronger financial position than it would have been if they had chosen not to diversify. There are significant capital investments involved in reaching the stage that Ian and Rhonda have achieved and this highlights the need for thorough planning to reduce risks and a clear focus on goals to ensure success.
CASE STUDY 5

Fred and Coral Davies

Stoney Creek Oil.

Talbot

Victoria
Introduction

Fred Davies’ great grandparents came to the Central Victorian Goldfields region in the 1870’s. They bought a block of land and set up a bakehouse and dairy to sell bread, milk, butter and cheese to the miners. The Davies family have had a continuing association with the region since that time, with Fred and Coral buying their current block of 163 hectares near Talbot just prior to the Ash Wednesday fires of 1983 and taking possession of the block just after the fires. All of the fences on the property were destroyed in the fire and they were still paying off replacement fencing in the late 1980’s.

From the mid to late 80’s the farm was growing fine wool, beef and cropping. At this time, Fred and Coral became some of the first people in the area to grow Safflower for the food oil industry. In the first few years they received good prices, however prices began to drop as supply increased with more farmers growing Safflower and as Canola became established as a substitute vegetable oil for use in margarine.

Stages of Diversification

Impetus for change

Fred had been earning off-farm income in the steel fabrication industry, however in 1989 the company he was working for went out of business and he found himself out of a job. He decided to try making the farm more viable by building up their fine wool flock through breeding and buying in sheep and producing a greater quantity of good quality fine wool. To maintain the increased flock numbers they were feeding most of their crop to the sheep, as well as buying in Lucerne and Hay to feed. Disaster struck when the guaranteed floor price for wool was removed and the wool price crashed. The sheep were practically worthless and the lack of cash flow meant they had to sell the beef herd to generate some cash.

Identifying the opportunity & assessing feasibility

Fred found himself with no job, no crop and at the age of 45 no real prospects to find new work. The only thing he had was some spare safflower seed which he was offered $160 per tonne for, but he had seen it being sold at the local health food shop for $18 per kg. This got him thinking about diversifying by setting up a processing plant to produce edible oils from oil seeds.

To get the ball rolling, Fred enrolled in a New Enterprise Incentive Scheme course. This was basically a 6-week crash course in small business development, management and marketing. He was keen to set up a business producing and selling Safflower oil. During the course, as an exercise they developed a business plan for their new enterprise, which included costing the establishment of the business, developing enterprise budgets and developing a marketing strategy.

Implementation & Issues

- Getting started - Description of business, infrastructure and financing.
Fred and Coral were advised to take on some venture partners to spread the financial cost of setting up. They did this and with the new partners purchased some second hand Oil expellers (machines that separate the oil from the seed) and started trialing them and learning the intricacies of the process. It was difficult finding anyone willing to impart knowledge of how to process the seeds to produce oil, but eventually Fred tracked down some people who had done research in the area and were willing to give some guidance.
In the meantime, progress in setting up the factory was being delayed due to disagreement with the venture partners about siting the factory. Fred and Coral wanted to set up the processing factory on their property but the venture partners were wary of doing this because the land title was in Fred’s name. The alternative was to purchase a new site but this option would add $100,000 to the set up costs and was an unnecessary expense from Fred’s point of view.

Eventually after getting sick of the delays Fred decided to go it alone. He borrowed $40,000, bought out the partners and established the processing factory on his land with very basic gear. This occurred in 1992 nearly 2 years after originally deciding to diversify. They started producing Safflower Oil only to discover after the first 5 months that the market for Safflower Oil was saturated so they decided to move into flax oil products. They struggled along until March 1995 when they first broke even on their investment, then in May 1995 they were able to draw their first wages from the company and in July 95 were able to employ their first full time worker. They are now employing 8 full time employees.

**Running the business**

Fred and Coral buy in their seed from other producers. 70% of their seed is organically grown by certified growers, however Fred points out that while they pay a high premium for organically produced seed, the price for the end product does not reflect the difference in cost between organically grown and conventionally produced seed. The seed quality is critical in determining the end quality of the oil, so they have developed a close association with their growers to ensure that the seed they buy is top quality. Getting consistent supply of top quality seed is always a problem and has become a bigger issue over the last few years as the business has expanded.

Fred and Coral have been very wary of expanding too quickly. In the first few years the business expanded very rapidly, but they had to be careful to match their ability to supply with the increasing demand while not compromising the quality of the product.

They have recently bought an old abattoir at Avoca, because of the increased power supply and larger cool rooms. This is part of their plans for expansion, but again Fred emphasises the need for careful budgeting. The move to bigger production capacity requires a large step up in investment which needs to be covered by demand and the ability to supply the product. It is important to avoid investment in unused production capacity. They are also looking at growing and supplying their own seed to overcome some of the problems with guaranteeing seed supply.
Fred and Coral employ 8 people, but they say that the cost of employing people is a big issue and they will have to rethink the way they do this, perhaps moving to contracting or piecemeal employment. Recent changes in the laws in Victoria related to employees rights to sue employers under common law have resulted in an increase in the Davies’ Workcover Insurance costs from $8,000 to $20,000 a year. This is the type of increase in expense that can be the final straw for small operators trying to run a business.

Training staff, and finding good reliable staff is always difficult. Fred believes that staff have to be “self-starters” and willing to learn, although he refuses to teach people “common sense”.

Fred and Coral see one of the key lessons is sorting out good financing for the business. They have always been undercapitalised, although to some extent they believe that this has been good for them by restricting their expansion and forcing them to focus on budgeting and getting the business operating efficiently before growing further. A lot of the business expansion has been financed through cash flow generated from the business and Fred has never forgotten the “tough times” so is always on the look out for second hand machinery.

They had to be smarter about the way they paid for seed which was one of the major costs of the business. Rather than paying up front for supplies, they have moved to an arrangement where they pay growers an up front deposit for seed and then monthly payments as they use the seed.

They have little respect for anything that governments are involved with, suggesting that government over-regulation often scuttles industry rather than assists in anyway.

They have continually attended training courses and seminars to stay abreast of the industry and learn more about running the business. They have also been aware of the need to have a good understanding of the business that you are in. This has required an evolution in thinking away from being farmers that are diversifying, to being suppliers of an end product to a market and all that that involves.

Figure 15. Part of the processing plant for production of Flaxseed oil at Stoney Creek Oils
**Sales & Marketing**

Fred and Coral sell nearly 50% of their product through mail order and the rest is through distributors and health food shops. Using mail order as a method to sell their product really occurred by accident rather than a planned marketing strategy. When they first started selling, they found it very difficult to get shops to stock their product because it was new and unknown. To overcome this they sent free samples direct to key people in the industry, and these people started ordering directly. This evolved into the mail order business, although it also helped expand the demand for their product in health food shops as people would go into health food stores and ask for their products. Once they had established this demand they were able to approach distributors with a ready made market.

An advantage of the direct marketing approach was the ability to get good feedback from their clients on the quality of the product and any changes that needed to be made. Fred discovered that many health food shops that he surveyed to get an idea of the quantity to supply would overstate their turnover. This meant that his sales projections were often overstated.

They also realised early on that the image of the product had to be changed. They wanted to emphasise the quality of their product and distinguish it from other oils on the market which were of poorer quality. So they decided to market their premium quality product as Flaxseed Oil and their 2nd grade product as Linseed Oil. Fred believes that people associate Linseed Oil mainly with cricket bats, so it is difficult to sell it as a health food product under that name. They ensure that their product is of the highest quality through a combination of top quality grain, the extraction process, and good quality packaging.

Packaging of Flaxseed Oil is a key factor in the quality of the end product because the oil reacts with oxygen, heat and light. They started using dark glass bottles, but after one of their first consignments turned up at the clients shop with 20 out of 23 bottles broken, they realised they needed to rethink the packaging. Dark glass keeps out only 40% of the light, while black plastic containers present problems because the oil can react with the black polyester lining. They finally decided on Aluminium bottles lined with EPON, an inert substance used to line food containers like sardine and soup cans.

Another issue with the packaging of the product is having to order large quantities of the packaging containers. For small operators this is a problem if they want to do something different, since factories that make the containers are not interested in setting up a specialised production run for small quantities. Fred spent a lot of time trying to find a manufacturer who would produce packaging containers in the quantities that were economic for them to produce and for him to purchase.

The design of the containers was also important in terms of presentation of their product. Fred and Coral used a marketing consultant to design the product image and the containers. Their original packaging was quite “Earthy”, but they weren’t happy with this so employed a new marketing consultant to design the presentation of their current range of products.

They are looking at expanding their product range by moving into capsules and mixes of oils, food grade meal for breakfast cereals, and ingredients for specialty bakers.
Cost Benefit Analysis and Financial Impacts of Diversification

This section uses cost benefit analysis and a comparison of financial indicators for the farm before and after diversification to investigate the impact that diversification has had on farm finances.

In undertaking the cost benefit analysis we have estimated the cash flow for the business starting from the initial investment in 1992 and running through to 2000. The costs have been estimated as any capital investment costs that have been made since starting the business. The benefits are estimated as the net income after all running costs have been deducted. Depreciation of capital is not included as an annual cost of running the business, rather for the purposes of the cost benefit analysis capital costs are fully accounted for in the year in which they occur. The cost benefit analysis is conducted in the context of costs and benefits to Fred and Coral rather than to the business entity. This means that any wages paid to them from the business are included on the benefit side of the ledger. Because of the way in which wages and depreciation are treated the cash flow estimated for the benefit cost analysis differs from that which would be determined for accounting purposes.

The average consumer price index over the period 1992 to 2000 is used to adjust the costs and benefits in the year in which they occur to present day dollar values.

The estimated cost benefit cash flow for the farm since diversification is presented in the figure on the following page.
The present value of capital costs associated with setting up the new business are $52,141. The estimated present value of benefits for the business are $1,730,000. This gives a benefit to cost ratio of 33.

Figure 17 below illustrates the relative impact on farm cash flow as a result of diversification.

Figure 17 indicates that there has been an immediate positive impact on farm cash flow since diversification. This is not surprising given that Fred and Coral were not really breaking even under the original farming system. This is also a reflection of the fact that Fred has been careful not to over capitalise the business as it has expanded. In other words most of the expansion has been funded through money generated out of the business.
Table 8. Impact of diversification on financial indicators - Stoney Creek Oils

<table>
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<th>Average farm (without diversification)</th>
<th>Stoney Creek after diversification</th>
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<td>Farm income ($/ha)</td>
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<td>Farm profit ($/ha)</td>
<td>$62</td>
<td>$1540</td>
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</tbody>
</table>

* Includes financing costs, depreciation and wages.

The analysis of financial indicators shows that Stoney Creek is in a very strong financial position compared to the average non-diversified farm in the region. Farm profit is substantially greater than the averaged non-diversified farm as is the capital invested in the business. The farm debt is also greater than the average non-diversified farm, however this is more than outweighed by the strong profit and capital situation of the farm.

Summary

Fred and Coral were determined to diversify their farm business as a means to ensure financial survival in the longer term. They came across the idea of processing oil seeds while comparing the price they received for unprocessed seed to the price received for processed oil in health food shops. Their original attempt to produce safflower oil was unsuccessful due to oversupply in the market. This made them move to flaxseed oil which they have focused on ever since. They have gradually expanded the business, being careful to focus on quality of the product and building up a good relationship with their clients.

They supply nearly 50% of their product through mail order. This started as a way of marketing their product to potential clients by sending samples to create new markets and demand. The mail order side of the business has become an important facet of the operation.

They currently employ 8 people although increasing costs of employing people may see them rethink the way they employ people, perhaps moving onto contracting or piecemeal methods of employment.

The analysis shows that they are financially far better off than if they had chosen not to diversify. Both Fred and Coral enjoy the challenge of what they are doing and have already begun moves to expand the business further. Fred points out that the rate of expansion is critical and he believes although he has always been undercapitalised, this has probably saved him from going bankrupt a number of times by restricting his capital investment in expansion and ensuring that the business funds its own expansion.
CASE STUDY 6

Phillip and Lucy Headlam

Forester Lodge.

Waterhouse

Tasmania
Introduction

Phillip and Lucy Headlam farm a 543-hectare property at Waterhouse in North-East Tasmania. Phillip’s parents bought the farm in 1983, but previously they had a smaller farm near Pontville in Northern Tasmania.

After leaving school, Phillip did 2 years jackarooing before going to Glenormiston Agricultural College in Victoria. After finishing at Glenormiston, he moved back to work on the farm and took over running the property in 1986 at the age of 21. Phillip and Lucy met at Agricultural College and married in 1990.

The farm originally ran Pollworth sheep, a Merino Corriedale cross, to produce fine wool. Phillip was keen to diversify the farm business, realising that the farm wasn’t going to be profitable from grazing sheep alone. In 1989 he planted about 2ha of Asparagus as a first step towards diversifying the farm business.

Stages of Diversification

Impetus for change

In 1990 the wool market crashed placing even more pressure on Phillip and Lucy to look for more profitable alternative enterprises. In the early 1990’s they started growing cut flowers (Dutch Iris) and selling the flowers to a wholesaler. They ended up growing about 80,000 bulbs a year and the business was reasonably successful until 1996 when the wholesaler went out of business. In the same year Phillip and Lucy had their first child so they were again under pressure to increase the farm income through diversification.

They toyed with the idea of buying a bigger property, but with not enough equity in the existing property and no indication that the wool industry was going to recover in the near future, getting a bigger property just to increase grazing capacity didn’t seem a sensible option.

Identifying the opportunity & assessing feasibility

Phillip and Lucy heard that Simplot, a large food producer, processing, and distribution company, with a factory based in the region, was looking for more land and contract growers to grow potatoes. So they began to investigate the feasibility of growing irrigated potatoes on the property. The area was not known for cropping, having historically being cleared in the 1960’s as soldier settlement blocks for grazing.

Implementation & Issues

- Getting started - Description of business, infrastructure and financing.
  To set up the business, Phillip and Lucy had to borrow $325,000 to pay for two centre pivot irrigators and underground piping to supply water to the irrigator pivots. They also had to negotiate a contract with Simplot. Being able to prove the feasibility of the business and the sustainability of water use, was critical to their success in getting finance and negotiating a contract with Simplot.

  To assist them with all of the contract negotiations, negotiating finance, arranging mines department surveys to assess the water availability, and accessing irrigation experts to assess the feasibility of the operation, they used a professional consultant who was also a good friend. Phillip and Lucy believe strongly in the value of good advice and seeking others opinions.
The Water Authority was originally sceptical about the availability of water, but through Phillip and Lucy’s efforts in seeking professional opinions and independent advice, they were able to convince the Authority that the water supply required was easily sustainable, and this has proven to be the case. Phillip and Lucy were also able to negotiate an interest rate subsidy of 50% on their loan through the Rural Adjustment Scheme (RAS). Again this proved difficult but perseverance, logic and the timely departure of a particularly contrary individual within the RAS eventually saw them succeed in their application.

**Running the business**

They entered into a four-year contract with Simplot who leased the land and the centre pivot irrigators back from them. Lucy and Phillip grow and supply the potatoes to Simplot for production of French Fries for MacDonalds. The move into centre pivot irrigation required a major change in the farm set up. This included changing fences to allow for the circular coverage of the centre pivots, setting up the irrigation infrastructure, and changes to roads and gates to accommodate the movement of irrigators between paddocks.

Phillip and Lucy use contractors to plant and harvest the crops which minimises their need for machinery (they own one tractor), and leaves them to manage the irrigation and crop maintenance. Each irrigator covers a circle of approximately 25ha of land in each pass, and can be moved between 2 to 3 circles. In 2000 they bought a third centre pivot which is not leased to Simplot and grew 25ha of poppies and 2 crops (50ha) of Canola for GM seed. The Tasmanian government recently put a moratorium on growing GM seed, so this has ceased as a crop option for the time being.

Their four-year contract with Simplot is coming to an end and has allowed them to pay off the first two irrigators. They have decided to enter into a further two-year contract with Simplot, and this will allow them to pay off the third irrigator. In the meantime they are investigating alternative crops like onions and carrots, because Simplot is now growing a lot of potatoes on their own land, which will make it more difficult for small contractors to compete.

Lucy and Phillip consider that lifestyle issues are extremely important, and see diversification of the farm business as a means to an end. They both love working with sheep and cattle and are both professional wool classers, so diversification has been a way to ensure the long term viability of the farm while ensuring that the grazing enterprise is maintained and hopefully in the future expanded.

While the diversification into irrigated crops has been successful from a financial point of view, it is very labour and management intensive, with Phillip working until 9.30pm most nights. They would like to balance the irrigating with grazing in a proportion of about 30% to 70% in the longer term. By doing this they hope to achieve a less intensive workload leaving time to “take a break”.

In 1998, Phillip and Lucy joined a farm improvement group run by Rural Consulting Services (RCS). The group has been invaluable to them in several respects. First it provides a forum for the farmers in the group to toss ideas around and get feedback from the group on their ideas and experiences. Secondly RCS provides detailed business performance analysis to the members to allow them to track their own performance against benchmarks for similar farms both within the group and across the state. Phillip and Lucy consider it a huge advantage to have this feedback and input to assist them in running the business as efficiently as possible. The culture of regularly evaluating their business performance helps to highlight any problems that are arising and to make any necessary management changes.

They believe that to run any business successfully, you need to have a clear goal and a vision of how to achieve that goal, but most importantly the commitment to achieve it.
Cost Benefit Analysis and Financial Impacts of Diversification.

This section uses cost benefit analysis and a comparison of financial indicators for the farm before and after diversification to investigate the impact that diversification has had on farm finances.

In undertaking the cost benefit analysis we have estimated the cash flow for the business starting from the initial investment in 1989 and running through to 2000. The costs have been estimated as any capital investment costs that have been made since starting the business. The benefits are estimated as the net income after all running costs have been deducted. Depreciation of capital is not included as an annual cost of running the business, rather for the purposes of the cost benefit analysis capital costs are fully accounted for in the year in which they occur. The cost benefit analysis is conducted in the context of costs and benefits to Phillip and Lucy rather than to the business entity. This means that any wages paid to them from the business are included on the benefit side of the ledger. Because of the way in which wages and depreciation are treated the cash flow estimated for the benefit cost analysis differs from that which would be determined for accounting purposes.

The average consumer price index over the period 1989 to 2000 is used to adjust the costs and benefits in the year in which they occur to present day dollar values.

Figure 18. Annual costs and benefits resulting from diversification - Forester Lodge.

The graph illustrates that since they first diversified into Asparagus in 1989 they have improved the farm’s financial situation with positive benefits. The next major diversification in 1996 into irrigated crops is represented with the investment cost of around $327,000 in today’s dollars. The benefits from this investment have occurred rapidly due to contracts signed with Simplot that have guaranteed an annual income. The analysis suggests that the breakeven on the initial investment occurred within 3 years with a substantial improvement in the farm’s overall financial situation.

The present value of benefits from diversification is estimated at $742,000 giving a benefit cost ratio of 2.3. The benefit cost ratio indicates a solid return on Phillip and Lucy’s investment in diversifying the farm business.

Figure 19 on the following page illustrates the relative impact on farm cash flow as a result of diversification.
Figure 19 shows that Phillip and Lucy’s initial diversification into bulbs helped to improve the farm income flow by about $8,000 per year. The second phase of diversification into irrigated cropping saw an initial drop in income as a consequence of investment in the irrigators and other infrastructure related to the irrigation enterprise, however this was soon offset by the constant lease payments made to them by Simplot. The annual farm income has improved significantly as a result of their diversification into irrigated cropping, with the analysis indicating that they are around $140,000 a year better off than if they had chosen not to diversify.

A comparison of financial indicators for the farm before and after diversification is given in the Table below.

Table 9. Impact of diversification on financial indicators - Forester Lodge.

<table>
<thead>
<tr>
<th></th>
<th>Average farm (without diversification)</th>
<th>Forester Lodge after diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm capital ($/ha)</td>
<td>$733</td>
<td>$2346</td>
</tr>
<tr>
<td>Farm debt ($/ha)</td>
<td>$121</td>
<td>$881</td>
</tr>
<tr>
<td>%Equity</td>
<td>84%</td>
<td>62%</td>
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<tr>
<td>Farm outgo* ($/ha)</td>
<td>$83</td>
<td>$491</td>
</tr>
<tr>
<td>Farm income ($/ha)</td>
<td>$111</td>
<td>$847</td>
</tr>
<tr>
<td>Farm profit ($/ha)</td>
<td>$28</td>
<td>$356</td>
</tr>
</tbody>
</table>

* Includes financing costs, depreciation and wages.

The analysis of financial indicators shows a stark contrast between the financial position of Phillip and Lucy’s farm compared to the average farm of their type (prior to diversification) in Tasmania. As with other case studies in this series, the farm capital and farm debt is higher on a per hectare basis than the average non-diversified farm and this is reflected in a lower equity ratio. However, the farm shows a substantially larger profit margin than the average farm which means that the ability to reduce debt is much greater.

The combination of the cost benefit analysis and the comparison of financial indicators shows that Phillip and Lucy have been very successful in using diversification as a strategy to enhance the long term viability of the farm.
Summary

Phillip and Lucy realised that the financial sustainability of the farm was at risk with their over reliance on sheep and cattle grazing. Their first move into diversification in the early 1990’s saw them growing flower bulbs and this was relatively successful until the client for the flowers went out of business. A move into irrigated cropping was the next stage of diversification and this has proved very successful.

The ability to lease their irrigators and crops to Simplot has overcome any problems with fluctuating cash flow and the associated risks. The success of the first four years of irrigating has given them the confidence and financial ability to further expand the business.

Phillip and Lucy thoroughly plan all of their business decisions and this is aided by involvement in a farm improvement group. The farm improvement group allows them to benchmark their progress against others in the group, and also provides them with a useful forum of peers to discuss their ideas.

The analyses indicate that Phillip and Lucy’s move to diversify the farm enterprises has been very successful, and should ensure the long term viability of the farm, while also allowing Phillip and Lucy the financial security to pursue other lifestyle goals.
CASE STUDY 7

Jim and Caroline Street

Blaxland.

Walcha

New South Wales
Introduction

The Street family has been living in the Armidale region since 1958. Jim and Caroline were married 26 years ago and lived in Victoria for 10 years before returning to Walcha in 1985.

Stages of Diversification

Impetus for change

Three years ago in 1998, Jim and Caroline decided they needed to sit down as a family and decide what they wanted to do with the business. Jim and Caroline wanted to be able to retire comfortably within the next 10 years or so. With a son interested in possibly taking over the farm and two daughters, they felt it was time to start planning for succession of the family business and the long term financial security of the family.

At that time they had a 900 hectare farm (165ha leased) with 6000 merino and fat lambs and 300 head of cattle. The farm had a moderate debt coming out of the wool crash, but the genetics of the sheep and cattle were good and the pasture on the property was in good condition. They felt that the “human carrying capacity” of the farm was far greater than what it was currently supporting, and like all farmers they were asset rich and cash poor. As a family they began looking at the pros and cons of different strategies for improving income, these included:

- Buy more land, but this would probably mean continuing on the same track in terms of getting minimal return on their overall investment.
- Negatively gear investment in shares, a high risk option.
- Start an off-farm business, but this would mean decreased labour on the farm and increased labour and management for the off-farm business, and as a family they were happy living and working on the farm.
- Form an alliance with an outside interest to share the financial and management burdens of running the farm, but this would not necessarily increase income.
- The final strategy that they agreed upon was to investigate options to intensify the use of the existing farm resources.

Identifying the opportunity & assessing feasibility

Having decided on this strategy they employed a consultant to assist them in working out the viability of a variety of opportunities. The reason for employing a consultant was to have someone who could act as a sounding board for their ideas, who could give them advice, think laterally about various options and take them through the whole process of SWOT analysis. They considered a range of options including:

- Alpacas
- Olives
- Herbs
- Globe Artichokes
- Cold climate viticulture
- Increase the existing worm farm
- Backgrounding cattle
- Farm forestry
- Growing out pigs
The problems associated with all of the options except growing out pigs was that they had a reasonable amount of risk associated with them and many were very climate dependant for viability. Growing out pigs had a number of advantages. It only required a small area of the farm and integrated well with existing farm enterprises. Management requirements were minimal and the by-product of pig manure and sawdust from the growing out sheds could be used to fertilise the pastures, enhancing production on the rest of the property, or could be stock-piled and sold to other farmers for the same purpose.

The farm was well sited to run the business. There was a ready supply of sawdust from the Walcha sawmill, a good supply of water from an 8000gall per hour electric bore and backup water from dams on the property. There was gravel on the property to construct roads, and a well drained site sufficiently distant from neighbours not to bother them with odours. The property is within a 100km radius of Tamworth where the pigs are bred and slaughtered and falls within an intensive industry zoning. There were no EPA requirements, bank interest rates were good when they wanted to set up and the Banks were supportive of the idea and the local council was also happy to approve the operation.

Another major advantage was that the enterprise would generate an immediate regular and reasonably guaranteed income. The Streets get paid for supplying the infrastructure, labour and water for growing out the pigs. The suppliers provide the pigs, and cover the costs of feed, vet bills and freight.

The enterprise was attractive for a number of other reasons. The infrastructure could easily be sold to other businesses if things didn’t work out. If the enterprise was successful, it would increase the cash flow of the farm without taking away from other aspects of running the farm. The increased cash flow would increase Jim and Carol’s capacity to get involved in off farm investments while at the same time improving the overall value of the farm business.
Implementation & Issues

- Getting started - Description of business, infrastructure and financing.
  After 3 years of looking at the viability of the enterprise they hired a consultant to verify their thoughts and to set up a formal business plan. They finally went ahead and borrowed $180,000 from a bank to build the infrastructure, they also received a $20,000 grant from the Rural Assistance Scheme in the form of a productivity assistance grant to help them set up.

- Running the business
  The net result of the business is that they are earning a gross income of around $100,000 a year from the pigs and are able to repay $35,000 a year on their borrowing so should pay off the loan within the next 3 years. Their costs include sawdust and a bobcat to clean out the sheds, plus labour of about 30hrs a month (or 1hr a day). They use 22,000 litres of water a day.

  Jim and Caroline recently purchased a manure spreader, which they have leased to a local contractor in return for free spreading of the manure on their property.

  They have not signed a contract with the pig supplier because they believe if you get into a situation where you have to break a contract you are in big trouble. They did spend a great deal of time speaking to the supplier and others that had worked with him to see if he was “OK”. Things have worked out very well between them.

  The increased income and minimal amount of time involved in running the pigs has meant that they can focus more on the grazing enterprise and building up the productivity on the rest of the property.

  If they were to do it all again they would build the sheds slightly differently which would make them cheaper and more efficient. The down side of the current business is that there always has to be someone around so it is difficult to get away from the farm, but they are looking at training up someone local to be able to take over if they want a break. They say the key to success is having a clear goal and staying focussed on achieving it. Jim and Caroline are involved in a farm improvement group that meets every few months to discuss ideas and experiences. They also do tracking and benchmarking of business performance of members of the group. This has also helped provide a good sounding board for their ideas, and engenders a habit of regularly evaluating the farm business and personal goals. They attend conferences and seminars and are always interested in improving their knowledge and management skills.

Cost Benefit Analysis and Financial Impacts of Diversification.

This section uses cost benefit analysis and a comparison of financial indicators for the farm before and after diversification to investigate the impact that diversification has had on farm finances.

In under taking the cost benefit analysis we have estimated the cash flow for the business starting from 1995 and running through to 2002. The initial investment in the business was made in 1999. The costs have been estimated as any capital investment costs that have been made since starting the business. The benefits are estimated as the net income after all running costs have been deducted. Depreciation of capital is not included as an annual cost of running the business, rather for the purposes of the cost benefit analysis capital costs are fully accounted for in the year in which they occur. The cost benefit analysis is conducted in the context of costs and benefits to Jim and Caroline rather than to the business entity. This means that any wages paid to them from the business are included on the benefit side of the ledger. Because of the way in which wages and depreciation are treated the cash flow estimated for the benefit cost analysis differs from that which would be determined for accounting purposes.
The average consumer price index over the period 1995 to 2000 is used to adjust the costs and benefits in the year in which they occur to present day dollar values. The figure on the following page illustrates the cash flow used in estimating the costs and benefits for diversification.

**Figure 21. Annual costs and benefits resulting from diversification - Blaxland.**

Prior to 1999 when the initial investment was made in the pig feedlot, the difference between cash flow with and without diversification is obviously zero. The graph shows the initial cost of investment in 1999 and also shows the immediate benefit that resulted from contractual payments by the pig suppliers to Jim and Caroline. The immediate positive cash flow highlights the low-risk nature of this diversification enterprise.

The net present value of costs for the enterprise are $184,440 while the net present value of benefits by 2000 were already estimated at $196,508. This gives a benefit cost ratio of 1.1 and indicates that the investment has covered its costs within 2 years of implementation.

Figure 22 below illustrates the relative impact on farm cash flow as a result of diversification.

**Figure 22. Change in cash flow resulting from diversification - Blaxland.**

The graph above shows the significant improvement in farm cash flow that has resulted from diversification. The move to diversify has taken the farm from a breakeven cash flow where farm receipts were not quite covering costs, to a situation where the farm enjoys an annual cash surplus after all costs are deducted.
A comparison of financial indicators for the farm after diversification with an average non-diversified farm in the region, is given in the Table below.

Table 10. Impact of diversification on financial indicators - Blaxland.

<table>
<thead>
<tr>
<th></th>
<th>Average farm (without diversification)</th>
<th>Blaxland after diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm capital ($/ha)</td>
<td>$446</td>
<td>$1,126</td>
</tr>
<tr>
<td>Farm debt ($/ha)</td>
<td>$32</td>
<td>$73</td>
</tr>
<tr>
<td>%Equity</td>
<td>93%</td>
<td>94%</td>
</tr>
<tr>
<td>Farm outgo* ($/ha)</td>
<td>$35</td>
<td>$296</td>
</tr>
<tr>
<td>Farm income ($/ha)</td>
<td>$46</td>
<td>$358</td>
</tr>
<tr>
<td>Farm profit ($/ha)</td>
<td>$11</td>
<td>$62</td>
</tr>
</tbody>
</table>

*Includes financing costs, depreciation and wages.

The analysis of financial indicators shows that the profit per hectare on Jim and Caroline’s property is much improved over the average non-diversified farm in their region. The amount of capital invested in the property and the level of debt are also proportionally higher than for the average non-diversified farm, however the percentage equity is slightly higher. The higher profits enjoyed by the diversified farm should help Jim and Caroline achieve their goal of reducing debt and increasing cash flow from the business. The increased cash flow will allow them a much greater flexibility in the long run to tailor their investment strategies to meet the family lifestyle goals.

The combination of the cost benefit analysis and the comparison of financial indicators shows that Jim and Caroline have succeeded in improving the farm’s long term viability through diversification. They have taken a low risk approach to improving farm income through more intensive use of the farm resources in a sustainable manner. This has provided them with the added bonus of surplus money to invest off-farm, securing greater financial freedom in the longer term and the ability to pursue lifestyle goals.

Summary

Jim and Caroline decided in 1998 that they needed to re-evaluate the direction of their farming business. They wanted to improve the long-term sustainability of the farm by improving the efficiency of resource use on the property. By improving the long-term sustainability and viability of the farm they were also hoping to satisfy personal and family goals outside the immediate sphere of successful management of the farm.

They investigated numerous options for diversification based on a number of personal and financial criteria. Finally they decided that backgrounding pigs was the most suitable option for them given their circumstances. It suited the resources that were available to them, the climate and geographical situation of the farm, and most importantly was a relatively low risk option requiring little additional management time.

They undertook further detailed feasibility analysis before undertaking the diversification into the pig enterprise. Their business relationship with the pig supplier is based on trust and they do not believe in signing contracts. The enterprise fits in nicely with other enterprises on the farm and because they receive a regular monthly income from the pigs the financial risk associated with setting up the business was minimal.

The improved income from diversification has given them the freedom to pursue off-farm interests and build a portfolio of investments to secure a solid financial future for the whole family. They are
involved in a farm improvement group which has been invaluable in helping them plan their movement into the new enterprise.
CASE STUDY 8

Tom Soles

Midlands Fish

Guyra

New South Wales
Introduction

The Sole's farm near Guyra in New South Wales was traditionally a sheep and cattle grazing property. Tom bought out a share of the family farm near Guyra in New South Wales in July 1992 with the aim of growing super fine wool and grazing cattle for beef.

Stages of Diversification

Impetus for change

Tom's 489-hectare share of the property was producing wool at 18 micron and in 1992 earned $128,000. In 1993 from the same number of sheep he earned $62,000. The dramatic fall in farm income, and the realisation that the wool industry was undergoing a significant downturn, was the incentive to start investigating ways to diversify his farm business.

Identifying the opportunity & assessing feasibility

He got the idea to try aquaculture after seeing another person growing Silver Perch and Murray Cod. The climate at Guyra is too cold for Silver Perch or Murray Cod, and his options for fish were limited. After investigating a number of fish species, Tom decided to try Rainbow Trout. He thought Rainbow Trout could be sold at the premium end of the market and that was the market he was aiming at.

Implementation & Issues

- Getting started - Description of business, infrastructure and financing.
  In Easter of 1993 he put in a few outdoor ponds and stocked them with about 6400 Rainbow Trout. He also built a shed with indoor tanks used to “clean out” the fish before processing for market.

Tom expanded the business only gradually, learning as he went along, to the stage where he had a total of 19 outdoor ponds. In the early years he made a few mistakes and lost a few fish, but with every mistake he learned a lesson which helped him to improve the management of the fish. His main problem in the early days was being able to maintain a regular volume of supply. Tom said he had no trouble selling the fish, the problem was in getting enough of them. This encouraged him to expand and he built a hatchery in the “cleaning out” shed and a new shed with more indoor tanks so that he could have greater control over the water quality and feeding and so he could intensify production.

By growing fish indoors in tanks he can maintain the water temperature at an ideal 17 to 18°C. The water is recirculated through nitrous oxide bacteria scrubbers to prevent diseases and Ozone is pumped through the water to purify it. The fish are fed a fish meal product and he aims for a 1:1 feed conversion ratio. Waste water is pumped out to a series of settling ponds that act as biological filters.

Tom had little problems with council regulations because the local council are quite progressive and encourage development of this nature. He did have some problems with neighbours who were concerned about the water usage of the project. But through discussion and negotiation he has been able to overcome the neighbours initial concerns.
The business has cost $700,000 to set up so is capital intensive, but also it is high return with Tom chasing up to $35/kg for his fish. He had to sell half of the farm to help finance the set up of the business and borrowed ¾ of the money from the bank to finance the establishment of the business. Tom developed a detailed business plan to submit to the bank, which helped secure funding.

- **Running the business**
  He grows fingerlings out in the hatchery, and then as the fish grow they are moved in stages to new tanks according to size. Tom aims to grow the fish from fingerling to a size ready for the plate (330grams) over the course of 9 months. They are currently producing nearly 50,000 fish a year at an average of 330grams. He is aiming eventually to get this up to 100,000 fish a year.

  Tom employs 1 person full time, 1 person part-time, and works himself 10-12hrs a day. He acknowledges that the business is very labour intensive for him at present, but his longer term plan is to make a good return on his investment over the next 10 or so years and then sell up and retire.

- **Sales & Marketing**
  Tom sells most of his fish direct to restaurants with the remainder sold through wholesalers. He says the price received from wholesalers is always pushed down by the big supermarket buyers, so he prefers to sell directly to the restaurant chefs. 90% of his product is smoked and shrink-wrapped in plastic ready for sale. The remainder is chilled down to 4 degrees and sent in a refrigerated van to restaurants at Brisbane and the Gold Coast. Tom runs the northern most Trout farm in Australia, so has an advantage in terms of transport costs over his more southern competitors through being closer to the premium restaurant markets in Brisbane and the Gold Coast.

  He believes the key to marketing is concentrating on providing a quality product and being willing to “do the hard yards” in contacting and meeting people to show them your product. Tom rings or meets with the head chefs in the restaurants that he targets. He has discovered that the chefs have the final say in what food the restaurants buy in. He will give them a sample if they are interested and then follow up with a phone call and preferably another meeting to get feedback.
Cost Benefit Analysis and Financial Impacts of Diversification.

This section uses cost benefit analysis and a comparison of financial indicators for the farm before and after diversification to investigate the impact that diversification has had on farm finances.

In undertaking the cost benefit analysis we have estimated the cash flow for the business starting from 1993 and running through to 2002. The initial investment in the business of $40,000 was made in 1993 when Tom first built the outdoor ponds for Trout. A second major investment came in 1997 when he built the indoor tanks at a total cost of $700,000.

The costs have been estimated as any capital investment costs that have been made since starting the business. The benefits are estimated as the net income after all running costs have been deducted. Depreciation of capital is not included as an annual cost of running the business, rather for the purposes of the cost benefit analysis capital costs are fully accounted for in the year in which they occur. The cost benefit analysis is conducted in the context of costs and benefits to Tom rather than to the business entity. This means that any wages paid to Tom from the business are included on the benefit side of the ledger. Because of the way in which wages and depreciation are treated the cash flow estimated for the benefit cost analysis differs from that which would be determined for accounting purposes.

The average consumer price index over the period 1993 to 2000 is used to adjust the costs and benefits in the year in which they occur to present day dollar values. The figure below illustrates the cash flow used in estimating the costs and benefits for diversification.

Figure 24. Annual costs and benefits resulting from diversification - Midlands Fish.

The net present value of costs for the enterprise are $793,806 while the net present value of benefits by 2002 were estimated at $913,437. This gives a benefit cost ratio of 1.2 indicating that Tom’s investment in diversification should break even by 2002 if his assumptions regarding future fish production and sales are accurate.

Figure 25 on the following page illustrates the relative impact on farm cash flow as a result of diversification.

Figure 25. Change in cash flow resulting from diversification - Midlands Fish.
The graph above shows the significant improvement in farm cash flow that has resulted from diversification. The move to diversify has had an immediate positive impact on farm cash flow, as Tom financed his first move into aquaculture from his own cash reserves. Further expansion sees a slight drop in cash flow followed by a significant increase, which is predicted to rise even more substantially as the business reaches its full potential.

A comparison of financial indicators for the farm after diversification with an average non-diversified farm in the region is given in the Table below.

**Table 11. Impact of diversification on financial indicators - Midlands Fish.**

<table>
<thead>
<tr>
<th></th>
<th>Average farm (without diversification)</th>
<th>Midlands Fish after diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm capital ($/ha)</td>
<td>$188</td>
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<tr>
<td>Farm debt ($/ha)</td>
<td>$28</td>
<td>$1,635</td>
</tr>
<tr>
<td>%Equity</td>
<td>85%</td>
<td>50%</td>
</tr>
<tr>
<td>Farm outgo* ($/ha)</td>
<td>$18</td>
<td>$409</td>
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<tr>
<td>Farm income ($/ha)</td>
<td>$23</td>
<td>$607</td>
</tr>
<tr>
<td>Farm profit ($/ha)</td>
<td>$4</td>
<td>$198</td>
</tr>
</tbody>
</table>

*Includes financing costs, depreciation and wages.

The analysis of financial indicators shows that the profit per hectare on Tom’s property is much improved over the average non-diversified farm in his region. The level of investment in farm capital and the attendant level of debt is also a lot higher than for a similar non-diversified farm. However the substantially higher level of profit should see the level of debt decrease over time and the level of equity in the property increase accordingly.

The combination of the cost benefit analysis and the comparison of financial indicators shows that Tom’s move into diversification has significantly improved the farm’s financial situation over what would have happened if he had chosen not to diversify.
Summary

Tom chose to diversify as a direct consequence of the declining returns and increasing costs faced in the sheep industry in the early 1990’s. He started growing Rainbow Trout in outside ponds and funded the set-up of this principally from his own finances. This initial move into diversification helped him to understand the management of the enterprise and the potential balance of supply and demand for his product.

After his initial success he decided to expand his aquaculture operation by building indoor tanks that allowed much greater control of feeding and quality. He sells a premium product to restaurants on the Gold Coast and spends a lot of time ensuring that his clients are satisfied with the quality of his product. Tom enjoys some advantages over southern competitors because he is the most northerly Rainbow Trout producer, meaning that he is closer to his principal markets.

The financial analysis shows that while the capital costs of establishing the aquaculture enterprise have been high, the high value product should allow him to breakeven on his investment by 2002. The analysis suggests that if Tom can realise the production potential of his set-up, while maintaining the markets and prices that he currently enjoys, his farm will be in a far better financial position than it was when he was relying purely on sheep and wool for an income.
CASE STUDY 9

Terrey and Barbara Johnson

Bantry Grove

Blayney

New South Wales
Introduction

Terrey and Barbara Johnson diversified from sheep and cattle into irrigated grapes for wine in 1998. They currently have just over 12 hectares of grapes which are run in conjunction with cell grazed cattle.

Terrey’s parents bought the original 2250ha property near Blayney in the south Orange region of NSW in 1936. The farm was run with fairly traditional farm enterprises, including sheep for prime lambs and cattle. Soon after buying the property, Terrey’s father started a program of pasture improvement up until his death in 1949. After this Terrey’s mother continued the program of pasture improvement and ran the farm under a set stocking regime with about 90% sheep and 10% cattle. This continued through to about 1966 when Terrey completed his degree in rural science and started to take a greater role in the management of the farm. The area of the farm was gradually reduced after the war as blocks were sold off for soldier settlement. The farm went from 2250ha down to 600ha in the mid 1960’s.

In the early 70’s the family partnership was split allowing Terrey and his brother to run separate properties. Just prior to splitting the property, the brothers bought additional land and split the larger farm between them. Terrey ended up with just over 500ha spread between 2 blocks which are about a kilometre apart. At the time Terrey ran stock with a rough split of 50% sheep and 50% cattle, the proportion of sheep to cattle would vary slightly depending on the seasons. Terrey used to consider that a balance between sheep and cattle was a good form of diversification, but now realises that both enterprises rely on and compete for the same resources.

Stages of Diversification

Impetus for change

The risk involved in an over reliance on stock was highlighted in 1982 when they experienced a severe drought. The drought prompted Terrey to buy a block of land that had a 60ML dam and an irrigation license. He also began looking into potential irrigated crops as a means to diversify the farm income and reduce the reliance on stock.

Identifying the opportunity & assessing feasibility

In the mid to late 80’s, Terrey became aware that there was a growing push towards colder climate viticulture and he began investigating the feasibility of viticulture on his property. His investigations included developing a number of detailed budgets as well as seeking advice from consultants and friends. Terrey and Barbara belong to a farm improvement group that acts as a critical sounding board for new enterprise ideas. The group is set up like a company board and they presented their new idea to the board for approval. Terrey also attended a number of seminars before assessing a number of potential sites on the property. He undertook a trial planting of 20 vines in the spring of 1988.

Implementation & Issues

- Getting started - Description of business, infrastructure and financing. Establishing a vineyard requires a large capital investment. Financing the investment is made more difficult by the fact that vineyards do not start to cover production costs for between 5 and 6 years and it takes even longer before the initial capital investment is repaid. Terrey and Barbara initially financed establishment through their own cash reserves and then went to a bank for a loan. Their involvement in the farm improvement group was a great assistance at this stage. Keeping close track of financial performance combined with the budgeting and business planning skills that are fostered
through involvement in the group makes it far easier when approaching financial institutions for a loan. The group also provides a useful forum for discussing issues and ideas with other members.

They planted the first major area of vines in the 1989, made up of 1.1ha of Chardonnay and 1.1ha of Cabernet. In 1990 they planted 0.45ha of Merlot and in 1991 they planted a further 1ha of Merlot. The total planting of 3.6ha gave them a reasonable size pilot vineyard that allowed them to determine the yields, quality and management requirements.

They continued expansion in 1996 planting another 5.4ha and then planted 2.2ha in 1998. This gave them the current area of 12.2ha of vineyard and completed the first phase of the vineyard development. Terrey wants to expand further, as they don’t yet have enough area to justify one full time employee.

Taking account of possible risks is extremely important when setting up a new business. One of the biggest risks in his region for grapes is frost. Since establishing the vineyard they have suffered several major frost events. His budgets accounted for this by factoring in yield reductions of up to 30% as a result of frost. The vineyard is laid out to account for frost movement with early maturing varieties planted at the top of slopes and later maturing varieties planted lower. The vines are planted on slopes with a northerly aspect and grasses and weeds kept to a minimum to improve air drainage down slopes between rows. Terrey also has frost and hail insurance. However he stresses that a couple of bad seasons can sink a small vineyard operator if they don’t have the cash reserves to cover the loss of expected income. For this reason realistic budgeting and sound financial arrangements are essential.

**Running the business**

After the initial planting, Terrey soon realised that prime lambs and grapes don’t mix well due to clashes in peak management periods. To overcome this, he dumped the sheep and concentrated on cattle. The cattle are managed to fit into the requirements of the vineyard. They use cell grazing to manage the cattle and this fits in fairly well with the management requirements of the vineyard although requires slightly more intensive management for the cattle. The only real clash in work loads comes when they are weaning calves which occurs around the same time as grape harvest.

Terrey says one of the problems faced by small vineyards is the lack of access to expertise and advice. Although with the increasing availability of viticultural courses and graduates from those courses, that problem is gradually easing. When he first decided to move into viticulture, Terrey had no illusions about becoming a winemaker and was happy to focus on grape production. He realised that he didn’t have the skills to become a winemaker, or the time to learn them, so he found a contract winemaker who also advised him on the management of the grapes.

The grapes are either handpicked or machine picked depending on the age of the vines. The older vines are machine picked, while the younger vines are handpicked to avoid damaging the structure of the vines. To increase his knowledge of grape growing, Terrey has completed a viticulture course. He has also relied on advice from consultants and friends, but admits that there is a huge learning curve. His background in rural science has helped him to be more thorough in planning and management of the vineyard, and assists him in knowing how to source and collate information as he requires it.

Accessing and training good labour is a bit of a problem in his area. People are generally attracted to larger rural and regional centres, so it is always an issue sourcing labour to carry out jobs like vine pruning, weeding, spraying and harvesting. There is a certain amount of skill required in pruning and it takes time training people to do it properly and efficiently.

Another major problem in the vineyard is bird damage. Controlling birds is an ongoing job with noise deterrents rapidly becoming ineffective as the birds become used to them. Shooting is a slightly more effective strategy for control but is labour intensive. Terrey has started covering some of the vines with nets but this is also very capital intensive.
The land in the area is over priced because of the proximity to Sydney which is only about 3.5 hours away. This means that a lot of “lifestylers” have begun moving into the area. As the capital value of the land increases there is an increasing opportunity cost associated with enterprises that generate lower gross margins because they are producing a lower than average return on capital investment. The land can support a grazing intensity of about 12.5DSE to the hectare which gives a gross margin for cattle of around $250/ha. This compares to a gross margin for grapes of around $5000/ha. However it is also important from a sustainability point of view, to have enterprises that are complementary and the cattle fill this role. Terrey believes that in drought years the grapes will still do well because of the irrigation and will easily offset any decline in income from cattle as a result of drought. In high rainfall years cattle should do well and the irrigation requirements for grapes should be lowered although yields may suffer depending on timing of the rainfall.

Figure 26. Older vines on the left are reaching full production while the younger vines on the right will not reach full production for another 2-3 years - Bantry Grove.

While the vineyard is likely to put the farm in a much stronger financial position, it has come at a price. Terrey says that managing the vineyard is time intensive, especially in the early years where it is important to put a lot of effort into establishing the vines well and managing any problems with pests, diseases and frosts. Terrey is involved in a number of rural committees and farmer organisations, and this takes a lot of time away from the farm so he has found it difficult to balance these time commitments.

Prior to establishing the vineyard he and Barbara used to take holidays each year in January, however they have not taken a proper holiday now since they first established the vineyard. They are looking in the longer term to train someone to be able to take on the day to day management of the vineyard so that they can take a more strategic management role and also to allow them more flexibility to get away from the farm.

No amount of planning can help you to foresee all issues, however nasty surprises can be reduced by seeking as much advice as possible from people with experience in the business you are entering. When setting up a business in a new area, access to good advice can be limited and this needs to be addressed.
Terrey and Barbara are still trying to seek out their competitive advantage in grapes. This may require planting new varieties that are more suited to the colder region where they are situated.

They believe they could have set up the vineyard cheaper than what they did if they had planted bigger areas to begin with, but there was a definite trade off between increasing risk and reducing cost of establishment.

Terrey comments that "if you are going to go into a new enterprise you have to be fully committed". There is no point being half hearted and you need to have a clear goal about what you want to achieve. You may have to be willing to sacrifice other lifestyle goals while you are setting up the business in order to ensure its success.

Terrey and Barbara are happy to be involved in the wine industry, as it is a mature industry with well established relationships. They believe that the long term objective of increasing the farm cash flow and reducing the cash flow variability will be achieved, even though they may not make as much money as they originally thought was possible.

The Johnson's believe that the whole experience has significantly improved their business planning and budgeting skills and has given them a personal confidence in their own abilities.

The management of the vines in terms of pruning and training on trellises is an area that they are continually trying to improve by trying different techniques.

**Sales & Marketing**

Terrey developed a good working relationship with the winemaker and this has taught him the value of good alliances between people. With the assistance and encouragement of the winemaker Terrey had his own wine label made up for the farm. He was also prompted by his winemaker to arrange wine tastings for his label. Terrey found this very rewarding and appreciates the close link between how the grapes are grown and their quality and the final marketing and sales of the end product. To illustrate the close link between grower and end product in the wine industry as opposed to other agricultural industries he cites the example of having been a beef producer for many years yet never having to go into a butcher shop to learn about selling the end product. This is contrasted to his experience in viticulture where after producing his first wine vintage he was organising wine tastings and getting first hand feedback from his customers.

Terrey has recently contracted to sell his grapes to a larger winemaking company, and hopes that access to the resources of the larger organisation will bring with it access to a greater range of expertise to help him manage his grapes.

**Cost Benefit Analysis and Financial Impacts of Diversification**

This section uses cost benefit analysis and a comparison of financial indicators for the farm before and after diversification to investigate the impact that diversification has had on farm finances.

In under taking the cost benefit analysis we have estimated the cash flow for the business starting from 1989 and running through to 2003. The initial investment in diversification into grapes was made in 1989. The costs have been estimated as any capital investment costs that have been made since starting the business. The benefits are estimated as the net income after all running costs have been deducted. Depreciation of capital is not included as an annual cost of running the business, rather for the purposes of the cost benefit analysis capital costs are fully accounted for in the year in which they occur. The cost benefit analysis is conducted in the context of costs and benefits to Terrey and Barbara rather than to the business entity. This means that any wages paid to them from the business are included on the benefit side of the ledger. Because of the way in which wages and
depreciation are treated the cash flow estimated for the benefit cost analysis differs from that which would be determined for accounting purposes.

The average consumer price index over the period 1989 to 2000 is used to adjust the costs and benefits in the year in which they occur to present day dollar values. The figure below illustrates the cash flow used in estimating the costs and benefits for diversification.

**Figure 27. Annual costs and benefits resulting from diversification - Bantry Grove.**

The above graph illustrates the significant up front costs that are associated with establishing a vineyard. It also illustrates the relatively long time involved before the cash flow from the grapes begins to cover management and establishment costs. Terrey estimates it has taken 12 years to cover the costs of establishment. The present value of costs for establishing the vineyard are estimated at $374,182 while the present value of benefits by 2003 is estimated at $338,038 giving a benefit cost ratio of 0.9. This indicates that the diversification will not have quite broken even by 2003, however trends in yields and associated cash flow suggest that the investment in diversification will breakeven by 2004.
Figure 28 below illustrates the relative impact on farm cash flow as a result of diversification.

**Figure 28. Change in cash flow resulting from diversification - Bantry Grove.**

The graph above shows that a net reduction in farm cash flow is experienced for over 10 years as the grapes are established and before they begin to yield sufficiently to cover the costs of establishment and ongoing management. However once costs of establishment are covered and the grapes begin to reach their maximum potential yield, the cash flow starts to significantly increase above what would have been enjoyed if diversification had not been undertaken.

A comparison of financial indicators for the farm after diversification with an average non-diversified farm in the region is given in the Table below.

**Table 12. Impact of diversification on financial indicators - Bantry Grove.**

<table>
<thead>
<tr>
<th></th>
<th>Average farm (without diversification)</th>
<th>Bantry Grove after diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm capital ($/ha)</td>
<td>$446</td>
<td>$2,600</td>
</tr>
<tr>
<td>Farm debt ($/ha)</td>
<td>$32</td>
<td>$731</td>
</tr>
<tr>
<td>%Equity</td>
<td>93%</td>
<td>72%</td>
</tr>
<tr>
<td>Farm outgo* ($/ha)</td>
<td>$35</td>
<td>$280</td>
</tr>
<tr>
<td>Farm income ($/ha)</td>
<td>$46</td>
<td>$671</td>
</tr>
<tr>
<td>Farm profit ($/ha)</td>
<td>$11</td>
<td>$391</td>
</tr>
</tbody>
</table>

*Includes financing costs, depreciation and wages.

The analysis of financial indicators shows that the profit per hectare on Terrey and Barbara’s property is much improved over the average non-diversified farm in their region. The comparison also indicates a much higher level of capital investment in the farm. This is directly related to the relatively high cost of establishing vines and infrastructure to support them. The level of debt has increased in line with the increased investment in farm capital and the reduced level of equity in the farm reflects this.

The relatively high profit per hectare will help to reduce debts in the longer term. The comparison of financial indicators, especially the improved profit level over a similar non-diversified farm, indicates that Terrey and Barbara have achieved their goal of a more financially sustainable business.
Summary

The Johnson’s initial interest in diversification arose after a particularly harsh drought in the mid 1980’s. Terrey and Barbara realised that sheep and cattle basically compete for the same resources and this was not really a valid form of diversification. The drought prompted Terrey to start considering irrigated crops as an option, and after a number of years of investigating potential crops, he decided wine grapes were a feasible option.

Terrey planted his first grapes in 1998 and has continued expanding the vineyard since that time to the current area of just over 12 hectares. He realised soon after diversifying into grapes that sheep and grapes don’t mix well. This was mainly as a result of clashes in critical management phases of the two enterprises. He got out of sheep and has focussed on developing his cattle enterprise as a complementary business to the grapes.

The move into grapes has been capital intensive and grapes take along time to breakeven. Terrey estimates that after 12 years he will just start to breakeven on the capital costs of his investment.

Terrey has a Degree in Rural Science, and is involved in a farm improvement group. He has developed good skills in planning and budgeting which have served him well in implementing the move into grapes. The farm improvement group has provided a good sounding board for analysing his business ideas and budgets and for benchmarking his progress against others in the group. One of the key differences he recognises in the wine industry is the close link between production and markets. He has developed a close working relationship with the winemaker that buys his grapes, and receives constant advice on vine management from the wine producer.

The analyses indicate that the Johnson’s diversification into wine grapes will substantially improve the financial viability of the farm in the long term. The vineyard should begin to breakeven in the next 2 years after which time the annual farm income should be much greater than it was prior to diversification.
CASE STUDY 10

Michael, Helen and Gemma Cripps

Alcheringa Marron
&
Alcheringa Damaras

Three Springs

Western Australia
Introduction

The Cripps run a 2,200ha property near Eneabba about 3hrs north of Perth in Western Australia. In 1996 they diversified from sheep and cropping into aquaculture with Marron farming, and then in 1998 they diversified further into Damaras fat tail sheep.

Michael along with his father and brothers bought the original 1900ha virgin block in 1978 and cleared 1000ha. In 1982 they bought a further 1700ha of which 700ha was cleared. They cleared a further 300ha on the original block before buying another 1500ha block in 1989.

Stages of Diversification - Marron

Impetus for Change

Michael decided in 1989 that he wanted to split the family partnership because the brothers had different ideas about how they wanted to continue in farming. He sold off the 1500ha block to buy out his father and brothers. The crash in the wool market and poor returns from cropping in the late 1980’s and early 1990’s saw the Cripps looking at diversifying into other enterprises.

Identifying the opportunity & assessing feasibility

In 1996 there was a marron farm in Geraldton for sale and this gave them the idea of getting into aquaculture. They attended a seminar on diversification in Eneabba and this confirmed their thoughts about the need to diversify the farm enterprises. They found clay on the property and realised that they had access to good water. The presence of the clay would make it relatively cheap to build the dams that would be required. Although there was going to be a reasonable cost associated with accessing the water with a bore and associated pumps to fill the dams. They continued to source information from the Fisheries Department and from seminars, conferences and field days.

Implementation & Issues

- Getting started - Description of business, infrastructure and financing
  Government regulations and bureaucracy have proved a bit of a hurdle in the past. The Environmental Protection Authority and the Water and Rivers Commission placed restrictions on pond siting and water disposal, and the Fisheries Department had a number of regulations and red tape that had to be adhered to for supplying Marron to market. The Fisheries Department has removed some of the red tape but there is now the prospect of the Water Authority introducing bore licensing and restrictions on water use.

  They developed some detailed budgets to submit to the bank but these later proved inaccurate because the marron took nearly 2 years to start turning over an income as opposed to the 12 months they had budgeted for. One of the hold ups was that the dams took along time to settle after being built including the time taken for a favourable ecosystem to become established for the Marron. Because of this, the Marron were slower than expected to breed and mature. Financing the marron wasn’t really a big issue because they financed a lot of it out of cash reserves left over from the sale of one of the blocks of land back in 1989.

  They originally started with 6 x 1000m² ponds stocked with 3000 juveniles each. They now have 9 x 1000m² ponds covering about 1ha of land. Michael believes it would require about 18 ponds to be able to make a living out of just the Marron. The total cost of setting up was $110,000 for the ponds, stock and pumps and sorting sheds.
• **Running the business**

They harvest the Marron by draining the ponds into a net. This captures about 80% of the Marron and the rest are picked up from the pond floor by hand. The Marron are graded into four sizes ranging between 120 to 150gms and the small ones are thrown back. A full draining of a pond takes about ¼ of a day and is done once every few months. The ponds are worked in a regular rotation to ensure regularity of supply. General management of the enterprise takes up about an hour a day. There has not been any great increase in workload, and management is sufficiently flexible that major work can be scheduled to coincide with less busy times for the rest of the farm.

![Figure 29. Damaras sheep on the banks of one of the Marron dams at Alcheringa.](image)

Poaching of Marron from dams can be a bit of a problem, but there are no easy ways to control this. They had a major disaster in 1997 when a neighbour sprayed a nearby Lupin crop and some of the spray drift went into the ponds. The Marron decided they would up and walk away and those that weren’t recaptured just died or were eaten by birds.

• **Sales & Marketing**

The main markets for the Marron are in Geraldton and Perth. The Marron are transported live to the markets in foam containers with ice so that they remain fresh. Quality and reliability of supply of a reasonable volume of product are paramount to being able to find good markets. They have the potential to produce between 1.5 to 2 tonnes of Marron from the current set up, although they are currently only producing 500 to 600kg per year. The Marron sell at between $110 to $140 per kg and with a growth rate of between 60 to 80gms a year it takes nearly 2 yrs to grow from juvenile to a marketable size. Michael has arranged all of his marketing through local contacts, but growers have the option of marketing through the WA Marron Growers Association. Michael is a committee member of the growers association and keeps in touch with what is happening in the industry through this involvement.
Stages of Diversification - Damaras

Impetus for Change

Clearing bans introduced in 1997 and 1998 also impacted on the enterprise options available for the farm. Increasing the area of cropping was no longer an option, and the cost of improved fencing to keep stock off uncleared land was a big impost on the business.

Michael and Helen’s daughter Gemma has always wanted to be a farmer and when she finished year 12 at high school she came back to the farm. The Marron were taking longer than expected to generate a reasonable turnover and Gemma was looking at getting into another enterprise.

Identifying the opportunity & assessing feasibility

She saw an article in the Guardian Newspaper on Damaras sheep and this raised her interest. She believed the mixture of traditional cropping and Merino sheep was not a sustainable enterprise mix for the farm given the long term outlook for wool. Because of a much more stable market for meat, Damaras sheep provided an attractive alternative enterprise. Damaras are a very hardy South African breed of fat tail sheep used entirely for meat which is highly sought after in the Middle East. Their wool is similar to that of a goat and sheds in the paddock. They are also similar to a goat in that they can survive on very rough scrub and are also very good at mothering their lambs which means the survival rate of lambs is very high compared to Merinos. Finally they are a lot less intensive in terms of management because they don’t require crutching, mulesing or shearing.

Implementation & Issues

- Getting started - Description of business, infrastructure and financing
  Gemma decided to go ahead with building up a flock of Damaras on the property by crossing them with the existing Merinos. At the same time she decided to set up a Damaras stud to provide purebred rams and ewes to other producers in WA. She borrowed the money from the bank to get started and also works off-farm to earn money to put into the business.

- Running the business
  In 1998 she bought 4 purebred ewes at a total cost of $3000 and has used embryo transfer techniques to rapidly build the stock up to the current level where she has 100 ewes and 60 rams. Embryo transfer costs about $250 for each live lamb on the ground. A commercial ram can sell for between $500 and $3000, while lambs grow to 35kgs after 5-6months and can be sold for export at $45-$50/kg live weight.

One significant management problem that they face with the sheep is foxes killing new born lambs. In the 3 weeks prior to our visit, they had shot 27 foxes. The Damaras lambs are a lot more robust than the Merino lambs. After 2 days the Damaras lambs tend to be able to look after themselves quite well, and the ewes tend to guard all lambs in the flock and not just their own as happens with Merinos.

The Cripps are aiming to eventually stock between 8000 to 9000 Damaras on their property and get rid of the Merino flock altogether.

- Sales & Marketing
  The ram sales are just starting to breakeven with the start up costs and costs of embryo transfer. Demand is increasing for the rams, especially from farmers in “station” country where the sheep are well suited because of their hardy nature and less arduous management requirements than merinos.
Cost Benefit Analysis and Financial Impacts of Diversification

This section uses cost benefit analysis and a comparison of financial indicators for the farm before and after diversification to investigate the impact that diversification has had on farm finances.

In undertaking the cost benefit analysis we have estimated the cash flow for the business starting from 1996 and running through to 2001. The initial investment in diversification into marron was made in 1996. The costs have been estimated as any capital investment costs that have been made since starting the business. The benefits are estimated as the net income after all running costs have been deducted. Depreciation of capital is not included as an annual cost of running the business, rather for the purposes of the cost benefit analysis capital costs are fully accounted for in the year in which they occur. The cost benefit analysis is conducted in the context of costs and benefits to the Cripps family rather than to the business entity. This means that any wages paid to them from the business are included on the benefit side of the ledger. Because of the way in which wages and depreciation are treated the cash flow estimated for the benefit cost analysis differs from that which would be determined for accounting purposes.

The average consumer price index over the period 1996 to 2000 is used to adjust the costs and benefits in the year in which they occur to present day dollar values. The figure below illustrates the cash flow used in estimating the costs and benefits for diversification.

Figure 30. Annual costs and benefits resulting from diversification - Alcheringa.

The above graph illustrates the up front costs that were involved in establishing the Marron enterprise in 1996 followed by a series of investments undertaken by Gemma in setting up the Damaras sheep enterprise. The enterprises begin to generate a positive cash flow in 1998 and the cash flow has continued to improve as both enterprises start to realise their full potential.

The present value of costs for establishing the Marron and the Damaras are estimated at $153,050 while the present value of benefits by 2001 is estimated at $226,456 giving a benefit cost ratio of 1.5. This indicates that the move to diversify the farm has started to pay off. Both the Marron and the Damaras enterprises have yet to reach their full potential, which means that the cash flow of the farm is likely to continue to improve. Figure 31 on the following page illustrates the relative impact on farm cash flow as a result of diversification.
The graph above shows that a net reduction in farm cash flow is experienced for several years as the marron are established and before they begin to yield sufficiently to cover the costs of establishment and ongoing management. Gemma’s Damaras enterprise began in 1998, but the combined cash flow of the 2 enterprises masks the relatively small investment that she required to establish the business. Once her business was established the cash flow combines to boost that already being generated by the Marron enterprise.

A comparison of financial indicators for the farm before and after diversification is given in the Table below.

**Table 13. Impact of diversification on financial indicators - Alcheringa.**

<table>
<thead>
<tr>
<th></th>
<th>Average farm (without diversification)</th>
<th>Alcheringa after diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm capital ($/ha)</td>
<td>$91</td>
<td>$227</td>
</tr>
<tr>
<td>Farm debt ($/ha)</td>
<td>$6</td>
<td>$14</td>
</tr>
<tr>
<td>%Equity</td>
<td>93%</td>
<td>94%</td>
</tr>
<tr>
<td>Farm outgo* ($/ha)</td>
<td>$9</td>
<td>$48</td>
</tr>
<tr>
<td>Farm income ($/ha)</td>
<td>$13</td>
<td>$71</td>
</tr>
<tr>
<td>Farm profit ($/ha)</td>
<td>$4</td>
<td>$23</td>
</tr>
</tbody>
</table>

*Includes financing costs, depreciation and wages.

The comparison of financial indicators shows that the Cripps’ move to diversify has improved the profit per hectare of the farm well above that for a comparable non-diversified farm in the same region. As with other farms in this case study series, their level of investment in capital and the accompanying level of debt is also higher than that for a similar non-diversified farm.

The comparison of financial indicators suggests that the Cripps are in a stronger financial position after diversification than if they had remained undiversified.
Summary

The Cripps’ decision to diversify came after a recognition that the returns for their traditional enterprises were declining rapidly while costs were increasing. After becoming aware of the potential to grow Marron in their area and investigating the feasibility, they built their first Marron ponds in 1996, however it took nearly 2 years before the Marron began to produce a reasonable income.

Michael experienced a few bureaucratic hurdles in setting up the Marron business, but a lot of the red tape that existed when he started has been significantly reduced as the industry becomes more established. Management of the Marron is reasonably straightforward and flexible requiring about 1 day every month. Because of the flexible nature of management it can be scheduled in to match the periods of minimal work on the sheep grazing enterprise.

The Marron currently provide a boost to farm income in the order of $30-40,000 a year, but have the potential to provide up to an extra $70,000 a year in farm income.

Gemma’s development of the Damaras stud was a further move towards diversifying the farm income base. The Damaras were an appealing breed of sheep because they are sold purely for their meat, and they are a hardy animal that requires minimal husbandry.

Gemma set up the stud for $3,000 and has invested regularly in the past few years using Embryo Transfer techniques to rapidly build up the herd. In addition to the Stud she is gradually transforming the existing Merino herd over to Damaras. The stud is now just starting to break even as Ram sales start to increase.

The Damaras Rams are proving popular with stations up north that require a hardier form of sheep. Gemma hopes to eventually turnover $30,000 a year to assist the financial viability of the farm.

The financial analyses combine to show that the enterprise diversification undertaken by the Cripps has already started to pay off. The comparison of financial indicators shows that the farm is already in a much stronger financial position than would have been the case if they had chosen not to diversify the farm business.
4. Summary of Case Studies

4.1 Introduction

This chapter summarises the findings of the 10 case studies of farm diversification from around Australia. The case studies set out to document the experiences and issues faced by each farming family as they moved from a non-diversified to a diversified farm business. Each case study also incorporated a detailed cost benefit analysis of the investment in diversification, this was complemented by a comparison of financial indicators of the diversified business versus the non-diversified business.

4.1.1 What is farm diversification?

Farm diversification signifies the introduction of non-traditional sources of income to the pre-existing farm business. Non-traditional sources of income can be derived through development of alternative agricultural and non-agricultural enterprises.

Diversification through development of alternative agricultural enterprises occurs when additional income is derived from a broader range of outputs, based on existing farm resources. Examples of this sort of diversification include aquaculture, farm forestry and specialised crops or livestock production.

Diversification through development of non-agricultural enterprises occurs when additional income is derived from service or processing opportunities that may arise as a consequence of farm location or resources. Typical examples of this type of diversification include farm tourism or accommodation, timber processing, distillation of essential oils, and manufacture of specialty products from an existing farm resource. This latter form of diversification includes “value-adding”. Value-adding occurs when farmers begin to manage their product further along the production-processing-marketing-supply chain. This is called value-adding because the farmer’s income is increased by capturing the “added value” as the raw product is transformed into a higher value product.

4.1.2 Why diversify your farm business?

Farm diversification is encouraged by both federal and state government agencies as a valid form of rural adjustment in response to the increased risk and uncertainty that has characterised the Australian farming sector since the early 1980’s.

Ultimately, a farmer's decision to diversify may be driven by a number of factors. More often than not, the long term financial viability of the farm is a critical factor, however lifestyle and family goals along with environmental issues affecting the farm are also common factors affecting the decision to diversify the farm business.

Whatever the reason for diversifying, successfully implementing alternative farm enterprises is a risky business. It is not surprising therefore, that the common theme of all farm management textbooks and case studies dealing with farm diversification is an emphasis on the need for thorough planning and a realistic assessment of personal objectives, skills, resources and market prospects. (Hardaker et al 1997; Haines and Davies 1987; Cahill 1993).

It is hoped that the case studies of farm families who have successfully diversified and the summary of results presented in this chapter will help other farming families better manage the risk of diversification.
Key Message.

Farm diversification is encouraged as a strategy to reduce risk - however it is a risky business! Successful farm diversification requires thorough planning and a realistic assessment of personal objectives, skills, resources and market prospects.

4.2 Case Study Descriptions

The 10 case studies summarised in this chapter were drawn from across the southern states of Australia, and were chosen to reflect a range of diversification options. The location of each of the case studies is shown in the map below, and a brief description of the diversification options undertaken by each farm is given in the table that follows.

Figure 32. Location map of case studies.
Table 14. Case study descriptions

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Before diversification</th>
<th>After diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burekup, WA.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Farmhouse Cheeses of Kangaroo Island, SA</td>
<td>Dairy</td>
<td>Dairy, specialty cheese production</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Portee Station Blanchetown, SA</td>
<td>Sheep station</td>
<td>Sheep station and Farm tourism</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Glenloth Game Wycheproof, VIC</td>
<td>Sheep and cropping</td>
<td>Sheep and cropping, Squab and Game processing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Stoney Creek Oil Talbot, VIC</td>
<td>Cattle and cropping</td>
<td>Cropping and Health food oil products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Forester Lodge Waterhouse, TAS</td>
<td>Cattle, Sheep, cropping</td>
<td>High value irrigated crops, cattle and sheep</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Blaxland Walcha, NSW</td>
<td>Cattle, Sheep, cropping</td>
<td>Backgrounding pigs, cattle, sheep, cropping</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Midlands Fish Guyra, NSW</td>
<td>Cattle, Sheep, cropping</td>
<td>Trout aquaculture, sheep</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Bantry Grove Blayney, NSW</td>
<td>Cattle, sheep</td>
<td>Vineyard and cattle</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Alcheringa Marron and Damaras</td>
<td>Sheep, cropping</td>
<td>Marron aquaculture, Damaras stud, sheep and cropping</td>
</tr>
<tr>
<td>Three Springs, WA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.3. Cost benefit and financial analysis of diversification.

This section provides a summary of the cost benefit and financial analysis that were conducted for the case study farms. The key issues examined include the level of investment in diversification and the impact this has on the time it takes to breakeven (cover costs) after diversification. We also discuss the impact of different types of diversification on cash flow and the time to breakeven. Finally we discuss the cost benefit ratios for each of the case studies and draw out the lessons from the cost benefit and financial analysis.
4.3.1 Level of investment in diversification and the time to breakeven.

The cost benefit and financial analysis of the case studies highlighted a wide range in the level of investment in diversification, as well as a wide range in the time to breakeven and returns from investment in diversification.

Table 15. Cost benefit analysis of diversification case studies

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Costs</th>
<th>Benefits</th>
<th>Benefit Cost Ratio</th>
<th>Estimated years to breakeven</th>
<th>Years since diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evedon Park Bush Resort</td>
<td>$1.2 million</td>
<td>$997,557</td>
<td>0.86</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Farmhouse Cheeses of Kangaroo Island</td>
<td>$133,210</td>
<td>$132,904</td>
<td>0.99</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Portee Station</td>
<td>$500,000</td>
<td>$94,355</td>
<td>0.19</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Glenloth Game</td>
<td>$2.3 million</td>
<td>$896,455</td>
<td>0.39</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Stoney Creek Oil</td>
<td>$250,000</td>
<td>$1.7 million</td>
<td>6.92</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Forester Lodge</td>
<td>$327,000</td>
<td>$742,000</td>
<td>2.30</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Blaxland</td>
<td>$184,000</td>
<td>$196,000</td>
<td>1.10</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Midlands Fish</td>
<td>$793,000</td>
<td>$913,400</td>
<td>1.20</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Bantry Grove</td>
<td>$374,000</td>
<td>$338,000</td>
<td>1.00</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Alcheringa</td>
<td>$153,000</td>
<td>$226,400</td>
<td>1.50</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

The benefits in the table above are calculated as the sum of annual income minus non-capital related running costs for each year since diversification up to and including the year 2000. Similarly, the costs are calculated as the sum of the annual capital costs incurred in setting up the business for the same period. Both costs and benefits are given in present dollar values.

The cost benefit ratio calculated for each case study indicates the level of benefits as a proportion of costs up to the year 2000. A cost benefit ratio of 1 indicates that the benefits received to date cover the costs. A cost benefit ratio greater than one indicates that the benefits received to date are greater than the costs, and a cost benefit ratio less than one means that the benefits received to date are less than the costs and the business is yet to breakeven.

It is misleading to compare the cost benefit ratios between case studies because different businesses are at different stages of development (See the years since diversification column in Table 12). In other words some have already reached breakeven, while other businesses have still to reach that point. However, cash flow analysis, breakeven analysis and cost benefit analysis are all extremely useful tools for helping to evaluate alternative diversification options on your property.

Table 12 illustrates that the amounts invested in diversifying the farm business ranged from $133,000 up to $2.3 million. Generally those farms where larger amounts had been invested in diversification were farms that had started diversifying many years earlier, and the larger investment reflected additional expansion on top of the original diversification.

For example, Tony and Merilyn Jenour at Evedon Park Bush Resort first diversified by establishing 2 Farmstay cabins in 1984. Since then they have gradually increased the number of cabins and continued to refurbish existing ones. More recently in 1995 they invested a further $200,000 in diversification by developing an effluent treatment plant on the farm. Currently they are looking at diversifying even further by value-adding the treated effluent waste through worm composting and selling the product to the garden and nursery industry. Even though their initial investment in diversification was relatively small, around $20,000 to build the first two cabins, to date they have invested a total of $1.2 million in diversification. It is important to note that their rate of expansion
has occurred gradually in line with the businesses financial ability to support the increased investment.

Fred and Coral Davies from Stoney Creek Oils reinforce the message of not expanding too rapidly: "We have always been undercapitalised, although to some extent this has been good because it has restricted our rate of expansion and forced us to focus on budgeting and getting the business operating efficiently before growing further."

**Key message**
Expansion of the diversified business should occur gradually, in line with the ability of the business to generate cash flow to support the expansion.

Another example of substantial investment in diversification can be seen with Ian and Rhonda Milburn from Glenloth Game in Victoria. They have invested a total of $2.3million in diversifying their farm business, but again they started small and then got bigger as they became more confident in their own abilities. Their diversification occurred in two stages. The first stage was when they developed a Squab processing plant in the late 1980’s which cost nearly $600,000 to set up and develop over several years. The second stage of major expansion occurred when they decided to move in to processing Emu and then later Deer. The second stage of their expansion has cost around $1.7million.

Both Evedon Park and Glenloth Game stand out amongst the other case studies for the substantial investment they have made in diversification. These two case studies also stand out in terms of the relatively long period to breakeven on their total investment in diversification. In both cases this is a direct result of large investments in diversification that have occurred quite recently. The increased cash flow generated by this increased investment should see both these farms breakeven within the next 2 years.

**Figure 33. Estimated cash flow resulting from diversification - Glenloth Game.**

The cash flow graph on the previous page for Glenloth Game illustrates how the recent extra investment in diversification has delayed the time it will take for the business to breakeven. The initial investment increased cash flow to the extent that breakeven would have occurred after 5-6 years. The second stage of investment has significantly increased annual cash flow, but it will require a further 5 or 6 years to reach breakeven point.

Other case studies that show relatively long periods to achieve breakeven include, Farmhouse Cheeses of Kangaroo Island, Portee Station and Bantry Grove.
Farmhouse Cheeses of Kangaroo Island experienced a 3 year delay in setting up their business because of a legal wrangle over a non-existent contract, and their experience over this issue will be dealt with in a latter section of the chapter.

Portee Station has only recently diversified and so the estimated time to breakeven is based on very conservative figures for trading over the next few years. Finally, Bantry Grove is a classic example of a form of diversification (vineyard) that takes a long time to breakeven. This is due to the fact that grape vines take 5-6 years to reach maturity at which time they begin to yield to their maximum potential, while at the same time gradual expansion of the area of vines planted, and the associated expenditure, increases the delay to breakeven.

**Key message**

The case study farms with the shortest time to breakeven, generally have a much lower level of initial investment in diversification. These farms also tended to choose a form of diversification that generated a steady income almost immediately from start up.

A good example of a form of diversification that breaks even quickly, can be seen with Jim and Caroline Street of Blaxland. Jim and Caroline diversified by moving into backgrounding pigs. Their initial investment of around $180,000 covered setting up the infrastructure such as sheds, feed storage and watering equipment. The business operates with the Street’s generating income by providing a service which supplies the infrastructure, labour and water for growing out the pigs. The suppliers provide the pigs, and cover the costs of feed, vet bills and freight. The income is steady and reasonably risk free, and they have the added advantage of being able to sell the infrastructure if the business doesn't work. The amount of time involved in managing the pig enterprise is minimal and fits nicely into the management of other enterprises on the farm.

Phillip and Lucy Headlam from Forester Lodge have taken a similar approach to diversification. They invested in establishing infrastructure on their property for centre pivot irrigation and at the same time negotiated a contract with Simplot who lease the land and the infrastructure back from them to grow potatoes. They also grow other irrigated crops. The advantage of this arrangement is a relatively guaranteed income that occurs soon after the initial investment is made.

**Key message**

The time to breakeven (cover costs) is an important point to consider in terms of farm cash flow. The time to breakeven is influenced by the level of your initial investment and how quickly you can begin to achieve a consistent income in line with your budgeted expectations.
4.4 Critical success factors and potential pitfalls

4.4.1 Planning for diversification
In all of the case studies, the common reason given for diversification was the need to improve farm income. In two of the case studies, the loss of an off-farm source of income forced the family to look more closely at the ability of the farm to generate more income. While in the rest of the case studies, poor returns from existing enterprises, or a level of income that would not support the families long term goals, were the principal reasons for looking at diversifying the farm business.

Key message
Choosing the most suitable form of diversification is a critical decision and is influenced by many factors.

A good example of the type of process that helps to decide the most appropriate form of diversification can be seen with Jim and Caroline Street from Blaxland.

Their farm had a moderate debt coming out of the wool crash, but the genetics of the sheep and cattle were good and the pasture on the property was in good condition. They felt that the “human carrying capacity” of the farm was far greater than what it was currently supporting, and like all farmers they were asset rich and cash poor. As a family they began looking at the pros and cons of different strategies for improving income, these included:

- Buy more land, but this would probably mean continuing on the same track in terms of getting minimal return on their overall investment.
- Negatively gear investment in shares, a high risk option.
- Start an off-farm business, but this would mean decreased labour on the farm and increased labour and management for the off-farm business, and as a family they were happy living and working on the farm.
- Form an alliance with an outside interest to share the financial and management burdens of running the farm, but this would not necessarily increase income.
- The final strategy that they agreed upon was to investigate options to intensify the use of the existing farm resources.

Having decided on this strategy they employed a consultant to assist them in working out the viability of a variety of opportunities. The reason for employing a consultant was to have someone who could act as a sounding board for their ideas, who could give them advice, think laterally about various options and take them through the whole process of SWOT (strengths, weaknesses, opportunities and threats) analysis. They considered a range of options including:

- Alpacas
- Olives
- Herbs
- Globe Artichokes
- Cold climate viticulture
- Increase the existing worm farm
- Backgrounding cattle
- Farm forestry
- Growing out pigs
The problems associated with all of the options except growing out pigs was that they had a reasonable amount of risk associated with them and many were very climate dependant for viability. Growing out pigs had a number of advantages. It only required a small area of the farm and integrated well with existing farm enterprises. Management requirements were minimal and the by-product of pig manure and sawdust from the growing out sheds could be used to fertilise the pastures, enhancing production on the rest of the property, or could be stock-piled and sold to other farmers for the same purpose.

The farm was well sited to run the business. There was a ready supply of sawdust from the Walcha sawmill, a good supply of water from an 8000gall per hour electric bore and backup water from dams on the property. There was gravel on the property to construct roads, and a well drained site sufficiently distant from neighbours not to bother them with odours. The property is within a 100km radius of Tamworth where the pigs are bred and slaughtered and falls within an intensive industry zoning. There were no EPA requirements, bank interest rates were good when they wanted to set up and the banks were supportive of the idea and the local council was also happy to approve the operation.

**Key message**
**Jim and Caroline spent nearly 2 years investigating the different options for diversifying their farm business. Thorough investigation of diversification options helps to reduce risk.**

It was interesting to note that 5 of the 10 case study farmers belong to farm business improvement groups. In 1998, Phillip and Lucy Headlam from Forester Lodge joined a farm improvement group run by Rural Consulting Services (RCS). The group has been invaluable to them in several respects. First it provides a forum for the farmers in the group to toss ideas around and get feedback from the group on their ideas and experiences. Secondly RCS provides detailed business performance analysis to the members to allow them to track their own performance against benchmarks for similar farms both within the group and across the state. Phillip and Lucy consider it a huge advantage to have this feedback and input to assist them in running the business as efficiently as possible. The culture of regularly evaluating their business performance helps to highlight any problems that are arising and to make any necessary management changes.

### 4.4.2 Business structures

The common types of business structure include company, partnership, single proprietor business and trust. There are advantages and disadvantages associated with each type of structure and the most appropriate structure for the business is best worked out in consultation with your accountant or business adviser.

An example of the importance of choosing the right business structure can be seen with Liz and Mos Howard's experience when they started up Farmhouse Cheeses of Kangaroo Island. Soon after they first established their company, Liz and Mos were approached by a marketing company that wanted to act as marketing agent and sole distributor for their product. They entered a series of negotiations with the company over various alternatives to the deal, but were never quite happy with the proposal and never signed the contract. Despite not having signed anything, they were sued for an alleged breach of contract.

A legal battle ensued, and the major lesson that Mos and Liz learnt from this experience was that “it doesn’t matter whether you are right or wrong, money is what buys you success in court.” They won the court case, but the cost of litigation forced the company into voluntary administration. This was an option that was only open to them because they were set up as a company. They traded their way out of difficulty and formed a new company to buy out the old company. The original choice of setting up as a company allowed them a number of options that would otherwise not have been available to them. Without the company structure in place, they would most likely have suffered substantial personal loss as well as losing the business.
Key message
The structure of the farm business needs careful consideration when diversifying into new enterprises.

4.4.3 Business relationships and marketing

Key message
One of the most common themes throughout all of the case studies was the importance of developing and maintaining good business relationships.

This applies to all aspects of the business, from marketing sales and promotions, through to staff management and client relationships.

The two case studies on farm tourism emphasise the need for good marketing and promotion of their product. Tony and Merilyn Jenour of Evedon Park Bush Resort spend anywhere between $5,000 and $15,000 on advertising and promotion each year, and this takes a range of forms from listing themselves in various Tourism Association brochures, to making sure that they are listed in Web search engines on tourism. “Word of mouth” promotion is essential to the success of their business, so Tony and Merilyn stress the importance of a professional approach to ensuring that visitors are well looked after and their specific needs catered for.

Ian and Margaret Clark from Portee Station say that marketing has been the greatest challenge for them since starting the business 6 years ago. Ian has tried numerous strategies and has put a lot of effort into promoting the Portee product. Ian is continually looking for effective ways to market his product.

Ian cites as examples of his efforts in advertising and promotion:

- Numerous editorials in newspapers,
- $10,000 worth of free advertising in the Adelaide Advertiser with a stay at Portee Station as one of the prizes in a competition,
- The Channel 9 Today show hosted one of their programs from the Homestead,
- Featured on the Channel 7 Discovery program.
- A web site on the internet.
- Pamphlets and brochures distributed at many travel agents.
- Production of a promotional CD
- Production of a PDF file that can easily be emailed around the world

He says none of these efforts individually have had any noticeable impact on numbers of visitors to the property. However he is convinced that “word of mouth” is an essential part of advertising and promotion. To this end he has recently developed a CD and a PDF file which both feature pictures of the homestead, the facilities and the property generally, as well as general information for visitors. Ian gives these to all the guests so that they can continue to promote for him after they leave, he also emails the PDF file or posts out the CD to people that make enquiries about the property.

Tom Soles of Midlands Fish in Guyra ensures that his business relationships remain healthy by making a point of visiting all the chefs that he supplies on a regular basis. This helps to ensure that he gets regular feedback on his product and can address any issues that arise with his clients immediately.
Fred and Coral Davies of Stoney Creek Oil took a different approach to developing their market and business relationships. Fred and Coral sell nearly 50% of their product through mail order and the rest is through distributors and health food shops. Using mail order as a method to sell their product really occurred by accident rather than a planned marketing strategy. When they first started selling, they found it very difficult to get shops to stock their product because it was new and unknown. To overcome this they sent free samples direct to key people in the industry, and these people started ordering directly. This evolved into the mail order business, but has also helped expand the demand for their product in health food shops as people would go into health food stores and ask for their products. Once they had established this demand they were able to approach distributors with a ready made market.

An advantage of the direct marketing approach is the ability to get good feedback from their clients on the quality of the product and any changes that needed to be made.

In almost all of the case studies (8 out of 10), the farmers had to undertake some form of marketing of their product. Good marketing is critical to the success of the business. Marketing serves several functions, first to make people aware that your product exists, second to encourage people to buy your product, and finally to ensure that your product meets your clients needs as closely as possible. A failure to understand the market within which you are operating, or a failure to promote your product well within that market, will most likely lead to the eventual failure of the business.

**Key message**

Successfully marketing your product is critical to the success of the business. Regular feedback from clients helps to ensure you are providing a top quality product or service and helps to gauge the success of your marketing strategy.

Good relationships with staff are also essential to running a good business. This is perhaps best illustrated by Ian Milburn from Glenloth Game. Ian is very proud of the fact that his business employs 40 people in the local area. He comments: *"It is always a struggle getting good people, and there is a lot of effort that goes into training people up for their jobs. It is essential to treat your employees in the same way that you would want to be treated. I pay them on a weekly basis so that they don’t have problems with cash flow, and occasionally I'll put money down on the bar at the local pub to shout them a beer".*

As a consequence of building a good working relationship with his workforce, Ian says that they are always receptive to new ideas and new ways of doing things. He also believes in the concept of mentoring and developing the skills of young people in the area so that they stay in the community.

### 4.5 Summary

This chapter set out to provide some insight into the financial impacts that farm diversification has had on 10 case studies from across Australia. We have also summarised some of the experiences that each of the farm families has had in undertaking diversification.

The cost benefit analysis shows that the level of investment in diversification and the type of diversification option chosen will significantly impact the time it takes for diversification to improve farm income. It is essential to have a good understanding of the impact that diversification will have on farm cash flow over a number of years in order to cover the initial set up costs of the business. Cost benefit analysis, cash flow analysis and breakeven analysis are all good techniques to use in assessing different diversification options for the farm.

Starting small and letting the business fund its own expansion is a good strategy based on the experience of the diversification case studies summarised in this chapter.
Thorough planning is essential before undertaking any investment in diversification. Many of the farm families in these case studies spent a considerable amount of time and effort investigating their options for diversification. This included seeking independent advice from business planners and accountants, attending workshops and seminars and having business plans developed. Included in the planning for diversification is the choice of the most appropriate business structure.

Developing good business relationships with staff, clients and through marketing and promotion was cited as a key to success in diversifying the farm business.

The case studies highlight the fact that there is no single correct path that will ensure success in undertaking farm diversification, however there are some common elements that can help to reduce the risk.

1. **Thorough planning, investigation and assessment of diversification options.**

   - This includes assessment of personal and family goals, skills and objectives as well as an assessment of farm resources and possible complementarity and impacts of the proposed new business on the existing farm business and resources. How much time will be involved in running the new business? How will this impact on managing the rest of the farm business? Will you need to employ staff or contract people?
   - Develop budgets and undertake cash flow, breakeven, cost benefit and general financial analysis of the diversification option. Seek advice from independent consultants and peers. Assess the markets for the new business by speaking to potential clients and develop a good understanding of their needs and your ability to meet these needs.
   - Develop a business plan which should be the basis for developing the business and will assist in obtaining finance. Decide on the most appropriate business structure, keeping in mind the relationship with the existing farm business. A common pitfall in developing budgets for new businesses is to over estimate income and to under estimate the costs of running the business. Be realistic in your budgeting.

2. **Management.**

   - Once you have decided to go ahead with the business, good management becomes the critical success factor.
   - Good management includes developing good business relationships with staff and clients and also requires continual assessment and evaluation of the financial health of the business and whether you are meeting your goals and objectives.

3. **Marketing**

   - Marketing your product is essential if your business is to survive. Your marketing strategy needs to identify who your clients are, what sort of product they are interested in, how you can best promote your product to them, and most importantly how you can provide your product to them in a way that satisfies their needs.

Finally, running any business requires a lot of hard work and dedication. In the words of Phillip and Lucy Headlam of Forester Lodge:

"To run any business successfully, you need to have a clear goal and a vision of how to achieve that goal, but most importantly the commitment to achieve it."
5. Bibliography


Tonts, M., Campbell White & Associates, and Black, A. (2000) *Socio-Economic Impacts of Farm Plantation Forestry on Australian Rural Communities. (Draft report)* Canberra: Rural Industries Research and Development Corporation.
