



AGRICULTURE RESEARCH GROUP ON SUSTAINABILITY



ARGOS Research Report: Number 06/01

ISSN 1177-7796

Understanding Approaches to Sheep/Beef Production in New Zealand: Report on First Qualitative Interviews of ARGOS Sheep/Beef Participants

Lesley Hunt³, Chris Rosin², Marion Read²,
John Fairweather³, Hugh Campbell²

Date of Publication: February 2006



1. The Agribusiness Group
PO Box 4354
Christchurch
www.argos.org.nz

2. The University of Otago
PO Box 56
Dunedin
www.argos.org.nz

3. Lincoln University
PO Box 84
Lincoln, Canterbury
www.argos.org.nz

Table of Contents

Acknowledgements.....	5
Executive Summary	7
1. What do you call yourself?	7
2. Personal vision, vision for farm and constraints to vision	7
3. Farm maps drawn by participants	8
4. Measures of sustainability	9
5. Financial wellbeing and productivity	9
6. Environmental wellbeing	9
7. Personal, family and community wellbeing	9
8. What is managed well and what is hard to manage	10
9. Involvement in ARGOS	11
10. Comparisons between Organic, Integrated and Conventional	11
Part A: Introduction.....	13
Chapter 1: Introducing the Research and Outlining this Report.....	13
Part B: Method.....	15
Chapter 2: Qualitative Research Methodology	15
2.1 The purpose of qualitative research	15
2.2 Focus and perspective	15
2.3 Some issues in the debate about qualitative and quantitative research	16
2.4 Methods	17
2.5 Qualitative research analysis	17
2.6 The qualitative research process	18
Part C: Results.....	21
Chapter 3: Self Identification by Participants of their Work Role	21
Chapter 4: Sheep/Beef Farmers: their Visions and Constraints	23
4.1 Vision	23
4.2 Constraints to visions and management	32
4.3 Comparison of vision and constraints across management panels	39
Chapter 5: Map Analysis.....	41
5.1 Introduction	41
5.2 Methods	41
5.3 Findings	41
5.4 Comparisons between management systems	46
Chapter 6: Measures of Sustainability	47
6.1 Measures identified by participants	47
6.2 Comparing measures identified by participant panels	48
Chapter 7: Indicators of Financial Wellbeing and Productivity	51
7.1 Assessing financial wellbeing	51
7.2 Productivity: healthy stock and good pasture	53
7.3 Comparison of panels in financial indicators	53
Chapter 8: Farming and the Environment.....	55
8.1 Farmers' understandings and conceptions of the environment	55
8.2 'Noticing' animals and birds	60
8.3 Comparing responses between the panels	62
Chapter 9: Contribution of Farm to Individual, Family and Community Wellbeing	63
9.1 Introduction	63
9.2 Contribution of farm to individual wellbeing	63

9.3 Relationship between the farm and family wellbeing	95
9.4 Impact of farm on community wellbeing	104
Chapter 10: Farm Management: What is Being Well Managed and What is Hard to Manage	111
10.1 Managing well	111
10.2 Things that are difficult to manage	111
10.3 Differences between panels	112
Chapter 11: Hopes and Concerns About Involvement in ARGOS	113
11.1 Hopes of ARGOS	113
11.2 Concerns about ARGOS	118
Part D: Conclusion	121
Chapter 12: Discussion and Conclusion - Approaching 'Ideal Types'	121
12.1 Introduction	121
12.2 Ideal Types	121
12.3 The typical farm couple	122
12.4 Life cycle stages	125
12.5 Conclusion	126
References and Bibliography	129
Appendix 1: Interview Schedule	131

Acknowledgements

Thanks to all the ARGOS team members who have contributed to this report: Lesley Hunt, Chris Rosin, Marion Read, John Fairweather and Hugh Campbell who prepared this report; John Fairweather and Lesley Hunt who prepared the interview schedule incorporating in the process suggestions received from Hugh Campbell, Caroline Saunders, Henrik Moller, Jon Manhire, and Dave Lucock; Lesley Hunt who carried out the interviews; and last but not least, Dave Lucock who kindly arranged many of the interviews, transported the interviewer to some of the farms, introduced her in the nicest possible way to the farmers and frequently sat in on the interviews. Thanks also go to Marion Read, Lyn Minchington, Brendan Doody and Jim Woods for the care, effort and thought they put into transcribing these interviews.

This work was funded by the Foundation for Research, Science and Technology (Contract Number AGRB0301).

Executive Summary

In the first preliminary interview with those participating in the sheep/beef sector of the ARGOS programme, participants were asked a series of questions in order to record their ideas about topics of interest to the management, environmental, economic and social objectives of the ARGOS programme. The responses to these topics are summarised below under the headings of the questions asked in the interview.

The different production systems under study are Organic, Integrated and Conventional. The term 'panel' is used to describe the group of participants associated with each production system.

1. What do you call yourself?

All the ARGOS participants identified themselves as farmers or farm managers, with two being part-time farmers having other business interests where they spent most of their time. Most also said that they farmed sheep and beef with a few considering themselves to be more involved in arable or cropping farming. Nine did not identify themselves by mentioning the particular type of farming they were engaged in.

2. Personal vision, vision for farm and constraints to vision

The visions participants had for themselves and their farms were wide ranging. Visions related to the financial side of participants' lives were associated with:

- Maintaining their financial position because they were satisfied with their present situation.
- Being resilient in ways which enabled the farm to withstand ecological and economic stresses.
- Persevering in order to survive as a farmer.

They hoped to improve their financial position over time by:

- Reducing debt.
- Economic growth.
- Investment.
- Having healthy stock.
- Reducing farm related expenditure.

Some hoped to increase the farm's productivity through:

- Increasing yields.
- Improving technology and management.
- Reducing the impact of limiting factors.

Many farmers indicated they had already adopted or wished to find alternative sources of income and some were planning for retirement.

Social aspects of participants' visions included:

- Improving their lifestyle and family wellbeing.
- Planning farm succession or otherwise if family members were not interested in farming.
- Contributing to the community.

- Contributing to social sustainability.

Participants rarely discussed environmental factors as part of their vision. Some did mention controlling inputs, developing the farm as part of the landscape and stewardship of the land, particularly the soil, in their care.

Personal aspects of vision that were mentioned included:

- the desire to have more time that was not associated with farm work, particularly time for holidays
- the learning involved in farming.

While about one third of the participants felt no significant constraints to the implementation of their visions, others recognised constraints in the climate and the physical environment (such as weather, soils, farm structure and pests). Some felt they were limited by the State through taxes and the policies of national and local bodies, by lack of information and knowledge, and by the demands of neighbours and family. Economic constraints were seen as limiting the ability to employ labour and that this in turn related to the time they were able to take off. A shortage of capital limited their ability to adopt new ideas or buy more land. Some farmers, mainly those in the Organic panel, identified issues to do with auditing as a constraint. They felt that at times compliance limited their management responses. Many farmers were aware of the constraints associated with their health and skills.

It was difficult to differentiate between the visions and constraints to those visions of the different panels. The desire to maintain the farm and to persevere in the face of climatic and economic hardship appeared, however, to be more typical of members of the Conventional panel. Likewise, members of the Integrated panel were more likely to emphasise increased productivity as part of their vision.

3. Farm maps drawn by participants

The table below summarises the data on the maps that participants drew. Data have been grouped into general categories and indicate the importance given to spatial features of the farm, such as its boundaries and paddocks, water sources, stock management features buildings and landscape morphology such as slope, hills and wetlands.

Table: Tally sheet of sheep/beef map feature

Category	Organic (n=13)	Integrated (n=12)	Conventional (n=12)	Totals
Spatial organisation	44	36	42	122
Wind	11	11	15	37
Buildings	19	16	20	55
Transport	12	10	13	35
Social context	8	13	9	29
Other biota	11	10	16	37
Landscape morphology	21	20	13	54
Climate/weather	4	5	2	11
Water	28	30	26	84
Biotic context	8	15	12	34
Stock management	21	22	16	59
Neighbouring buildings	1	0	5	6
Other features	1	2	1	4
Total features	189	188	191	568

4. Measures of sustainability

The main factors participants thought should be measured were soils (24), financial indicators (19), animal health (13), social indicators (farmer wellbeing) (12), productivity (10), water use (7), environmental health (7), plant health (5) and inputs (5). Nearly all the Organic farmers said that soil, especially biotic activity, should be measured and they were more likely to suggest environmental factors be measured.

5. Financial wellbeing and productivity

Financial wellbeing was usually measured by returns - whether they met certain goals such as balancing accounts, providing a certain lifestyle or having something over for further investment. A second group placed an emphasis on costs as well as returns, and members of the Organic panel were more likely to be aware of costs. A few farmers (none from the Organic panel) benchmarked their finances against other similar farms. Most Organic participants and half the Integrated participants said during the interview that their production costs impacted on their returns.

Productivity was measured by having healthy stock and good pasture. Quantity and quality of yield were emphasised and most participants were clear that they distinguished between productivity and financial wellbeing.

6. Environmental wellbeing

Participants viewed the health of stock and plants as environmental indicators. They felt that they contributed to that health through controlled use of inputs, encouragement of biodiversity, soil and water conservation and waste management. Many in the Organic and Integrated panels saw themselves as working with nature.

The most common birds noticed by farmers were ducks, magpies and sparrows. The most common mammals were rabbits, hares and possums. Grassgrub, worms and lizards were also often mentioned. The most common animals noticed were nearly always those classified by farmers as pests.

7. Personal, family and community wellbeing

Farming was perceived to have both positive and negative impacts on an individual's wellbeing. Many participants saw wellbeing as a balance to be achieved. The positive ways in which a farm contributed to personal wellbeing were regarded by the participants as:

- The satisfaction gained from farm work given its autonomy and flexibility, its hard physical, outdoor nature, challenge, recognition and feedback.
- Being a farmer and owning a farm.
- Achieving financial success but gaining satisfaction from other aspects of farming as well.
- The attachment to the land and the place in which they lived.
- The rural, farming lifestyle.

The farming life was also a source of stress. Stress was experienced by participants because of:

- Their feeling that they had to work all the time to get the necessary things done, rarely being able to take time off.
- Their lack of control over factors such as the weather.
- Working through succession issues.

- Tension between husband and wife over the place of the home and children, time spent with the family, different financial priorities, and differing thresholds on financial risk.
- Financial worries.

Many farming couples had developed strategies to make sure the farm did not dominate their whole lives. These encompassed:

- Changing their priorities around how they organised the farm to better match how they wanted to live their lives. This included making choices about how and what they would grow.
- Working hard to change their attitudes so that they focused on enjoying what they did while remaining aware of the 'ups' as well as the 'downs' of farming.

A strong sense of purpose and a sense of the privilege of being a farmer seemed to help wellbeing.

Farmers also tended to compare themselves constantly with others, with the past, with urban lifestyles and so on, perhaps indicating an uncertainty about their identity as a farmer through its changing role in our country's national image and priorities.

When comparing panels it seemed apparent that Conventional participants were more likely to have emphasised the stress of farming, while Integrated farming couples were more likely to have worked out ways of dealing with it. Conventional farming couples were also more likely to have mentioned succession issues and to have talked about positive aspects of the lifestyle of farming. By contrast, Organic and Integrated farming couples were more likely to have talked about attachment to the farm as a place.

Participants also saw the impact of the farm on family life as having positive and negative aspects. They felt that a farm provided a good quality of life for bringing up children. It provided a healthy physical environment. Its rural character meant that children were removed from the temptations of the city and had a greater contact with 'reality', hence growing up to be more responsible and mature than urban children. Many farmers felt a tension between meeting farm goals and finding time for children and money for their education. For most, the necessity of sending children to boarding school for their secondary education was unquestioned. A family farm brought both its own joys and troubles because managing succession could be difficult and the expectations involved were often seen as onerous.

ARGOS participants painted many different pictures of their communities ranging from no local community at all because locals travelled to the nearest urban centres for their shopping and recreational needs, through dying communities to communities which were coming to life again with an influx of young farming families. Participants were or had been very involved in their local communities especially through their participation in the local primary school, sports activities and organisations such as the local and regional A&P show committees. They were very aware of how the benefits of farming flowed on to the local and wider community through the provision of employment and services.

8. What is managed well and what is hard to manage

Most farming couples in each of the panels felt that they managed certain things or most of the farm well. The things that they felt were managed well included those that some found most difficult: the whole farming system, stock and pasture, finances, staff and planning. Managing their responses to the weather, its extremes and unpredictability, was the most difficult aspect of the occupation of farmer.

9. Involvement in ARGOS

On the whole participants saw their involvement in ARGOS as a positive opportunity to learn more about farming and their farm in particular. This learning would take place through the provision of comparisons and benchmarking with others, feedback and information. A strong hope was expressed that ARGOS might prove to be an advocate for farming in general to the wider population and policy makers in particular. Organic farmers hoped it would also provide hard evidence to support the viability of organic management systems. Concern was expressed about the time and book work that might be involved and the fear that information found through the programme could be used against farming.

10. Comparisons between Organic, Integrated and Conventional

Overall the panels were different in rather obvious ways. The Organic panel were more environmentally aware than the other two, while the Conventional panel were more conventional and traditional in their farm practices and expectations of farming. The Integrated and Organic panels were more likely to have more complex farm systems in place, practicing rotational cropping and grazing, and being more likely to experiment with new crops and farming practices.

Organic farming couples were likely to value their distinctive farming practice, feeling that their care for the environment, mainly through their careful use or lack of use of chemicals, contributed to the wellbeing of the local and the global community. They were more likely to be interested in soil biota as an aspect of soil fertility and the monitoring of the health of pasture, but less interested in monitoring productivity than those in the other management systems. They were less likely to look to returns as the only measure of financial wellbeing, being interested in costs as well, and they were less likely to see yield as an indicator of productivity. As organic farming involved annual audits, members of the Organic panel were more familiar with auditing and more likely to have issues with it. They would also like to see more research done on organic practices because they felt there was a lack of knowledge related to growing organically in pastoral agriculture.

Along with Integrated farming couples, Organic farming couples felt that they were working with nature and they emphasised their attachment to the place of the farm rather than just to the associated lifestyle.

Integrated farming couples had a vision of increasing productivity and as such were more likely to see their farming as constrained in one way or another. They were more likely than other participants to have worked out how to deal with stress and to have come to terms with the ups and downs of sheep and beef production.

Conventional farming couples were more likely to emphasise their perseverance in the face of difficulties and hardship rather than adjusting their farming methods to make their farm more resilient. As such they seemed to experience higher levels of stress than their Organic or Integrated counterparts. They had greater difficulty in 'escaping' from the farm for time off or holidays, and there seemed to be more tension within couples over time spent with the family and succession issues, although they remained positive about the farming lifestyle. They were concerned about the sustainability of the traditional rural community and were or had been heavily involved in their communities through the local school and sports teams. Conventional farming couples were less interested in environmental monitoring than those in other panels and more interested in financial factors.

Part A: Introduction

Chapter 1: Introducing the Research and Outlining this Report

Sheep/beef farmers comprise a diverse group of individuals with a variety of perspectives on and approaches to sustainable production. This diversity is the product of a broad range of social, cultural, economic, and ecological influences and experiences. It is also possible, however, for commonalities to emerge among the farmers based on their (possibly) shared experiences with similar social and environmental contexts in New Zealand's pastoral agriculture industry. One of the goals of the ARGOS programme is to determine if the adoption of a particular management system (in this case the different panels – Organic, Integrated or Conventional) is influenced to any degree by the social characteristics of farmers. Towards this end, a suite of social methods or approaches (including semi-structured interviews, quantitative surveys, participant observation, and interactive activities) have been proposed as means to study the social lives of participants and to draw out any relations between these and management practices – especially those that impact on sustainability. This report documents the first in a series of qualitative interviews with participants in the sheep/beef sector of the ARGOS programme.¹

The following report provides a catalogue of the categories applied to the initial qualitative interviews conducted by the researchers in the social objective with 37 sheep/beef farmers. The first goal of this round of interviews was to provide a broad introduction to the ARGOS participants, allowing them to tell us who they are and what they do. Secondly, in addition to establishing a foundation for engagement with the participants, the interview was structured to include queries that might inform the developing research in the remaining programme objectives (i.e., economic, environmental, farm management, and He Whenua Whakatipu). Thus, questions structured around the participants' visions for themselves and their farms as well as those soliciting economic indicators were proposed by members of the Economic Objective. Similarly, questions addressing awareness of the animal life on farms and other environmental indicators were submitted by the Environmental Objective. Other questions on social wellbeing and management practices were also included. As a result, the initial interviews provide a wide ranging, if not always deeply incisive, set of textual data allowing us to complete a third aim which is to explore the similarities and differences between the responses of the participants from the Organic, Integrated or Conventional management systems. The structure of this report is intended to offer readers a tool that provides a basic understanding of the content of the interviews and an introduction to the coding and analysis accomplished from the perspective of researchers within the social objective. It is hoped that this will encourage readers to engage with the data and members of the social objective in order to develop deeper insight to the initial interviews and to establish themes and topics to pursue in future iterations of qualitative data gathering.

The primary method for gathering qualitative data in the initial interview was that of the semi-structured interview. In order to confine the discussion to factors of interest to members of the ARGOS programme, an interview schedule listing eight areas of inquiry was developed (see Appendix 1 for the interview schedule). Each section of the interviews – with the exception of the farm mapping exercise (an interactive activity) – involved short and sometimes tightly bounded questions relating to self-perception, farm management, and indicators of sustainable farm management. Participants were first asked to introduce

¹ The initial interview was also conducted with 35 kiwifruit orchardists. The results of these interviews are available in ARGOS Research Report 05/01, *Understanding Approaches to Kiwifruit Production in New Zealand: Report on First Qualitative Interviews of ARGOS Kiwifruit Participants* (Hunt, Rosin, Read, McLeod, Fairweather and Campbell, 2005).

themselves as they would in a social situation. Next, they were encouraged to describe their vision for themselves and their farm over the next five to ten years. The participants' current view of their farm and the factors affecting its management were recorded in the form of a map that they created. This was followed by a series of queries on the means of assessment used by participants in gauging the sustainability of their farm. This was followed by questions about what they managed well and what they found hard to manage. Finally, the participants were asked to share their expectations of, and concerns about, participation in the ARGOS programme. Because of the distinct focus of each section of the interview, the responses to each section are treated as a separate chapter in the following report.

As noted above, the first qualitative interviews contain a wealth of data. Most notably, the responses of the participants provide a substantial foundation for understanding the context within which farm management is pursued as well as suggesting possible indicators of interest to the ARGOS programme as a whole. On the other hand, the manner in which the elements of the interview were compiled limits the extent to which a comprehensive analysis of the social (and other) aspects of sustainable farm management can be made. More specifically, the collage of topics included in the interview (combined with a desire to avoid overtaxing the participants' patience) limited the application of a full suite of qualitative methods. Frequently, the opportunity to pursue topics of interest more deeply was cut short in the expectation that they would become central themes for future interviews. Furthermore, it is apparent that other research methods would prove more appropriate for addressing several of the issues included in the first interview (e.g., listing and ranking of indicators of importance to participants). As a result, most of the analysis undertaken to this point requires further data gathering in order to develop emergent insights into aspects of sustainable farm management among ARGOS participants. It is important to note that – while such topics are identified within the coding and initial analysis that follows – the majority of patterns that emerge in the first interview may require additional confirmation of any actual differences or similarities among individuals or panels. In this regard, the numbers placed in brackets after some themes indicate the number of Organic, Integrated or Conventional transcripts in which this theme appeared.²

The responses of participants were also dependent on how many people took part in each interview for each farm because interviews involving two or more people were usually longer and therefore involved more material. Where one person was interviewed this person was a man and in one case this man was a farm manager. In all cases where two people were interviewed (32 of the 37 interviews) they were a man and a woman, usually partners, but in one instance they were a female farmer and an employee and in one other a farm manager and his partner. Two interviews involved the participation of other family members. The participation of a woman usually meant that certain things may have been mentioned more frequently such as things to do with the home/house, family, or work they did together on the farm, which may not have occurred if only a man was participating.

The final chapter in this report describes what we see as an emergent typology of the typical farmer as well as how the choice of a specific management system appears to affect the characteristics of this typical farmer. The chapter concludes with suggestions about what should be included in the next interview and an overall consideration of the value of this report.

The Appendix contains the interview schedule.

² See the final section of Chapter 2 for the limitations of such counts.

Part B: Method

Chapter 2: Qualitative Research Methodology

“It is not worth the while to go round the world to count the cats in Zanzibar.” Henry David Thoreau, *Walden*. (As cited in Jones, 1988: 31)

This report contains the first analysis and summaries of the responses made by the ARGOS participants in the kiwifruit sector to the first interview. Interviewing, particularly with open-ended questions and the analysis of the resulting interview transcripts are among the suite of methods contained within the broadly defined field of qualitative research. This section of the report briefly describes and explains the main dimensions of qualitative research methodology.

2.1 The purpose of qualitative research

“What is going on here?” is the common question asked in qualitative research. Such research seeks to explore, describe and explain how we, as human beings, make meaning of our worlds. This has been described as a study of how we “... understand, experience, interpret, and produce the social world” (Sandelowski, 2004: 893). Qualitative researchers want to find the “... shared symbols, sentiments and meanings” that people have (Jones, 1988: 33). Such research aims to understand “... phenomena in ways that do not require quantification” or else the phenomena under study “... do not lend themselves to precise measurement” (Abercrombie, Hill and Turner, 1984: 200). In other words, qualitative research is not based on measurements and quantitative claims. Whole situations or contexts are studied rather than particular variables. The fabric of human life is “... seen as too complex to reduce to independent and dependent variables” (Jones, 1988: 33). The final result is “thick description” (Geertz, 1973: 37-38) which acknowledges that someone’s action (in this case ‘talking’) has been perceived and interpreted by those doing the analysis. Results from this research have various ways of arguing their validity and generalisability.

2.2 Focus and perspective

Qualitative research takes the ‘actors point of view’. It focuses on the words and actions of those studied, accepting and respecting them as they are, not as the researcher thinks they should be (Nord and Jermier, 1994), but at the same time taking account of the particular context (Rose, 1978: 244). It seeks a deeper understanding of the world of those studied (Sarantakos, 1993: 52), by positioning itself in the frame of reference of the participant (ibid.: 56). In other words, it searches for understanding of the world of others from within rather than as a detached observer (Jones, 1988: 34). It shows a “... reverence of individuality, diversity and everyday life, and the hope that the inquiry can bridge the gaps that divide people ...” (Sandelowski, 2004: 894). The focus is often emancipatory in that it hopes through understanding to give people democratic power and the ability to have some control over their own daily lives.

2.2.1 Subjectivity and reflexivity

“... social researchers always remain part of the social world they are studying. Consequently their understanding of that social world must begin with their daily experience of life” (Tolich and Davidson, 1999: 37)

From the above descriptions it is obvious that qualitative research is subjective and this subjectivity and lack of detachment is often criticised by those who seek research that is objective. But qualitative researchers argue that this form of research “... makes explicit the partiality inherent in all inquiry” (Sandelowski, 2004: 894). This subjectivity is balanced by the reflection and reflexivity that is built into the research process. The researcher is

constantly considering what they are doing, what is emerging from the interviews and observations as they do them, how that informs what they do next, and how it could have been done better. Not only that, they also reflect on making explicit the part they are playing, the potential impact of their perspective on what they hear, see and find (Hammersley, 2004), as well as any influence they may have on those they are researching (Fook, 1996: 196). This is built into the research process by the keeping of notes after every encounter with participants. For this reason the personal qualities of the interviewer become important: "... a vital concern is that of rapport and trust – the intangible and personal qualities of human relations" (Owen, 1988: 34). The researcher must quickly establish a good relationship with those she is researching that enables them to talk easily.

2.2.2 The naturalistic research method

In conducting social research, researchers do not try to manipulate events but rather observe them as they unfold. They also refine and narrow down their research as it goes on (Sandelowski, 2004: 894; Perkins, 1988: 305). For example, in the interviews presented in this report the researcher subtly changed the interview questions in order to adapt them to the persons being interviewed. As they engage with additional participants researchers explore and then 'inspect' what they have found. This process is inductive. Instead of being directed by theory and the understandings of others, researchers seek to find out what is going on in everyday life. They may, subsequently, test how relevant the theories are to their findings (Perkins, 1988: 305) or construct a theory of their own. In a process sometimes called 'analytic induction' researchers may go back and forth between inductive and deductive processes.

2.3 Some issues in the debate about qualitative and quantitative research

There are those who say that researchers are embedded in a particular approach because they have certain beliefs about the world and how we know that world. Some argue that the qualitative and quantitative paradigms are mutually exclusive because their epistemological assumptions, values and methods are so different (Bryman, 2004: 895). As a supporter of this perspective Massé states, "The quest for meaning and the quest for measurement are incommensurable". In its pursuit of concrete measurement the quantitative perspective "... decontextualises, objectifies and disembodies a lived experience" whereas qualitative research methods seek to interpret this experience (Massé, 2000: 411). For example, in this research programme we are exploring wellbeing associated with the farming lifestyle and its relationships to sustainable management practice. We could decide that wellbeing was measured by several different qualities, and get people to assign a number to how much this resembles them. Or, we could ask them to tell us what it is about their farming lifestyle that makes them happy, and let them define it within their own context and life. There are others who take a more pragmatic approach labelled the 'technical' perspective, which justifies the use of any approach as long as it suits the aims of the research (Bryman, 2004: 896). From this perspective the quantitative and qualitative approaches can be seen as complementary (e.g., Owen, 1988: 34) with the qualitative approach being useful in hypothesis development for quantitative research and conversely the qualitative approach helping researchers understand why people answer the way they do in questionnaires, for example.

Qualitative research aims to maximise validity in many ways. Firstly it is reflexive (see above). Secondly, through the process of theoretical sampling, the researcher purposively seeks sources of data that will be different from those already studied (see below). Thirdly, it uses multiple sources of information, methods, theories, and observers to generate a variety of data (Bryman, 2004). This is often called 'triangulation'. Hence, in addition to the responses of the participants, data informing the analysis may be drawn from observations made during fieldwork, an organisation's reports, a newspaper account, existing published research, or by colleagues working in the same programme. Fourthly, the numbers of

responses and/or observations that have contributed to a particular understanding are regarded as reaching saturation when what is heard becomes repeated again and again, or nothing new is heard. Beyond the measures built into the actual research process, a principal indicator of the validity of qualitative analysis is simply whether a piece of work 'rings true' to others apart from the researcher. Such arbiters of the validity of an analysis may include colleagues as well as the participants themselves. The latter are considered appropriate judges of the extent to which the findings reflect and corroborate with their own experience.

"It is not the numbers that make data valid ... but rather the logical integration of data from different sources and different methods of analysis into a single, consistent interpretation" (Bryman as cited in Hill, 1984: 60).

2.4 Methods

Qualitative research uses many different methods and is used by researchers coming from many different perspectives and disciplines. It encompasses semi-structured to completely open-ended in-depth interviewing and participant observation. The open questions asked in interviews are often in the form of "What ...?", or "How ...?", or they may be of a "Can you tell me how that came about?" form. "Why" questions are used sparingly because people tend to give such questions an answer containing a rational explanation for something when this research is seeking how people make meaning.

In some situations the researcher will keep on talking to people until saturation is reached, at which point they will search for different people who may challenge this pattern (theoretical sampling, Glaser and Strauss, 1967). If divergent views are found this is incorporated to account for it or else the previous analysis is rejected. This tactic is used to seek diversity and provide a full description of the phenomena under study, hence making any ensuing theory more robust and able to withstand challenge. In the ARGOS research design, engagement with the different farming and growing systems in the programme is expected to facilitate such theoretical sampling. However, the possibility of achieving saturation may be limited by the number of participants in each panel.

2.5 Qualitative research analysis

Answers to questions asked in qualitative research are very rarely straight forward and often are given in narrative form. That is, the answer may be in the form of a story rather than a direct answer. The former situation is demonstrated in the 17 different variations in response from the 35 respondents in this interview to the simple question, 'What do you call yourself?' there were. Participants used the narrative form in responding to most of the other questions.

At first the data may be analysed in a way that summarises and describes it. This is a process of interpretation (see later), as sections of the interview are assigned to emergent themes or categories which may be researcher dependent. Qualitative variables (more likely to be called emergent themes or categories) are categorical or nominal. In other words, they are of a descriptive nature and every element that makes up a variable is considered to be of equal importance.

Researchers also look for relationships in the data. The most obvious way of achieving this involves the construction of a hierarchical structure, as in this report for example, where the concept of individual wellbeing is broken down into different components or categories. Whole groups of themes may come together to tell a particular story.

It is acknowledged that in analysing data we all come from particular perspectives or see through a certain 'lens'. One of the common perspectives taken by some social scientists, particularly sociologists, is Symbolic Interactionism (Blumer, 1969) which argues that actions and objects have no intrinsic meaning. Instead meanings are constructed and conferred

through social interactions and are negotiated by actors according to the specific social context. The constructs (notably language) come to 'stand for' or 'symbolise' the objects and activities, often in a 'short hand' form. The same word or object can have different meanings and therefore significance, to different communities. Such meanings are neither fixed nor exclusive.

An example comes from our own ARGOS 'Social Dimensions of Sustainable Agriculture' rationale (p.66): "I am walking across a paddock and see an isolated plant growing above the grass ... What am I seeing? Am I seeing a beneficial species, a weed/pest, a part of nature, an indicator of pasture ill-health, an indicator of ecological good health, something for me to control, something for me to cooperate with, an irrelevant plant that doesn't fit with any of my views of what a pasture should look like so doesn't even register on my consciousness ...". We could then consider how one of these meanings becomes more dominant than another, or how the way a person saw such a plant may be linked to their agricultural practice.

Qualitative research results in rich detailed descriptions and interpretations of people and the social practices that both shape them and are shaped by them. Such results are usually related to a particular context or a particular social group of people (Sarantakos, 1992: 52). This sort of result is rarely reported as tables or figures, except in a very 'wordy' form.

2.6 The qualitative research process

It is difficult to make any generalisations about the qualitative research process. To help understand it we describe the process used to reach the results included in this report in some detail below, on the understanding that ours is only one style of implementing qualitative research.

In early 2004 an interview schedule was developed in consultation with other participants of the ARGOS programme, in order to have some transdisciplinary focus on topics of concern to all the objectives in the ARGOS programme (see Appendix 1 for the interview schedule). For example, the vision and constraints to vision questions were of interest to the Economics objective in particular, and the possible indicators of environmental, economic and social wellbeing were of interest to those respective objectives. This interview was to serve as an introduction for the ARGOS participants to the social research and to form a basis for the measurement of change over the ARGOS research time frame.

From May till November in 2004 an ARGOS researcher carried out 37 interviews of individuals, couples or families participating in the ARGOS programme who were also involved in the sheep/beef industry as owners or managers of 12 Organic farms and one converting to Organic farm, 12 Integrated farms, 12 Conventional farms. These interviews lasted from 50 minutes to two hours. The interviews were transcribed, a process which took up to twelve hours per interview. Then two ARGOS researchers loaded the transcriptions into a database using NVivo software which facilitated analysis of the interviews.

In the analysis process researchers read through the interviews and coded sections of text according to themes that they felt were emerging from the data or from the questions that had been asked in the interview (see Appendix 2). These codes were often constructed in 'trees' in a hierarchical fashion. For example, all text referring to what a participant thought they were managing well was 'coded' under what type of management system their farm fitted (Organic, Integrated, Conventional), then 'management' and then 'well'. This involved blocking the text and dragging it into this code, which is listed on the side of the screen in NVivo. (NVivo is really just a convenient way of keeping lots of files open all at once that researchers can copy and paste into.) The text associated with this code was not necessarily found in the transcript only at the point where the question was asked in the interview. Responses to relevant questions may have arisen in comments throughout the interview.

Following the coding exercise, the researcher is able to print out (or read) all the text that has been assigned to a particular code, read it through and put it through another categorisation process. This process may involve additional coding in NVivo or may be carried out on paper. For Lesley Hunt, it involves trying to find a word that summarises each quote, or writing down parts of the quote and grouping all the quotes and words under different headings. For example, there were different things that people felt they were managing well on the farm such as the whole farm system, different parts of the farm system, and so on, and then there were other things that people felt they were managing well in their personal lives –such as family relationships and achieving a work/life balance. This was examined for each panel and then the analyses were combined in a summary of what they had in common. In this example, for instance, at this point it became apparent that the responses to this question in the interview indicated that more Organic participants were concerned about their work/life balance than those in other panels. When writing up this analysis quotes from the transcripts may be used which summarise each of these categories or a description may be written to back up the assertions made.

The limitations of using numbers associated with how many people said what is well illustrated in Section 4.3 of the report on the interviews with kiwifruit participants in ARGOS (Hunt, Rosin, Read, McLeod, Fairweather and Campbell, 2005), when one of the researchers explored the idea of a 'tidy' orchard and the greater emphasis placed on this aspect of an orchard by some Hayward green orchardists in particular. Some orchardists did not mention 'tidy' but used other words such as neat and hygienic, or spoke of well trimmed shelterbelts, mowing frequently and 'cleaning' up the bush, and so the researcher had to decide that all of these things supported the 'tidy' orchard idea. However, some orchardists talked of how they were not like those who had 'dead' strips from using Roundup and mowed their orchards every week, and so the idea of a 'tidy' orchard could also be developed from the negative comments about such orchards. Assigning supporting numbers to this idea was very difficult, and gives no indication of the richness and the complexity of the data. This also serves to explain why some of the numbers given in this report may well contradict those found in other places.

In this report a development of the data analysis took place when we considered what made a 'typical' farmer. By then considering the differences between management systems, we developed typical Organic, Integrated and Conventional farmers, who encompassed the qualities of the typical farmer and a bit more. This analysis was based on Weber's 'ideal types', in which a tendency to a particular type is used to describe that type. In other words, not all farmers will fit their type completely but may have some of the attributes (Gerhardt, 2004).

A further development of the interpretive analysis process (which is not apparent in this report because it covers the specific questions asked in the interview) involves the development of themes which arise out of the data as a whole and are linked to something the researcher may be interested in developing further. Such topics may also have some theoretical basis and/or be associated with the work of others. For example, what drives a participant to have a 'tidy' farm (or an 'untidy' farm), or how do people make meaning of their work and how does that relate to their identity. These topics should have direct links to both growing sustainably and to resilience.

Part C: Results

Chapter 3: Self Identification by Participants of their Work Role

Question: First of all I am interested in what you call yourself. When you are out and someone says, "What do you do?" what do you say?

Question: Could you tell me about what your work involves?

When asked what they called themselves nearly all ARGOS participants said they were farmers (see Table 3.1). It has been assumed that this includes both men and women in the couples interviewed as most wives/partners agreed. We have interpreted their agreement as an indication of their self-perception. A few of the women did, however, call themselves mother, teacher (4) and housewife. Some people said they were "farming" rather than "farmers", emphasising the activity of farming rather than the occupation. For those farming organically, the differentiation from other farmers was an important part of their identification. Two people felt that the location of the farm was important – one saying that they farmed in the Catlins and another that they farmed "down South". Another said he was a "fifth generation farmer", emphasising the time his family had been on the property. One of the managers said he worked for his parents and another person said he worked for the government!

Table 3.1: Identification of work role by ARGOS participants

Identification	Organic	Integrated	Conventional	Total
Farmers	10	11	11	32
Part/time farmer (Other business)	1	0	1	2
Farm manager (Mentioned organic)	2 (9)	1	0	3 -
Total	13	12	12	37

Often participants identified themselves as a particular kind of farmer. Table 3.2 gives the results of this categorisation. Most acknowledged that they were 'sheep and beef' farmers (a characteristics that confirms the classification of these participants as sheep/beef farmers within the ARGOS programme) though the 'beef' was sometimes identified as 'cattle' or 'bulls'. The participants who said they were arable, cropping or mixed farmers were nearly all situated in south or mid Canterbury, and some of these said they also had sheep. It is interesting that nine did not identify any animals or crops associated with their farming and those with 'finishing units' did not say they had lambs or cattle.

There are no apparent differences across the panels in how people identified themselves and what they did on their farms.

Table 3.2: Identification of type of farming involved in by ARGOS participants

Type of farming (not mutually exclusive)	Organic	Integrated	Conventional	Total
Lamb/sheep and beef/cattle/bulls, stock (sometimes deer, horses)	5	9	7	21
Cropping/arable	2	3	3	8
Mixed	1	0	0	1
Sheep only (apart from crop) - store lambs, breeding, finishing/fattening	2	2	1	5
Finishing unit	0	1	1	2
No mention of crops/animals	4	2	3	9

Chapter 4: Sheep/Beef Farmers: their Visions and Constraints

Questions: What is your vision for your future? (What do you want to be doing in 5 years time?)

How could this be achieved?

What do you think are the most important constraints or problems that might prevent you achieving this vision?

What do you think could be done to address these constraints or problems?

What is your vision for the future of your farm?

What ideas have driven this vision? (Where have they come from?)

How could this vision be achieved?

What are the main constraints to achieving this vision?

What do you think could be done to address these constraints or problems?

4.1 Vision

The responses of farm families to questions about their visions for themselves and for their properties covered a broad range of goals and objectives. The diversity of their response indicates the range of motivations that underlie management strategies on the farms that are participating in the ARGOS programme. Further evidence of these diverse motivations is apparent in the additional goals located throughout the interviews in the responses to questions not explicitly focused on vision. These further responses address specific aspects of vision (e.g., environmental, economic, or social) as they relate to questions on wellbeing and management more generally. In the following sections, the visions that were identified in the interviews are grouped according to their financial, social, ecological and personal aspects. This presentation reflects the relative frequency (from higher to lower) with which each aspect is identified by ARGOS participants.

4.1.1 Financial aspects of farm management

The most common element of the visions articulated by participants in the initial interview was that of financial expectations. This situation can most likely be traced to the essentially commercial nature of sheep and beef production in New Zealand. That is, since production is predominantly oriented toward the market as opposed to on-farm consumption (although the occasional participant would indicate that self-subsistence gained through diversified production and maintenance of a vegetable garden was a goal), economic returns from the activity are largely measured in monetary terms. Despite the importance of the financial aspects of production, it is noteworthy that their goals as well as their assessment (see section on economic wellbeing, below) of their own economic wellbeing are often limited to the maintenance of a positive cash flow. From the discussion in the interviews, there appears to be little awareness of or concern for comparative returns to investment or levels of risk relative to other economic activities. Financial aspirations identified in the interviews have been sub-divided into several categories including: financial improvement, productivity, investment in farm, move to retirement, alternative products, and good stock. Taken as a whole, there is little substantial difference among the sheep and beef panels in regard to the financial aspects of their visions.

Maintaining position

Oh I'll just carry on here doing this for a few more years, I suppose (man, Organic).

Despite the fact that financial aspects dominated the farmers' response to the vision questions, the most common perspective on vision (11, 8, 16 – N.B., these numbers reflect the case that some participants responded with similar sentiment to both the individual and

the farm oriented vision questions) was the desire to maintain the current economic situation of the farm and its household. Farmers who provided this response ranged from those who were satisfied and comfortable with their current economic situation to those who perceived substantial limitations in their ability to pursue investments that would enhance their economic position. This section has been divided into three sub-categories in order to account for the diverse optimism expressed by participants regarding a farm's, or a farm household's, current economic situation and the possibility of improving on the situation. The first sub-category includes those farmers who were generally satisfied with the situation and saw little need to change – except by means of enhancing their own skills and knowledge. This latter feature was somewhat more prevalent among the Organic panel, perhaps reflecting a situation in which the farmers are experimenting with new management practices. The remaining two sub-categories include responses in which farmers discussed their reactions, or ability to react, to outside influences. The first, resilience, was an active response with the purpose of increasing the capability of the farm to overcome negative stresses, both ecological and economic. The second, perseverance, was more an effort to put up with such stresses and survive as a farmer. The latter sub-categories appear most common among the Conventional farmers, who have indicated a more conservative commitment to established management practices.

Responses³

- Satisfaction with (acceptance of) existing situation (8, 4, 5):
If we'd expect to be here in five years time, we would do [the same]. Basically, the way the farm runs now is pretty stable. It's got quite a good equilibrium. We might have tried out a few different crops and maybe not. I wouldn't imagine, if we were still here in five years, that the farm would look very much different from what it is now... (man, Organic).
- Resilience (responding to negative impacts) of farm as vision (3, 4, 8):
To be a farmer, you've got to be an eternal optimist; otherwise you'd never bother, cause there's always something. What about the poor fellows in those flood areas. They're a whole lot worse off than what we're ever going to be. And most of them will survive it – amazingly enough. No, farmers are very resilient people (man, Conventional).
- Perseverance as basis of vision (0, 0, 4):
That's about all. You've just got to work away until you get it. [You] get what you want eventually, if you want it bad enough... (man, Conventional).

Financial improvement

Well, making money is number one (man, Conventional).

There was some apparent contradiction in the financial aspects of farmers' visions. At the same time that they professed a degree of commitment to and satisfaction with existing conditions, many (9, 7, 6) also expected that they would experience improved financial situations in the future. This improvement took several forms including higher financial returns, reduced debt, or growth more generally. There appears to be little difference in these responses among the panels. A small number of farmers also identified the means to achieve this improvement (investment) or the eventual target of the improved returns. (Some of the responses included in the 'move to retirement' category, see below, also imply the expectation of improvement in the existing financial situation.)

³ The citations provided in the 'responses' sections are selected in order to provide an indication of the type of response from which the analysis developed. As such, they should be interpreted as illustrative of a given category of response, but not necessarily as the definitive representation of that particular category.

Responses

- Financial return (3, 1, 4):
Man: For me, I'd be quite happy to be here and with a little bit of money left over. As to what we've got now, we haven't been farming long; so, we're just sort of starting it. Yeah, that's where I'd like to be. I don't know about you.
Woman: Yeah, same sort of thing: to be bit more financially secure than we are at the moment, to have improved various things around the farm that we've got in our minds that we want to do. Those things, and to have achieved those types of goals (Organic).
- Reduced debt (1, 3, 1):
Five or ten years' time? Well, hopefully, we will have lowered our debt, improved our production. We'll still be here (man, Integrated).
- Economic growth (3, 2, 0):
So, we're always sort of looking out for new ways to do things and make more money, I suppose. And keep the interest factor going, yeah (man, Organic).
- Investment (0, 1, 1):
Like, like in three years time, I would like to have more pasture redevelopment done on the farm and have my farm running at what I perceive to be a good economic working sort of system, generating enough so that I can do some things, get some off farm investments and do a little bit round this house – which is going to need to happen (man, Conventional).
- Farm income to support other demands (2, 0, 0):
I think it would be good from that point of view, financial and consolidating. But I also see the next ten years – maybe not ten years but maybe five – is going to be money going out for family things – house and education – but also expenses on the farm. It's sort of both. We want to be able to make as much [as we can] and consolidate (man, Organic).

Productivity

Probably to grow a lot more better grasses (man, Integrated).

Relatively few of the participants (4, 8, 1) associated increasing productivity with their personal or farm visions. This may indicate a limited desire to gauge their management on the basis of yield and production. Further evidence of a degree of hesitancy in this regard was evident in the low number of participants who utilised benchmarking as a means to assess their financial wellbeing (see below). That said, members of the Integrated panel appeared to be more cognisant of productivity as a factor in their visions. In particular, high yields were associated with good management practices, providing evidence of a farm's viability. As was the case with the categories 'financial improvement' (above) and 'investment in farm' (below), very few (1, 2, 0) of the farmers indicated their intent or desire to invest in productivity enhancing investment (in these cases either irrigation or land purchases).

Responses

- Vision equating yield with viability of farm (1, 3, 1):
Well basically, with sheep, we try to get as many lambs out of our ewes as we possibly can and then we fatten them to where we see the premium or what suits your country, and then sell all the lambs bar those that we retain. With beef, well, beef farming on this place is just fatten them as quickly as we can to give them weight and try to sell them on the premium parts of the year for cattle. That's basically what we do so that we can be a self-sustainable farm (man, Conventional).
- Vision of technology improving yield and management (1, 2, 0):
You know, we only had two irrigators trying to water 530 acres; where now, we've got three irrigators to do another five hectares a day. Over a week, we've done 35 hectares

extra. So, hopefully, our yield should go up with more water and keep our quality (man, Integrated).

- Vision of productivity limited by other factors (1, 1, 0)

Woman: But you have no great desire to increase your stock numbers hugely do you? Which is where I'd like to see ...

Man: Well, not really. Because all it does is mean more work.

Woman: Yeah and I mean he's quite right. I can see where he's coming from. But I see the challenge in farming is continually improving and getting more land (Integrated).

- Vision equating yield with proper management (0, 2, 0):

You're undervaluing your management strategies too, like the mowing, when to apply fertilizer. [My partner] thinks out of the square with some of his management issues and I think we get perhaps higher production than some people because he's thought a bit out of the square and applied some urea in a time when most people would say, 'God you won't get any result with that because is still heavy frosts' and things. But, you do it and it might take 6 weeks, but you get that response and that sets you up going into summer so that you can perhaps feed your stock 10 percent better and you're that much ahead of the ball game all the way through. I think that's a bigger issue than he thinks it is (woman, Integrated).

Alternative income sources

And so we're doing everything we can on farm to generate surplus income and we are doing a few things off farm to generate some additional money and we will probably cash those up and they would be the cash injections to build the house (man, Organic).

Many (7, 7, 5) of the farmers indicated that they included alternative sources of income as part of the financial aspect of their vision. Generally, these alternatives involved cropping activities and only occasionally other animals – for example, deer. In fact, several of the participants (located in the Canterbury region where there is access to irrigation water) considered themselves to be primarily cropping farmers and the animals were an alternative income source. Another alternative on-farm activity identified by two participants was tourism. Off-farm income, especially from a partner's employment, was also an important contribution to some farmers' financial visions. In many cases, alternative income sources were an element of a farmer's attempt to improve the farm's resilience.

Move to retirement

Well, at my age, in ten years time I'll have my feet up on a bloody beach somewhere (man, Conventional).

A number of farmers (4, 5, 4) discussed retirement as an element of their vision for the future. In every case, retirement was seen as a positive progression or reward following many years devoted to the strenuous activities of farming. The farmers who included retirement in their vision also indicated that farm ownership had a beneficial impact on their ability to realise this objective. Several sub-categories, which reflect the diverse expectations of retirement and of the farm's contribution to it, have been identified. For the most part, the inclusion of retirement in the vision discussion reflected the life cycle stage of the participant (whether retirement was considered to fit within a ten year time horizon) rather than a farmer's assignment within a particular management practice panel.

Responses

- Vision of active retirement (1, 2, 1):

Well, I'm 46 now and its still relatively young, but you know in a few years, 5-10 years time, I won't want to be doing quite as much as I'm doing physically and doing it a bit easier. So, I do have to think ahead and try and make the farm relatively easy care under the management system that I put in place (man, Organic).

- Vision of farm as family business (0, 3, 1):
My future? Oh, so I can retire or have the farm carry on. We bought it off Mum and Dad. I'm the second generation. I'm hopeful there'll be a third generation go through here. And just to have a good retirement (man, Integrated).
- Vision of farm as retirement income (3, 0, 2):
Interviewer: So how do you think [retirement] is going to be achieved?
Man: Oh there's probably two ways isn't there – seeing as I've got two kids that are not interested in farming? We're sitting on a block of land that's very valuable [if we] manage to sell it. The other way is: we've sort of independent lives anyway. So, whether we slow down and put a manager on or a share farmer on or something like that. There's all sorts of options (Conventional).

Good meat/stock

I suppose yeah it's nice getting the big money for things; but, it's always nice to go out and see good healthy sheep (man, Integrated).

A further element of vision that reflects on financial aspects (or, more specifically, the value of the farm's output) was the goal of maintaining good or healthy stock. Relatively few farmers cited this aspect specifically in response to the vision question; but, in each of these cases, it formed an important part of their management objectives. This category has been sub-divided according to the underlying rationales for maintaining good stock including its role as an indicator of good management, as a response to consumer demands, and as a product of 'Organic' management.

Responses

- Vision of good stock as indicator of proper management (3, 3, 2):
The condition of the stock overall: that's probably what we are watching all the time. We don't really talk about it much (man, Conventional).
- Vision as meeting consumer demands for quality (1, 1, 0):
When the chefs and other people are coming back and saying, 'Well, it's the tenderest and the tastiest.' So, that's a measure that we use (man, Organic).
- Vision as growing healthy product (2, 0, 0):
If he sells any lucerne to people for their horses or stock, [they] just love it because it's probably got better flavour. And they just lick the ground. They don't leave anything. And my horses are incredibly healthy (woman, Organic).

4.1.2 Social aspects of farm management

The second most common element of farmers' visions involved social aspirations. In these cases, the participants referred to their ownership of a farm as contributing to their personal wellbeing, that of their families or of society more generally. The lifestyle generally associated with rural life was frequently a feature of the personal vision of participants and of their family's wellbeing. As such it was considered an important reason for remaining in the sector. While the time spent with the family was often an important element of vision, the succession of children to farm ownership was cited relatively infrequently and most often as a preference or possible option as opposed to an expected action. This attitude indicates, perhaps, recognition of the disincentives associated with farming as an occupation. In those cases where succession was included in a farm household's vision, it was an integral component of that vision (see discussion of succession in Chapter 9). A sense of belonging to and needing to contribute to a community was also a relatively common aspect of vision. In some cases, this extended to a desire to promote the social sustainability of the farming sector.

Lifestyle and family wellbeing

The benefits of a rural lifestyle, especially its impact on the farm family, were the most commonly mentioned (10, 7, 10) social aspects of vision. Most frequently, these concepts were discussed in relation to questions on personal and family wellbeing, and rarely as a direct response to the vision questions. As such, these responses are included in this discussion to the extent that they provide insight to the farmers' stated visions. (A more detailed discussion of these elements of the interviews is presented in Chapter 9.) Three of the farmers in the Conventional panel did discuss lifestyle as an aspect of vision, but in these instances it was cited as an important element in their decision to change their employment situation – either to retire or to move to full-time farming. Two of these latter farmers also indicated that lifestyle provided a non-monetary return that should be included in the assessment of a farm's viability. The remainder of the responses among all panels involved either the advantages of farming (outdoor work, being one's own boss, etc.) or the ability to compromise the timing of work in order to engage in family activities. In these responses, it is apparent that lifestyle is part of the overall vision of what makes farming a desirable pursuit. The benefits recognised generally include references to less stressful work conditions and a family friendly environment that teaches responsibility, provides outdoor activities, and minimises exposure to negative peer pressure.

Responses

- Vision as enjoying rural lifestyle (3, 4, 2):
I guess the beauty of it is that every day is different. That's the real attraction to me, the fact that you can be inside or outside, doing whatever (man, Integrated).
- Vision of meeting family needs (4, 1, 5):
I mean it could be that the best way of making money here would be for me to be here by myself doing whatever it is and working all the time. Well, that wouldn't really pass the test. So the crop activity thing really is that [the family] can live the life that we want to and do the things we want to do when we want to do them. I think, for me anyway (man, Organic).
- Vision of family benefiting from lifestyle (3, 2, 3):
It's nice to live here. It's certainly a healthy environment to live in, great to bring up kids here. If we can get them outside, there's plenty of scope for them to get out and do things (woman, Organic).

Family succession as vision

Although the children have never been terribly interested in the farm, and we haven't pushed it at all ... You know, [our son] likes animals and is good with animals but hasn't shown any inkling to go farming. He may change his mind, with what he wants to do ... I think he more or less has to go farming or be on the land to have the time to do it [sport] (woman, Conventional).

Succession is frequently discussed as an element of the farmers' visions, although not in a majority of cases (6, 4, 4). Those who do address the issue of succession indicate that they would be happy if a child were to take over the farm in the future. On the other hand, these farmers generally claim that succession is a matter over which their children will have the final say. As such, they see the decision as a pragmatic one, involving either the interests of the child or the possibilities for greater income from other activities. In most cases, it is a son who is mentioned as the prospective heir to the farm.

Community service as vision

There's so many different levels at which you can look at it. If you go on a big circle, the farm isn't an entity – it's part of a community (woman, Organic).

Although not often a direct response to the vision question, the sheep/beef farmers commonly referred to their relationship with a 'community' as an important influence on their

management practices. (Again, this topic is included in this discussion to provide additional insight to the stated visions of the farmers.) This perspective contained a slightly different feature in responses from the Organic panel, with participants suggesting that the health and environmental benefits of their practices contribute to local and more distant communities. Across all three panels, communities were also perceived to be essential to the sustainability of farming as a lifestyle, providing support in a difficult situation. As such, their vision of farming involved allocating time and resources to participation in community events and activities.

Responses

- Vision of strong community (1, 6, 8):
It came about that we'd started to talk [with] our neighbours - we made a promise that we would always talk with each other. [My partner] got involved with a discussion group that came about the second time it [drought] came round (woman, Integrated).
- Vision of farm contributing generally to the health and environment that is enjoyed by local and more distant communities (5, 0, 0):
It's just good healthy crop really. [It's a] shame everybody couldn't do it. Be a healthier place to live wouldn't it really, 'cause you can smell the spray drift sometimes from other farms. It's probably ten miles down the road, a dairy farm, but you can still smell it in the air (man, Organic).

Social sustainability

Maybe sort of measure up against other groups in society, like other people working in different areas. I think stress is quite a big one for farmers. I talk to lots of my friends and lots of girls anyway think that their husbands are really terribly stressed (woman, Conventional).

Nine farm households (3, 0, 6) discussed issues that could be loosely categorised as relating to social sustainability. In this discussion, which was often introduced by woman partners, social sustainability was considered an obvious element of their visions. The farmers were not, however, convinced that it was realised given the existing conditions of production. The discussion of this topic included references to the need to make farming more sustainable (that is, more appealing to youth, less onerous in regard to labour demands) as well as the desire to measure the contribution of farms to local economies. The latter measure was expected to improve public perception of farming. The greater number of responses that came from the Conventional panel may be a factor of a more conservative outlook on farming as both an economic and social practice.

4.1.3 Ecological aspects of farm management

Seldom (3, 1, 0) did participants discuss environmental factors as a direct response to the questions about vision. This suggests that the majority of participants did not define their goals as being of an overtly ecological nature. Despite the absence of such perspectives in response to the vision questions, farmers' discussions of nature and their interaction with it (see Chapter 8 on Farming and the Environment) indicated that many did envision their farms as an element of the natural landscape and that it was their responsibility to care for or improve the potential of that landscape. In the majority of cases, care for the environment was associated with a more conscientious and careful use of chemical inputs, a perspective uniformly cited by the members of the Organic panel. Responses that placed the farm within the natural landscape did not, however, vary substantially among the panels. The concept of actively contributing to the health of the environment in other ways was a relatively infrequent element of vision as addressed in the interviews. Because the text coded for this topic largely comprise that coded in the chapters discussing environmental aspects of management, it will be treated in an abbreviated form here.

Controlling use of inputs

Well, I think we get caught up in a bit of a rat race sometimes. And we are very quick to grab technology and give it a good shake without sort of thinking of the consequences (man, Conventional).

A large number of farmers (including the entire Organic panel) suggested that one of the goals of their management practices was to control the level of chemical inputs – and, thereby, have a reduced impact on the environment. While this perspective was identified as a goal of management, it was only included by three (all members of the Organic panel) as a response to the vision question. More often, it was included in discussion of the environmental wellbeing of the property. It is notable that several of the Conventional and Integrated farmers, in giving this response, compared their practices to the excesses of chemical use they saw on neighbouring dairy farms. In discussing their decision to reduce chemical inputs, these farmers were also keen to assert that this was not a reflection of being a 'greenie' or of being sympathetic to that position. This assertion was shared by two of the farmers from the Organic panel who insisted that they had adopted Organic practices in order to realise the economic benefits.

Responses

- Vision of benefiting the environment through reduced input use (0, 3, 4):
We've got friends that are dairy farmers and [it's] incredible what they're putting on. It just makes you think. If they keep doing it, is it gonna get to the point that we've made a mistake? And you just can't turn a page and start fresh again (man, Integrated).
- Vision of Organic management as better for the environment (12, 0, 0):
I don't think there's an honest debate really about modern farming, partly because the traditional farmers have hijacked the debate because it's a big industry in this country. All the people who sell the fertilisers, all the people who sell the machinery, you don't get an honest debate about it; and it becomes more honest as these things like the fuel costs and fertiliser costs go up in price. It's just a question of time, starting now with the fuel. I'm sure they'll start to look much more favourably on the stuff that we're trying to do - which is just old fashioned mixed agriculture where you're trying to grow crops that suit the climate (man, Organic).

Farm in landscape

I'd like to see it [development of farm] happen sustainably, with the least environmental impact – the longest term, most sustainable impact there. And, hand in hand with that, it would be, for me, nice to see it go in with the ancillary developments of suitable shelter belts, suitable wildlife areas ... (man, Integrated).

Only one farmer from the Integrated panel identified this perspective on the environmental aspects of farm management in direct response to the vision question. In the above citation, he indicates that an awareness of the potential environmental impacts of his management practices tempers his development of the farm. Many other farmers (6, 5, 6) voiced similar recognition of their farms' role as an element of the environment by adopting practices (including planting natives, stream protection, and shelter belts) that had beneficial ecological effects or by acknowledging the need for better monitoring of water and soil quality. These responses differ from those identified as stewardship (below) to the extent that the farmers did not indicate that they were engaged in these activities for the benefit of future generations.

Stewardship

I'm only here to try and improve it for the next generation and I'm only a caretaker of it. I'm here to try and leave it in better order than what I found it and hopefully the next generation'll do the same (man, Integrated).

The concept of protecting or improving the land for future generations is a theme that was relatively infrequent in the interviews with the farmers. Only nine (2, 4, 3) included these

ideas in their responses, and usually in answering questions about their assessment of the environmental wellbeing of the farm. For most of these farmers, improvement was measured in soil quality or plantings of trees, both native and introduced, which was expected to contribute to the biodiversity on the farm.

Improving soil

It's always a conflict because the perfect ecology is a closed circle like in a rain forest, nothing is taken out. But we need to stretch that circle a little bit and make a business in there. So you've always got to be taking things out, so you've got to be responsible for putting things back in (man, Organic).

A small number of farmers (3, 2, 2) also discussed the need to improve the soil on the farm, although not necessarily in the context of stewardship. In this case, soil improvement was generally presented as a means to enhance the productive capability of the farm rather than caring for the environment, more generally. In their responses, these seven farmers emphasised the importance of Organic matter and soil biota for a healthy soil.

4.1.4 Personal aspects of farm management

A further aspect of farm management that was included as an element of the farmers' visions is labelled here as 'personal.' This category does not encompass the full gamut of aspects of vision that reflect personal benefit or perspectives (for example, much of the financial aspect of vision involves individual returns), but rather those aspects that do not correspond to any of the remaining sections. The first sub-category, time, could arguably be included in the financial section although it is not identified as such in the interviews. In the majority of cases where time was identified as an aspect of vision, it reflected either social expectations or personal health benefits. The approaches to farm management included in the section are indicative of an individual's attitude as she or he approached management or other important decisions. Being personally oriented, these perspectives can also be contrasted to vision focused on family, society or the environment.

More time

Five or ten years' time? Well, hopefully, we will have lowered our debt, improved our production. We'll still be here – farming with a bit less stress, going on holiday a bit more regularly (man, Integrated).

Several farmers in each of the panels (3, 3, 3) identified more free time and the chance to get away or go on holiday as an important part of their vision. Often, this aspect of vision was related to family situations with parents expressing either the desire to go on holiday with children or the belief that they would have more free time when children had left home. This vision was also closely related to the desire to improve the efficiency of the farm operation.

Approaches to farm management

The following features are discussed as they relate to vision and contribute to the approach of participants to farm management. Analysis of the coded text, rather than identifying specific goals or motivations of farm management, suggests the context within which an individual has formed a particular vision or approach to management. They appear relatively infrequently in the sheep and beef sector interviews, but are included in order to facilitate comparison with similar perspectives drawn from the kiwifruit sector. As such, the responses have been identified as belonging to the categories of 'experience based,' 'being in control,' or 'challenge driven.' The first is the most frequently identified among these aspects of vision and often reflected the farmer's (or farm family's) sense that much of the skill of farming involved getting to know a particular farm and the complexities of its management. The text referred to in this section is found throughout the interviews and several passages from the same interview may be included in different sub-categories.

Responses

- Vision based in experience, or farming as a craft (6, 6, 5):
I sort of believe, [if] you have a farm for thirty, forty years, you should actually learn something at the end of it. You don't do anything unless you try and make a decision yourself. It might be the wrong decision, but you can truly get better at it (man, Organic).
- Vision based on being in control (1, 1, 2):
As far as the farm is concerned, I enjoy trying to solve our own problems, and being able to go and ask people when we want to. I don't like, being told what to do (man, Organic).
- Vision based on being challenge driven (3, 2, 1):
You know, one of my motivations is being told you can't do something (man, Conventional).

4.2 Constraints to visions and management

Question: What are the main constraints to achieving your vision?

While interview participants listed a broad range of goals and motivations in their response to the vision questions, they were also very aware of limitations and constraints to meeting these. In the following sections, the constraints are categorized as emanating either from the physical environment, social relations, the economic situation, relations with the industry, or personal limitations. The constraints listed by the farmers are discussed in order of the frequency with which the general category of constraint was identified. As was the case with vision within the interviews, coding of constraints was not limited to the participants' responses to the constraint question. Often, factors considered to be constraints emerged in discussions of the farm map, suggestions for indicators of good management, or listings of animal life on the farm. Whereas the farmers readily recognised constraints to achieving their visions, they did not indicate that these were leading to the imminent demise of their farming enterprise.

4.2.1 Climate and physical environment

Aspects of the physical environment were the most commonly recognized constraints to vision among all the panels in the sheep/beef sector. The importance of biophysical constraints (relative to other limiting factors) appears to reflect the inescapability of their influence – and the perception among farmers that extreme conditions were increasing in frequency and extent. These constraints were indicted as a result of their potential affect on the health of stock, on the productive potential of crops, and the ability to diversify farm income. The majority of farmers had attempted to mitigate the impact of these constraints, although some admitted to compromising on mitigation practices which interfered with cropping patterns or involved excessive labour or capital inputs. It is notable that there were no discernable differences between panels regarding the importance or relative impact of biophysical constraints.

Climate and water

I was going to say climate. Why anybody would want to farm here, I have no idea (man, Organic).

Climate – drought and cold being the most commonly noted factors – was considered to have the greatest potential impact on the productivity of the farm. Drought was identified as being a dominant issue for farmers who were engaged in cropping practices, although it was also seen as negatively impacting on the availability of feed and stock health more generally. The growing use of irrigation to combat drought introduced the relative accessibility and quality of water as a related constraint. The other climate factor commonly mentioned by the farmers was that of cold weather which affected stock survival and future breeding potential and could limit the production of feed crops. Finally, there were several references to wind

and climate in a broader sense. There was no significant difference among panels in regard to the perceived vulnerability to climatic conditions.

Responses

- Drought as constraint (4, 5, 5):
Droughts, yeah. I can say that to you; but you just can't appreciate how tough that is on farmers. It's everything. What is that saying? It takes us as long to recover from a drought as the drought itself (man, Conventional).
- Access to water as constraint (3, 5, 3):
Water is our biggest [constraint]. It's very topical at the moment. There's no other thing that actually holds us back. I mean at the moment we do have water, a very limited supply (man, Organic).
- Cold as constraint (4, 5, 3):
If you poke your nose out on the road out there tonight, it's quite a strong, cold, south-westerly wind. That's a killer here in the springtime. A real killer (man, Conventional).
- Wind as constraint (2, 2, 2)
Like last year, we got 100 mm of rain nearly in February but by May, because it didn't rain again after 3rd March until 12th May, it was looking nearly back to brown again, because we got a lot of wind in April particularly. And we were starting to get a bit tight for feed (man, Integrated).

Topography and soils

Its fairly steep but you get used to it ... (man, Organic).

For the sheep and beef farmers, topography was an issue to the extent that it either limited the area that could be cropped or it impeded accessibility to areas of the farm. Because it is a natural feature that is difficult to change, those who cited topography as a constraint indicated that they had learned to account for the difficulties it imposed. The fertility and texture of the soil was often associated with topography. Generally this was also an issue for cropping activities, where fertility could limit production and soil structure could limit a farmer's ability to apply irrigation.

Responses

- Topography as constraint (9, 7, 7):
Oh, the terrain. Obviously, that's the biggest factor by a long way really (woman, Integrated).
- Soil as constraint (5, 4, 5):
We've concentrated on the better ground. A lot of that higher ground, it's high and steep and rocky and really this area was subsidising the hill. And that's what happens to a lot of hill country (man, Conventional).

Farm structure

We used to go to auctions and buy up all the old cheap netting so we could run round the boundary fences and stop [the sheep from escaping] (man, Organic).

The structure of the farm was frequently (8, 8, 8) included in discussions of vision and constraints. (Further discussion of farm structure can be found in the report on the farm sketch maps created during the interviews (Read, Hunt and Fairweather, 2005).) As an existing constraint, structure was predominantly an issue for those who had more recently assumed control of a given farm, especially if they were intent on altering management practices (e.g., to Organic production or rotational grazing schemes). Many in this group noted the need for such elements as secure fencing, realignment of paddocks, and improved access routes. For more established farmers, development of infrastructure was something that had been accomplished in the past and contributed to the current ease of management on the farm. Most importantly, a well-structured farm facilitated access to all areas and

movement of stock between paddocks. For the latter group, structure could be a constraint to the extent that it involved maintenance or it was being adapted to recent conditions or objectives (e.g., planting trees).

Pests

Another thing that affects my management ... is pest control (man, Conventional).

The farmers identified a diverse range of pests (most commonly including insects in pasture, crops and stock as well as other disease organisms) as constraints to their visions and management more generally. Less frequently (1, 3, 3), animals such as rabbits, possums or non-native birds were also identified as pests. The latter group were often seen as invading the farms from neighbouring areas of bush. The final constraint in this category was that of plant pests, or weeds, which were only identified by farmers from the Integrated and Organic panels.

Responses

- Pests as constraint (3, 4, 5):
Grass grub, which is a huge problem right throughout NZ really, is quite a problem in this area and in Northern Southland (man, Conventional).
- Weeds as constraint (2, 2, 0):
There was also a weed named burdock. It's a terrible thing. Absolute shocker. And also thistle. This block out here we purchased about eight years ago, I suppose. And I knew that there was thistle but I didn't know it had burdock. And with the windrows you couldn't get in to spray it, you had to do it all on foot (man, Integrated).

4.2.2 Constraints associated with social relations

Following constraints posed by the physical environment, the sheep and beef farmers were most likely to identify constraints on vision and management that are associated with social relations. Their responses indicated four distinct sources for these constraints – the state, providers of outside knowledge, neighbours, and the needs and demands of family members. Only the first two of these sources are cited by (just) over 50% of the participants suggesting that social constraints are not recognised as having as strong an impact on vision as those derived from environmental conditions. Where they were recognised as constraints, the farmers identified little means of mitigating their impact. Much as in the case of biophysical constraints, farmers persevered in the face of the social constraints. It is also notable that the identification of constraints was relatively homogenous across the management panels.

State

Taxes and things like that. So, yeah, there are quite a few external things that can really impact [on the farm] (man, Organic).

Many farmers recognised the state as having a strong negative impact on their visions or management. In particular, they suggested that economic policies were often biased against the agricultural sector. While the relative importance of this constraint reflected, in part, the high value of the New Zealand dollar at the time of the interviews, it also was indicative of a shared dissatisfaction among the farmers with a market that dictated the prices they received for their product. In addition, a few farmers cited regulations enforced by local councils, especially as these related to environmental conditions or access to irrigation water. A further aspect of state activities involved its macroeconomic policies which were perceived to affect both the marketing of product and the cost of inputs.

Responses

- Economic policies/conditions as constraint (7, 7, 7):
We can fix [prices] for the bulls. We've done that the last two years. But we haven't done it this year because I feel the dollar's too high at the moment to do anything (man, Integrated).
- Regulation of water access as constraint (2, 3, 3):
It really hasn't got practical yet, I don't think. The district council has really clamped down on dairy farms but the sheep and beef, they haven't really got there yet. I think when they get round to that, we'll have more information. Hopefully, they'll see sense. 'Cause, I think it's got to be balanced. I mean, we could have our whole country as a reserve (man, Conventional).

Off-farm sources of knowledge

So again, good information is absolutely critical actually. It'll cost you heaps when you don't [have it]. It's really, really critical (man, Integrated).

This constraint relates to the perceived lack of sufficient and accurate outside knowledge and focuses squarely on the activities of outside research interests. Among those who identified a lack of research (or information more generally) as a constraint, a primary incentive for participation in ARGOS was the expectation of greater insight to their farming practice through monitoring and recommendations. The second set of responses, labelled as the lack of a complete knowledge of farming, involved a range of responses that generally indicated an active pursuit of more complete information or a more thorough understanding of agricultural processes. Farmers voicing this deficiency claimed to utilise a wide range of experts as advisors on various aspects of the farm. The final category in this section included those responses that indicated scepticism in regard to the value of information received. Often these farmers suggested that information they received – whether from company representatives or from research organisations – was influenced by commercial or other interests. This was especially true in the case of organics according to one of the farmers in that panel. There are, however, no apparent differences between the panels related to these responses.

Responses

- Lack of research as constraint (3, 3, 4):
We're going to put it [organic fertiliser] on some linseed we're growing and that is supposed to help convert the minerals that are in the soil to make them available. I'm going to put it on. I don't know whether it's going to do any good or that but I want proof that it's done what it's going to (man, Organic).
- Lack of complete knowledge as constraint (2, 4, 1):
I discovered [part of] taking over is putting your stamp on things. It's OK to do things and seek to improve things. So we are getting in a farm advisor to bring in some new ideas, because I feel we have thought about what we are doing as much as we can and we need some other input (man, Conventional).
- Questionable advice as constraint (2, 2, 4):
There's all sorts of things - like your drench. There's so many things about drench resistance and all that sort of stuff, it gets confusing. You've got information from this drench company and that drench company and there is not an independent body that gives you accurate information that's sort of divorced from actually selling anything (woman, Integrated).

Neighbours

A limited number of farmers recognised the activities of neighbours as constraints to their vision and management. The constraints imposed by neighbours involved either trans-boundary effects (e.g., the drift of chemicals or encroachment of weeds from neighbouring areas) or the perceived need to conform to social assessments of good or appropriate

management practice. The first aspect involved developing strategies to mitigate the impact of the encroaching constraint through either physical means (shelter belts) or political actions (consultation with regulatory organisations). In regard to the latter aspect, farmers suggested that they experienced some limitations on the practices that they were able to employ or to avoid as a result of the tendency to 'look over the fence.' The relatively infrequent identification of neighbours as a constraint among members of the Conventional panel suggests that, by employing practices that conform to those common to their region, they are less likely to be challenged by assessments from the neighbourhood.

Responses

- Transboundary effects as constraint (4, 3, 0):
They've been doing some spraying and we're not supposed to have chemicals coming across the fence (man, Organic).
- Neighbours' assessments as constraint (2, 2, 1):
Everyone looks over the fence to see if you're doing any better or worse, but it's an indication, I suppose, of how your own stock are looking sometimes (man, Conventional).

Family demands

Sometimes communication between your parents [is difficult to manage]. You know, the generation gap and just new ideas (woman, Conventional).

A relatively small number of farmers (0, 5, 5) cited family relations as constraints on their farming practice and their vision. The factors which acted as constraints were evenly divided between issues related to inheritance of the farm (for example, disagreements with parents over management or with siblings over money) and those related to the demand that children placed on time. There is no apparent reason for a lack of this constraint among the Organic panel, although it may relate to lifecycle differences between panels.

4.2.3 Economic constraints

The farmers listed a number of constraints on their visions that were associated with economic aspects of management. Generally, these constraints were not seen as limiting the overall viability of the farming enterprise. By contrast, economic constraints were described as affecting the flexibility of management and the ability to engage in non-farming activities. More specifically, economic constraints were seen to influence the amount of time available to members of the farm household to the extent that costs inhibited investment in labour or efficiency improving technologies. Relatively few farmers (see 'Financial Factors' and 'Land' below) associated economic constraints with farm productivity or return. There was also little difference between the responses provided by the management panels, except for the apparently lower demand for labour on the Organic farms.

Labour

We can't get labour at the right times to do the jobs we want (man, Organic).

Access to labour and the capabilities of labour were identified as constraints in all of the panels, although it appears to be more of an issue for farmers employing Conventional and Integrated practices. Many farmers saw a need for additional labour to relieve time constraints and to allow them to get away from the farm. Several farmers acknowledged the assistance of parents or other family members in providing the additional labour. (These were obviously not the same farmers who identified parents as constraints in the above section.) Others indicated that the cost of hiring a person full-time prohibited them from seeking the help they needed or desired. For those that were able to hire labour, either as contractors or full-time employees, the capabilities of those who were hired can be cause for concern. Some of the farmers suggested that the latter situation was a matter of learning appropriate skills for managing people, whereas others gave examples of pure incompetence. That few Organic farmers discussed labour in reference to their constraints

suggests that the structure of the Organic farms (e.g., size of operation, life cycle situation of farm household, etc.) was such that labour was not a problem for them.

Responses

- Need for labour (4, 7, 7):
Yes, if we were in a better position financially, time wouldn't be a constraint because I'd just get an extra staff member and then I'd have more time. But, that's not going to happen for the next two or three months anyway. I'd still replace the guy that's left, but it won't be till October, which means that I just have to start earlier in the morning which won't hurt ... for a while (man, Conventional).
- Capability of labour (1, 4, 3):
I had one contractor [make hay] and I thought, "Oh, that's the way it's done." And then I got a new one last year and, oh my goodness, I could live with this and eat it myself. It was just chalk and cheese since I'd had a rough contractor ... (man, Integrated).

Time

It's just hard to fit [in] everything. The number of jobs you have is always more than the time you've got to do it in (Organic).

A constraint closely related to that of labour and the demands of family was discussed as a lack of time by a moderate number of farmers (5, 6, 4). In the majority of cases, this response included a complaint about the constancy of work on the farm, leaving little time for other things in life. Two of the farmers suggested that the time demands of farming diminished their enjoyment of the rural lifestyle. The other factor that increased the demand on farmers' time appeared to be the diversification that was a large part of their vision (see 'Alternatives', above). As such, the desire to have diverse income sources appeared to be mostly a response to the economic realities of farming rather than a preferred mode of operation.

Financial factors

Well, if anybody's got lots of ideas, you're short of money aren't you? You don't need many ideas to be short of money (man, Organic).

In addition to labour, several financial factors were identified as constraints. In none of the cases were these factors acknowledged by a majority of farmers within a particular panel (N.B., some interviews contained responses that were coded in both of the sub-categories). The farmers included in this section appear to share more immediate issues related to financing the management of their farms. For example, those who cited limited capital as a constraint often claimed to experience high debt loads as well. Those citing costs as a constraint were likely to be faced with the opportunity for a high cost investment such as irrigation systems or land purchases. This suggests that, while none of the farmers claimed to participate in an extremely buoyant economic sector, they managed their finances so as to realise a sense of relative security.

Responses

- Limited capital or income as constraint (5, 4, 3):
Man: It was very difficult when we first came here. Financially, we were right at the top end of our limit. A couple of banks wouldn't even look at us because of the risk factor.
Woman: It's very hard to get into farming from nothing, you know. If you haven't got a parent that you can buy into a farm through, just to get the capital to get started is very, very difficult and increasingly so, I would imagine (Organic).
- Increasing costs as constraint (0, 3, 3):
There's been a big irrigation scheme put up. I think it was \$2, 000 a hectare just to join it [and] nearly \$600 a hectare annual fee for your water. [For] us to do 50 hectares is a \$100,000 joining fee, up to [\$]30,000 a year, which we worked out was nearly 500 lambs

a year it's going to cost, just to run it. That's just to buy the water. We would have to get the water out through pumps or diesel, put fertiliser on and crops in the ground and ... (man, Integrated).

Land

Like for us to buy this place here it's just ... Land prices are stupid (man, Integrated).

Several (2, 4, 7) farmers noted that the availability of land, and high land prices in particular, posed a potential constraint to farming. The apparent variation in the response according to panels is somewhat misleading to the extent that a majority of the references concerned farming in general (i.e., the impediment to beginning farming posed by high land values). Perhaps a more telling difference was the mention of improving the scale of production which occurred only in interviews with Conventional farmers (albeit in only two instances). Other cases where land was viewed as a constraint on a given participant's vision involved the impact of the lack of land ownership on access to credit.

4.2.4 Constraints associated with the meat processing industry

A fourth category of constraints that are found in the interviews is that specifically related to participation in the meat processing industry. Constraints that were included in this category are largely limited to the Integrated and Organic panels, the members of which have experienced industry initiated controls on management practice. As such, the responses can be divided into two sub-categories: those related to the regulatory aspects of audit systems and those which made Organic production more difficult. Issues related to the marketing of meat products are generally perceived to involve macroeconomic or other political conditions as opposed to the actions of the industry.

Audit

Only eleven participants, the majority of whom were members of the Organic panel (7, 3, 1), identified audit as a constraint. The low level of this response outside the Organic panel most likely reflected the relatively minimal experience that individuals have had with audit systems. Among the Organic farmers – who must all meet compliance criteria – the rigidity of Organic production standards was perceived as a limit to their flexibility in terms of management. In addition, the documentation of practices was often seen as a significant time constraint. The Integrated growers who cited the effects of quality control standards described them as an additional challenge and demand on time that was well compensated by the promised access to a more exclusive market. Some of these farmers also indicated that the audit system was increasing their awareness of the social and environmental impacts of their management practices. The only Conventional farmer included in this section complained about regulation of farming practice more generally as excessive restrictions imposed by non-farming – and, thus, less aware – bureaucrats.

Difficulties of Organic production

It's this whole organic thing, I think. When you take a farm that's been worked conventionally, there's so many different practice methods and it takes time for me to get a handle on it. The farm has to change. We're still doing that (man, Organic).

Related to the constraints imposed by meeting the documentation requirements of Organic certification were a myriad of factors which the Organic farmers identified as making their farming system more difficult than conventional sheep/beef production. Eleven of the Organic farmers suggested that they faced a more difficult path to success than their Conventional or Integrated counterparts. For the most part, the Organic farmers argued that this constraint reflected the relative lack of knowledge and information available for those looking to pursue Organic management. Specific barriers to Organic production included the lack of funded research, the need for new technologies or input choices, and the uncertainty of continued compensation from the Organic market.

4.2.5 Personal constraints

An additional aspect to the list of constraints on farm visions and management involved personal limitations – ranging from issues of health to those of skill. The health concerns of the farmers and their partners largely involved dangers associated with the physical nature of farm work with no specific mention of the health effects of agricultural chemicals. Lack of sufficient (or complete) knowledge of all aspects of meat and, in many cases, crop production was cited as a constraint by a small number of farmers as well. For Organic farmers citing this constraint, it was closely related to their perceptions of the difficulties inherent to Organic production (see above). Other factors that contributed to a perceived lack of skill included relatively recent adoption of farming as a profession or the sense that intensification had altered traditional management practices.

Responses:

- Health as constraint (3, 7, 1):
Man: The biggest thing that's going to stop that would be me. I mean, I've had a little bit of back trouble. [If] for some reason I pack it in, the whole thing would stop.
Woman: That's always something we have forefront of our mind: making sure the farmer's health is sustainable. It all pins on that (Organic).
- Lack of skills as constraint (5, 2, 4):
Your soil is your starting point. You're not going to get those good results until that soil [improves]. The country's sort of a wee bit harder and we're in a very ... dry area so you got that against you. But, it's just improving those soils. There's too much variation between fertiliser reps. One'll tell you one thing and [another will] tell you something else. And for us who don't know, who do you believe? That makes me wild, because all you want to be doing is the right thing (man, Organic).

4.2.6 No significant constraints

There's no restraints. Yeah. I love farming. I really enjoy developing land (man, Conventional).

A number of farmers (5, 2, 6) indicated that they experienced no significant constraints to their vision or management. In some cases, this reflected a general sense of achievement and satisfaction with the existing lifestyle and economic situation. Other farmers argued that they could not foresee anything that would interfere with the general progress on their farm – its productivity, its ease of management, etc. Finally, several farmers indicated that their enjoyment of farming was such that they could easily deal with any situation that others might consider a constraint. For the farmers who gave such responses, the rewards of managing their farms well and the expectation of meeting their aspirations to be good farmers diminished the impact of any possible constraints on farm management.

4.3 Comparison of vision and constraints across management panels

The visions maintained by the sheep and beef sector households who are participating in the ARGOS project were remarkable for their similarity. In other words, it is difficult to discern significant variation among the management systems on the basis of the visions for the future of the family or the farm. Rather, the majority of the perspectives regarding vision appeared to reflect a stoic response to the relatively stagnant meat production sector. In other words, those farmers who continued to participate in the sector did not expect a rapid or precipitous change in the returns for their efforts. For the most part, at least among those participating in the ARGOS project, the sheep and beef farmers appeared relatively content with their current situation to the extent that it provided a reasonable economic return while continuing to meet desires for a less hectic and safer lifestyle within a comfortable community.

The aspects of vision in which it was possible to distinguish some differentiation among the panels largely indicated the extent to which a farm household was either content with or willing to alter its management practices. For example, as a group, the Conventional panel projected a more conservative perspective on management and the lifestyle of farming more generally. This conservatism was indicated in the higher level of response from this panel which represented their vision as maintaining the farm and persevering in the face of climatic and economic hardship. Similarly, the Conventional panel appeared to value what they described as a more traditional rural community to a greater extent than the other panels. By contrast, members of the Integrated panel were more likely to identify an increase in the productivity of their farm as part of their vision. Members of the Organic panel, for their part, emphasised the distinctive nature of their management practices.

The overall lack of differentiation among the visions discussed by participants in the interviews was similarly evident in their identification of constraints to those visions. The uniform identification of biophysical constraints was not surprising given that the majority of farms are located in locations subject to some sort of climatic extreme (especially cold weather and drought). It further suggested, however, that the adoption of any of the management systems included in the project would offer little advantage in mitigating the impacts of environmental factors. The responses of each panel citing social and economic constraints suggest that the farmers also inhabited and negotiated similar social environments. In these cases, slight variation was apparent in the lesser extent to which members of the Conventional panel perceived neighbours as a constraint and those of the Organic panel viewed family as affecting their visions. The response levels for each of these constraints were low for all panels, however, limiting the significance of any differences. Of perhaps slightly greater importance was the relatively low incidence of labour among the constraints identified by the Organic farmers which may indicate their lower reliance on hired labour or that they are in a more settled labour situation. In reference to relations within a particular sector of the meat producing industry, the Organic panel was much more likely to cite constraints, reflecting their greater exposure to systems of audit as well as the difficulties inherent to Organic practices. Finally, differences among panels in the number of responses stating that no, or only minimal, constraints were experienced suggests that the members of the Integrated panel (with only two members providing such an answer) were less content with their current situation and experienced more limitations to their visions than did their counterparts. This final observation, like those on differences in social and economic constraints, may be of limited significance due to the relative low frequency of this response in the interviews as a whole.

Chapter 5: Map Analysis

Question: Could you draw me a mind map/diagram/sketch of your farm? It doesn't need to be geographically exact. It should contain all the things/features/elements/parts that are important to you and the farm, and impact on your management of the farm.

5.1 Introduction

As a part of the first round of interviews all respondents were asked to draw a map (or alternatively in some cases a 'picture') of their property illustrating the things that were important for the management of their property. It was stressed by the interviewer that these could be positive or negative features, and that geographic exactness was not required. This technique has been adopted from a group of action research methods frequently used in the field of rural development (Berardi, 1998: 439). In the context of the ARGOS program, the key feature of this family of methods is that while the field of research may be externally imposed, in this case by researching sustainable production systems, the aim is that the categories of information and the criteria for judging their importance within that field are determined by the respondents and not the researcher. This summary report presents an overview of the findings of the analysis of these maps. A more in-depth report, including statistical analysis of the data, is available separate to this report (Read, Hunt and Fairweather, 2005).

5.2 Methods

The methods used to analyse the maps are known as mixed (Rose, 2001: 202). They entailed, firstly, content analysis. Maps were examined and the occurrence of features recorded in a spreadsheet. This was not done through a purely visual interpretation alone. The transcripts of the discussion which occurred while the maps were being drawn were read in conjunction with the visual examination of the maps. This was often necessary to identify features which had been drawn on the map.

In addition to reading the transcripts in conjunction with the visual analysis of the map, the text of the transcript was coded using the features which had arisen from the visual analysis. This discursive analysis provides the means of assessing the importance of features and their interrelationships, as frequencies of occurrence cannot be interpreted to directly imply importance. In Rose's words, 'content analysis is a technique the results of which need interpreting through an understanding of how the codes in an image connect to the wider context within which that image makes sense' (Rose, 2001: 65).

The third method used to analyse the data was statistical.

5.3 Findings

Table 5.1 provides the raw data resulting from the content analysis. The brief discussion which follows has been organised under subheadings determined inductively through the process of analysis.

Table 5.1: Tally sheet of sheep/beef map features

Category	Organic (n=13)	Integrated (n=12)	Conventional (n=12)	Totals
Spatial organisation	44	36	42	122
Boundaries	11	11	11	33
Blocks	8	9	8	25
Paddocks	8	6	9	23
Fences	7	6	9	22
Tracks	3	3	4	10
Grazing	2	0	0	2
Other	5	1	1	7
Wind	11	11	15	37
Shelter trees	9	7	7	23
Problematic winds	2	4	5	11
Prevailing winds	0	0	3	3
Buildings	19	16	20	55
Houses	10	9	11	30
Other buildings	9	7	9	25
Transport	12	10	13	35
Roads	9	9	10	28
Airstrips	2	1	1	4
Bridges – external	1	0	1	2
Driveways	0	0	1	1
Social context	8	13	9	29
Neighbours	2	6	8	16
Other	6	7	1	13
Other biota	11	10	16	37
Crops	4	5	5	14
Forestry	6	3	5	14
Trees – aesthetic	0	2	4	6
Gorse hedges	1	0	2	3
Landscape morphology	21	20	13	54
Slope – terrain	7	9	7	23
Wet land	3	2	3	8
Aspect	3	0	1	4
Other	8	9	2	19
Climate/weather	4	5	2	11
Water	28	30	26	84
Rivers	8	7	6	21
Irrigation	5	6	5	16
Ponds	3	4	3	10
Pump	2	4	3	9
Water Sources	2	3	4	9
Dam	3	1	3	7
Well	2	2	1	5
Water races	2	1	1	4
Other	1	2	0	1
Biotic context	8	15	12	34
Soils	4	7	5	16
Bush	3	3	3	9
Manuka / gorse	0	2	3	5
Weeds	1	2	0	3
Other	0	1	1	1

Category	Organic (n=13)	Integrated (n=12)	Conventional (n=12)	Totals
Stock management	21	22	16	59
Stock yards	9	12	7	28
Shearing shed	6	3	7	16
Laneway	3	4	0	7
Animals	2	3	1	6
Silage pit	1	0	1	2
Neighbouring buildings	1	0	5	6
Other features	1	2	1	4
Total features	189	188	191	568

5.3 1 Spatial organisation

Spatial organisation of farms was depicted on maps by boundaries, paddocks, fences and tracks. Boundaries were the most commonly noted feature for all production types. In fact, in one instance they were practically the only thing noted! (See Figure 5.1.) Despite its simple appearance, Figure 5.1 emphasises the importance of boundaries to this farmer because of the neighbours, because a major road runs through his property and because the altitude of the upper boundary meant that snow was more likely to fall there. Boundaries were described by one Integrated farmer as being the limit of what they own and administer.

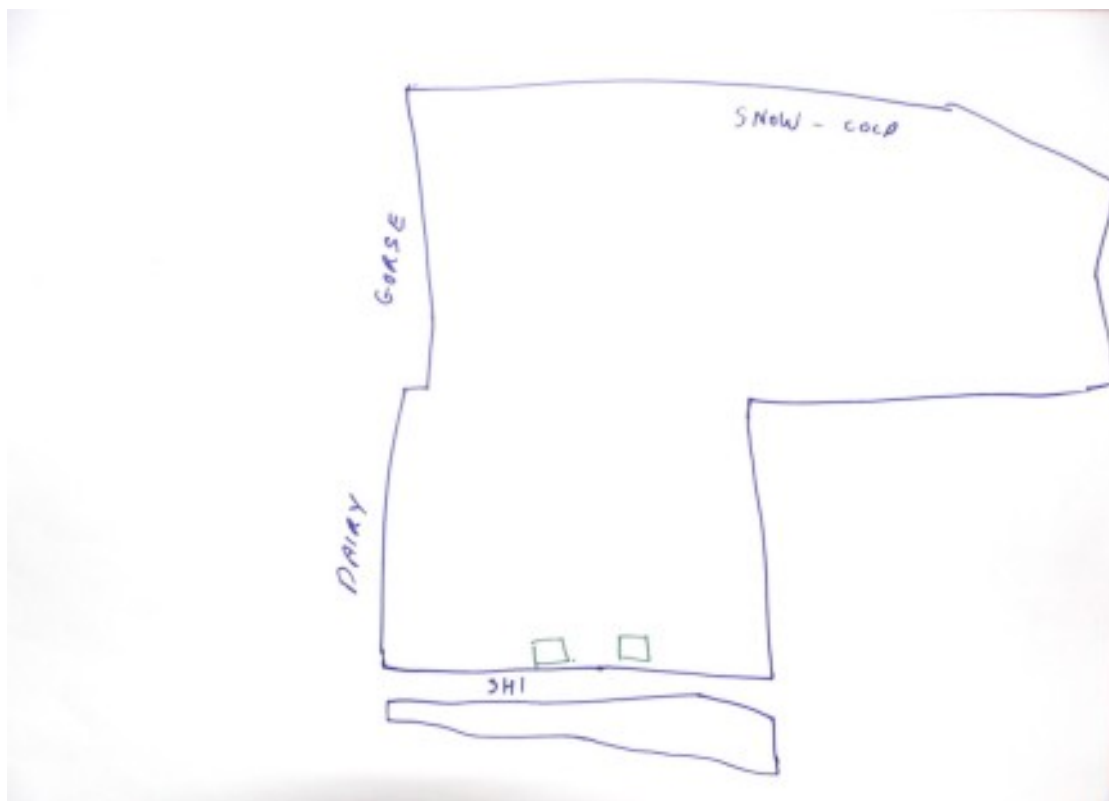


Figure 5.1: A map with boundaries as the only important features

The material relating to paddocks mainly referred to their size or number; to the reasons for their size or layout; and to their names. Clearly the number of paddocks on a farm is likely to have some relationship with the land area of the farm. Paddock shape and dimensions were determined according to a number of criteria such as adaptation to landscape features, the need for shelter and the employment of irrigation. Farmers also spoke of a need to reduce

paddock size, if they had not already done so. More farmers spoke about their paddocks rather than drawing them on their maps because of their complexity and numbers. Tracks provided access through the farm. They differed from 'laneways' (see below) in that laneways were tracks or roadways internal to a farm, onto which paddocks, yards, and other facilities open, as opposed to tracks which passed through paddocks.

5.3.2 Wind

Shelterbelts were a common and clearly important feature for many respondents. The material on shelter contained a strong aesthetic element both on a broader scale and in terms of the species used, while shelter trees were obviously intended to provide protection from wind. Prevailing winds were reported but little was actually said about them. Opinion was fairly evenly divided over southerly and south westerly winds, and nor'westerly winds as problematic and this was related to a farm's location.

5.3.3 Buildings

A wide range of buildings were drawn on the maps: sheds, workshops, haybarns, grain sheds, hay sheds, implement sheds and machinery sheds. Twenty nine out of 37 respondents clearly noted a house on their map, and a further respondent spoke about it without including it on the map. Often it was a female partner who made sure the house was drawn on the map. For example, Figure 5.1 was drawn by the male farmer. When his wife saw the map she noticed that he had not drawn a house prompting her to add the two houses, one being where her husband's parents lived. A number of maps, in fact, showed more than one house on the property. Discussions about houses followed three distinct patterns – the value of having the house at the centre of the farm, the expense of the house, and the house as a home and an aesthetic environment.

5.3.4 Transport

One of the striking features of the farm maps was that 23 of the 37 farms were either bisected by a public road, or existed at more than one site. In most instances the roads were part of the broader spatial organisation of the farm and were strongly associated with boundaries and with shelter. They were, in fact, often the first feature drawn. Four farms, all in hilly areas, mentioned having an airstrip.

5.3.5 Social context

The major component of the maps that reflected the social context was the references to neighbours. It is notable that the comments made about neighbours depicted them as being undesirable and the cause of problems. However, it is in regard to the broader social context that the most striking difference between the panels arose. Three of the organic maps reflected a sense of connectedness with a broader social world in a different way from that demonstrated by any respondents from the other panels, for example, by adding a reference to the consumers of their products.

5.3.6 Other biota

Some of the ARGOS sheep/beef farms could more accurately be described as cropping or arable farms. As a consequence, the range of crops reported was extremely wide, particularly so for the Organic farmers. Crops were clearly organised and limited by spatial and biophysical factors. The number of crops possible per year and the process of succession and rotation were variable depending on the crop and the farm location.

The practice of planting forestry blocks was common to all three management systems. It was not, however, evenly spread across the geographical locations there being no forestry reported on the Canterbury plains sites of Leeston/Dunsandel, Rakaia, or Ashburton. At the other extreme, all four farms in the Waimate area reported some forestry. It is likely that

there is a relationship between topography, the potential or otherwise for alternative uses, and the venture into forestry. Trees planted for pragmatic reasons were clearly appreciated for their aesthetic appeal, but trees were also planted for aesthetic reasons.

5.3.7 Landscape morphology

While a wide range of morphological features were reported or recorded generally in a purely descriptive manner. Thus the proximity to the sea and the presence of terraces, cliffs, slips, under-runners, and mine tailings on the property, could be seen as localised characteristics of the place which, to a great degree at least, are taken for granted landscape features. However, some aspects of landscape morphology were associated with more descriptive responses from the participants and these were slope/steepness, hills, flat land, or “flats” and wetland.

5.3.8 Climate - weather

While weather was noted as an important feature by a small number of respondents, comments made about it related closely to geography – for example, cool winters and the propensity for summer drought or the problems of snow, wind and rain during lambing.

5.3.9 Water

Rivers, creeks and streams were commonly mentioned and recorded across all management types. Again, geographical factors seemed to play a much more significant role in the importance of these waterways than the management system. In most instances the rivers were not characterised in any way, they were simply landscape features.

A range of water sources were mentioned. These included water schemes, dams, creeks, rivers, a lake and ground water supplies, both springs and bores. It is interesting to ponder the distinction between ‘ponds’ and ‘dams’ (see below). It would seem that both were substantially artificial. However, ponds seemed to have a broader range of functions than dams, including stock water, irrigation and duck shooting. They also seemed to have an aesthetic function, often having trees planted in close proximity. Dams were used as a means of storing water for both irrigation and stock. The sources of water for these dams included springs and water pumped from other sources. A number of respondents commented on the use of pumps to extract water for irrigation. Both diesel and electric pumps were used, taking water from wells, water races, rivers, streams and dams.

Irrigation was not featured on the maps of the Southland and Otago farms, but it was a feature reasonably evenly distributed across all three management systems in Canterbury and Marlborough. This geographic distribution most likely relates to varying combinations of topography, climate and the availability of water, which all impact on the range of production opportunities.

5.3.9 Biotic context

The biotic context of farms was referred to in mentions of soil, bush, scrub and weeds on maps and in the conversation during the map drawing. There was clearly a strong sense of agreement across all three panels about the importance of the soil fertility to productivity. This can be summed up in the statement made by an Integrated farmer who said, “Everything revolves around the ground - the dirt - what you put in from year to year ...”. Soil types were generally divided into “heavy” clay based soils and “light” silt based soils. Both had benefits and constraints.

The presence of bush on their property was not problematic for any of the farmers. Those who felt positively about the bush on their land, in the main, demonstrated an aesthetic attachment to it. Apart from the mentions of manuka, the Integrated and Conventional respondents portray scrub in a similar manner – as a problem.

5.3.10 Stock management

There were many references on the maps to things related to stock management. Despite the fact that the farmers interviewed all managed some animals from the range of sheep, cattle and deer, most of the discussion relating to the maps had to do with sheep. Even so, sheep were only mentioned directly on one map and few farmers actually drew sheep on their map. Laneways on a farm, whilst being an aspect of spatial organisation, were primarily a means of livestock management. Three sorts of stock yards were reported or drawn: sheep yards, cattle yards and stock yards. Shearing sheds (or woolsheds), along with the house, the stock yards, and sheds, are clearly key features on sheep/beef farms, and of central importance.

5.4 Comparisons between management systems

No statistically significant differences existed between the Organic, Integrated and Conventional management systems; however, some small differences are suggested by the qualitative analysis. With regard to soil Conventional farmers mentioned only stock management and fertiliser application as soil management strategies. Additional soil management tools were mentioned by the participants from the Organic and Integrated panels. Some participants in the Organic panel talked of their use of manure crops, and within the Integrated panel animal manure (gained from a feedlot which fed cattle maize) and compost were used along with conventional fertilisers. This suggests quite a difference in approach with the Integrated and Organic panels using more similar methods than those used by the Conventional farmers. (The results of investigations by the ARGOS biophysical team to ascertain if there are significant differences in soil quality between the management systems are available in other ARGOS reports.)

The second area of apparent difference between the management systems can be found in the social context within which they see themselves. It appears that some Organic farmers see themselves connected to a much broader social context (that is, beyond their immediate neighbours) than do others in the Organic panel, and those in the other panels. Further, some Organic participants noted links to schools, training of volunteers, employment and customers, and wanted to share the benefits of organic farming with others.

The distinction related to the extent of a farmer's social context is paralleled in the level of ecological concern expressed by Organic farmers. On the topic of wetlands some Organic farmers adapted their management to the land in contrast to Integrated and Conventional farmers who were more likely to intervene by draining or flooding. Similarly, none of the Organic farmers reported manuka as scrub while several Integrated and Conventional farmers saw it this way. On the topic of irrigation, an Organic farmer was the only farmer who actually raised the issue of the potential ecological consequences of irrigation. One other Organic farmer mentioned that irrigation was not used on their property to grow grass. These two respondents stand out in stark contrast to the other respondents from all three management systems who talked about their irrigation practice. For all of these other farmers the use of irrigation, where there is water that can be accessed, is a given.

Chapter 6: Measures of Sustainability

Question: The ARGOS team consists of many researchers (including economists and scientists and social scientists) and we all have ideas about what needs to be measured on your farm. But first we want to hear from you about what you think is important and what should be measured.

Thinking about your farm, what things are important to you and to the management of your farm, now and in the future?

Why?

What could be measured to record that?

6.1 Measures identified by participants

This question was included in the interview in order to develop a (self-generated) list of measures of sustainability. It was expected that such a list might identify measures that had been overlooked as well as providing a means to prioritise measures already included in ARGOS research. It was noted by the interviewer, however, that participants indicated some difficulty in answering this question. When participants did focus specifically on measures of sustainability, they provided a rather diverse list of 117 possible indicators for their farms (grouped by general topic and displayed as a chart in Figure 6.1). The indicators identified were almost equally divided between environmental (54%) and social, including economic (46%), factors. This suggests that the farmers are well aware that the continued success of their farm management is affected by elements of both the physical and social environments. It is equally noteworthy that, of the top five identified indicators (the only ones cited by 10 or more farmers), two involved environmental factors, two financial and one other social. The two most frequent responses – soil and financial factors – were also the most likely to be mentioned first by farmers listing more than a single indicator.

Soil fertility or soil health (11, 8, 5) was the most commonly identified indicator of sustainability among the farmers. Most often, participants suggested a simple test of nutrient levels in order to determine the appropriate fertiliser rates (chemical in the case of Integrated and Conventional farmers, Organic additives in the case of Organic farmers) to alleviate any deficiencies. This response also included the desire to monitor soil biota, especially within the Organic panel (6, 2, 1). In addition to the condition of the soil, participants were eager to assess the health of their stock (3, 4, 1) or (pasture and crop) plants (4, 0, 1), although several argued that this would only reflect the soil condition. Possible aspects of stock health included monitoring of reproductive capacity, disease resistance, nutrient deficiencies and weight gain while plant health generally involved either visual assessment or analysis of nutrient uptake. Other more frequently mentioned measures related to the environment included the general level of environmental health (2, 3, 2), access to water (2, 4, 1) and level of input use (2, 1, 2). Of the latter three indicators, environmental health and input use referred most specifically to the potential impact of management practices on the environment.

The most commonly identified factors of sustainability not directly related to environmental factors of production included financial returns (8, 5, 6), the potential for the farm to meet the personal needs of farmers (4, 3, 5) and productivity (1, 5, 4). Those farmers who cited financial returns generally argued that their ability to continue farming depended on the capability of the farm to provide sufficient economic return. Often (in a manner not dissimilar to that discussed in the 'vision' section), this involved maintaining some capital liquidity without specifically designating a minimum return to investment. The second group of indicators included a variety of factors which would contribute to the social sustainability of farming including time and money for non-farming activities as well as the health, stress level, lifestyle and satisfaction of the farmer. Productivity was an economic measure

suggested by some within the Integrated and Conventional panels, although it was often discounted by Organic farmers.

A few farmers mentioned how their farming practices were returning in some ways to those of their forebears. They saw this as demonstrating a more sustainable way of farming. One such discussion went like this:

Woman: I just notice that a lot of what [husband] is doing now is probably what his grandfather or father did in the early days, and now he has gone back to what was done. Perhaps that tells you that we've come along way but not come very far.

Interviewer: So what sort of things is [he] doing now?

Woman: He is stopping things in the winter. There are some things that he just does now, going back to the old ways, aren't you? ...Well, you used to do grass and ... now you've gone back to putting in turnips and that type of thing, haven't you? There used to be all grass and that fad died didn't it?

Man: Well, yeah I think at the end of the day our forebears weren't too far away

Woman: Some of the grasses they used.

Man: The way they farmed and how they saw things.

Woman: You've been through all these fancy [grasses] and now you're going back to coxes [cocksfoot grass] and stuff again (Conventional).

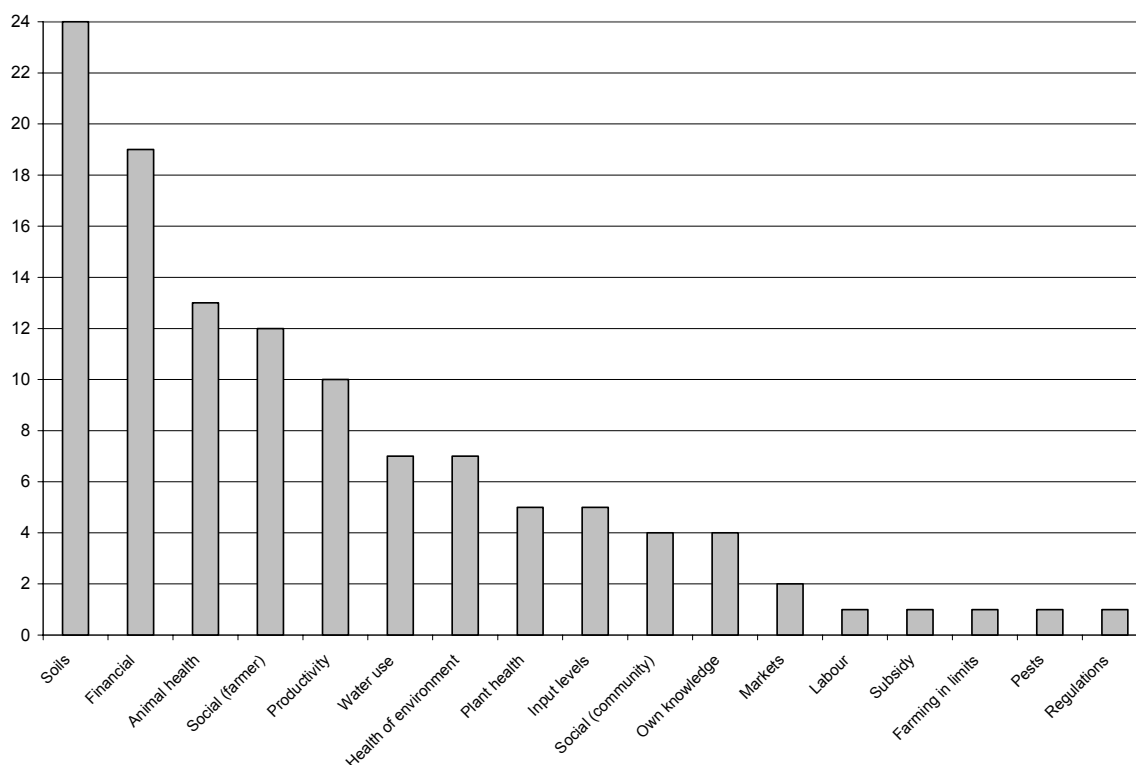


Figure 6.1: Frequency distribution of responses to question about potential measurements of sustainability.

6.2 Comparing measures identified by participant panels

It would appear that sheep/beef farmers rely on their own observations, experience and comparisons to monitor the health of their pasture and stock rather than rely on measurements made by 'experts' such as farming consultants and others. These farmers are most likely to rely on consultants to provide insight to a very specific aspect of the farm, particularly fertilizer representatives to make recommendations about enhancing soil fertility, and vets and meat works reports for animal health.

Overall, the identification of indicators of sustainability by participants offered little means for differentiating among the management system panels. At the level of number of indicators identified, the Organic panel listed the most (45), followed by the Integrated (39) and Conventional (33) panels. These numbers are likely influenced in part by the additional farm included in the Organic panel, with resulting averages of 3.5, 3.2 and 2.8 indicators per farmer interviewed in each of the panels respectively. These values would be further influenced by the number of individuals who participated in interviews with each additional person increasing the likelihood of that multiple indicators would be mentioned.

A more insightful comparison may be derived from the relative emphasis on the aspects of sustainability measured by the cited indicators. For example, 60 percent of the indicators identified by members of the Organic panel could be classified as directly measuring environmental factors. In fact, all but two of the Organic farmers suggested soil as an indicator. Among the Integrated farmers, this focus on environmental aspects of sustainability remains greater than one-half (56%), whereas it drops to 42 percent for the Conventional panel. Whether this difference reflects a greater awareness of human-environment interactions involved in farm management among the first two panels or a more consistent reliance on 'lower environmental impact' as a justification for their practice is not, however, evident in the responses. It is noteworthy that Organic farmers are more likely to include measures of biotic activity (as opposed to chemical nutrient analysis) as an indicator of soil health (six farmers in comparison to one from the Integrated and two from the Conventional panels). On the other side of the coin, the Conventional farmers were most likely to emphasise financial aspects (36 percent of their responses, compared to 22 percent and 28 percent in the Organic and Integrated panels respectively) despite the relatively consistent appearance of financial issues in the farmers' visions across all the panels. Social factors appear to gain similar recognition as indicators of sustainability across all three panels.

Chapter 7: Indicators of Financial Wellbeing and Productivity

*Questions: What tells you how productive your farm is?
How do you know that financially all is going well?*

These two questions are combined in this chapter as they were generally addressed as economic factors in the responses of the participating farmers. As a result, there was often overlap in the answers which they provided in response to either question. It was fairly common for responses to focus simply on financial balances at the time that lambs or cattle were sold to the meat packers. Very few participants indicated that they engaged in more detailed analysis of either risk or relative returns on investment, and then usually as a result of the efforts of the accountant or bank representative whom they have engaged. It was fairly common, on the other hand, for farmers to simply identify returns without specifying costs as such. The participating farmers did not appear to employ benchmarking as a general means of measuring economic wellbeing, perhaps because the meat packing industry did not provide data which would facilitate comparisons of yields and returns with other farms. (The lack of financial data did not, however, preclude the desire to compare one's farm with those of the neighbours as discussed in Chapter 9 on personal wellbeing.) Non-economic factors were generally not addressed in this portion of the interviews, although one Conventional farm household did suggest that 'quality of life' would be a good, although most likely immeasurable, indicator.

7.1 Assessing financial wellbeing

The means through which interview participants assessed the financial wellbeing of their farms can be assigned to three general categories. The factor most commonly considered was that of returns, both actual and potential. References to returns generally focused not on their actual level but, rather, on the capability of the returns to meet particular goals: balancing accounts, a comfortable lifestyle, or investment (or costs) beyond necessary management expenses. A second group of farmers indicated that their assessment of returns was subject to costs of inputs. It is, perhaps, noteworthy that the issue of costs was more frequently cited by members of the Organic panel who were often engaged in a process of converting their farm. A final, and relatively trivial, means of assessing financial wellbeing was that of benchmarking and involved comparison of farm returns with the average return for similar farms.

7.1.1 Returns

I suppose it's the cheque at the end of the day (man, Conventional).

Among the farmers who focused more exclusively on returns as a measure of financial wellbeing, there appears to be a greater sense that the viability of their farming enterprise relies on good market conditions as opposed to appropriate management practices. As such, it is not unexpected that a majority of the Conventional farmers, who indicated a more conservative scope to their visions (see above), offered such responses. For the most part, these farmers were secure in their current management and less likely to respond to constraints associated with industry or the state by altering the management system. The focus on returns may also indicate that this is the simplest measure to gauge – either the bank statement or the accountant computes the balance of accounts. Returns, however, are most likely received in larger, lump sum payments that can be compared to previous years' returns.

Responses

- Returns needed or expected to balance accounts (1, 5, 7):
A lot of farmers run at a loss but I think you need to run at a profit. So yeah, it's basically, you know, we try to get the most we can out of our system and get the best prices for our products and hope that at the end of the year it all pays out. Again, of course it depends on what the climate throws at you. So there's a few things there that can effect your bottom line (man, Organic).
- Financial wellbeing as achieved (1, 1, 1):
We seem to be getting on happily with the bank. They're happy with us. The accountant's happy with how it's [going]. He runs his pencil over it each year, of course, doing your returns. We're happy with it. So, as far as I'm concerned, that's all that counts. I mean, we [certainly] won't be running the most profitable farm in the ... County, but that doesn't worry me either. But I don't think we'll be running the least profitable one (man, Integrated).
- Returns sufficient to allow investment (1, 0, 1):
I mean you could make the bottom line balance better by cutting out that extra person – maybe just employing a casual person when you need it. But that has never even been a question here (man, Organic).

7.1.2 Costs and returns

Because you can distort the financial side by maintenance of equipment and running things down ... (man, Organic).

A large number of farmers (almost equal to those focusing on returns alone) suggested that their financial wellbeing reflected the costs of farm management as well as the returns. As might be expected from discussions in the chapter on visions and constraints, attention to costs was more prevalent among farmers in the Organic and, to a lesser extent, the Integrated panels. This reflects, in part, that farmers in both of the groups were more likely to face the costs of converting the management. In addition, these farmers also were less complacent in their response to difficult and stochastic market conditions. As such, they appear to be more interested in assessing various aspects of their farms' financial situation.

Responses

- Input costs and returns (8, 5, 2):
Oh it's the difference between those going out and those coming in. It's as simple as that. It's a bit like the urea one. The town advisor'll say, "If you put urea on you'll grow so many more kilograms of dry matter, at a cost of so many cents a kilogram. And you'll be better off." But what he forgets to measure is the increase in the stock health bill and the down side in production as a result of that. The final measurement has gotta be the economic one (man, Conventional).

7.1.3 Benchmarking

Benchmarking was suggested as a means for assessing economic wellbeing by a limited number of farmers, none of whom belonged to the Organic panel. The responses recorded here reflect only those specifically associated with the financial wellbeing question and, as such, should not be interpreted as indicating that farmers do not compare their farms with others. The limited number of responses in this sub-category is likely to be more indicative of the limited availability of appropriate statistical information to facilitate comparisons of financial wellbeing.

Responses

- Comparison for self-assessment (0, 1, 2):
I'd look at the industry for benchmarks. For example, what do they reckon the average benchmark return per stock unit in the South Island is – fifty dollars? I think that's the

average net return. And that's the sort thing that I would look at. I would like to be able to look at fairly well established industry benchmarks (man, Integrated).

- Comparison as competitive (0, 1, 1):

I compare it to a friend down south and we're always pretty competitive about that first lamb cheque. And always there's always that competitiveness and there mightn't be anything in it. We've been down to like five or six cents but – well, I got beaten, or I beat him. But there's always that challenge. I know it's five cents, but I beat you. You always keep an eye and see [what] other people are doing (man, Integrated).

7.2 Productivity: healthy stock and good pasture

From our aspect, it's perhaps the ability of getting lambs off at good weights. The ewes scan very well. So, we obviously are doing something right (man, Integrated).

The responses included in this section involve the farmers' assessments of their farms' productivity. The majority of farmers indicated that they distinguished, to some extent, between the productivity and the financial wellbeing of the farm – some pointedly stating that high yield did not guarantee economic viability. Yield, both its quality and quantity, was the most commonly identified indicator of productivity. Farmers claimed to assess quality both subjectively ("A few sheep in there look a bit scrubby ..." (Conventional)) as well as quantitatively using feedback from the meat packing industry. It was important to farmers that lambs were adding weight and were playful. Quantity was more readily assessed based on lambing rates, in particular, as well as per hectare weights. Frequently, a given farm household would suggest that quality and quantity were strongly related to each other. For a small number of farmers, financial returns provided the ultimate means for assessing a year's productivity. It is possibly noteworthy that the majority of these farmers were from the Organic panel, suggesting that these farmers did not expect favourable comparisons with non-Organic farmers on the basis of yield.

Responses

- Yield as indicator (5, 10, 8):

You've only sort of got to look around you [to] know yourself whether you're feeling comfortable with the situation or whether you're thinking, "Gosh, I've got to buy some more feed." Or OK, I can shut up a paddock and make some balage or that type of thing. From that sort of level, you know that it's going well. Or if you harvest a crop and it's looked good and it's performed and [you] put in the silo what you expected too, if you haven't had any climatic problems, that sort of tells you ... whether things are going well or not. If you don't get your yield for your peas and you sort of think well, they should've done better than that or you think it's not great ... (woman, Conventional).

- Financial return as indicator (4, 1, 1):

My benchmark for meat, for example, is we need to return at least forty-five thousand dollars worth of lamb in a twelve month period. We're actually still almost doing that, even [though] on half the sheep that price's doubled. But we're still going backwards because costs have gone up too (man, Organic).

7.3 Comparison of panels in financial indicators

While the responses analysed in this chapter exhibited limited diversity in scope, they do appear to indicate some differences among the management system panels. Overall, the farmers' assessment of financial wellbeing and productivity are rooted in similar indicators – return and yield. In the case of financial wellbeing, however, the Organic farmers, as well as approximately half of the Integrated farmers, are also very aware that their production costs can contradict the potential benefits of high returns. This distinction may indicate that either the need to justify the costs of converting to an alternative management system, greater ability to comprehend additional financial information, stronger sense of control over economic variables, or a blend of these factors are more representative of the Organic and Integrated farmers. The apparently greater desire to measure both the financial inputs and

outputs to farm management likely contributes to the higher number of Organic farmers who rely on financial returns to provide the ultimate measure of their farms' productivity. This latter difference may be of limited importance, however, given the small number of farmers who cited financial returns as an indicator of productivity.

Chapter 8: Farming and the Environment

Questions: What tells you that you are looking after the environment on your farm? (Is there anything in particular that you notice – see, hear, smell, taste, feel – that tells you everything's OK?)

Can you tell me about the animals – including insects – that you notice on your farm?

What animals do you notice?

(Prompt for a full list of animals present at any time of year.)

Can you tell me about the birds on your farm?

As part of the first qualitative interview, participating farmers were asked to reflect on the environment relative to their management practices. The intent of this discussion was to gain insight to the participants' understandings and conceptions of the environment as well as potentially identifying further indicators of environmental impact that were commonly recognised by the farmers. Farmers were also asked to contribute to understandings of biodiversity within the ARGOS programme by listing the animals that they notice on their farms.

8.1 Farmers' understandings and conceptions of the environment

In their response to the question, "What tells you that you are looking after the environment on your farm?" farm households offered significant insight to the diverse understandings that they have developed in regard to environment on their farm and their ability to care for it. It is notable that the most frequent response, associating the health of animals and cultivated plants with that of the environment (10, 7, 7), was also the only indicator of care cited. The majority of responses focused instead on those actions undertaken by farmers – such as soil or water conservation measures – that should be interpreted as being beneficial for the environment. Some of the responses included in this section emerged in discussions of other topics in the interviews, especially when working on the farm maps, discussing indicators of sustainability, or expressing expectations of their involvement in the ARGOS programme.

8.1.1 Stock and cultivated plants as indicators of environmental health

Stock are healthy. And happy, happy sheep, happy cows (man, Conventional).

For the most part, the farmers participating in the interviews viewed the environment from the perspective of the farm. As such, a large number of farmers (10, 7, 7) considered good stock or pasture to be a sign of environmental health more generally. This perception also included the opposite association – that is, dying animals indicated poor environmental health – although it was only mentioned by Conventional farmers. Occasionally, the farmers suggested that healthier stock was the result of improved breeding strategies that were more compatible with the demands of the environment. In these cases, the implication was that such breeding was evidence of the farmers' working with the environment or, at least, within the constraints imposed by the environment. In some cases, by including wildlife, the focus on animal health involved a more global perspective on a healthy environment. For example, biotic elements of the soil (especially earthworms) were also referred to as indicators of soil health.

Responses

Man: Well, I guess just the pastures and that. If you weren't looking after them, they would be getting worse rather than better. That's probably the main indication.

Woman: I think the stock health though too is a reflection of the environment, I mean if your environment's not good then they wouldn't be healthy (Organic).

If your sheep drop dead or something, then there's something in the soil. I mean, if there was run off or something from somewhere that was terribly bad, then your sheep would be [dying] (woman, Conventional).

Soil fertilities, I suppose. Not so much the fertility of the soil as we conventionally measure it but measuring the Organic matter in the soil ... I'm not sure what else one would measure that reflects the health, soil microbes, micro-organisms and the macro-organisms or whatever they call them things – like earthworms and so on (man, Integrated).

8.1.2 Actions contributing to environmental health

In addition to identifying indicators of environmental health, the farmers all took the opportunity to provide evidence of their active role in contributing to that health. Many of these responses involved common perceptions of agriculture's potential negative impacts on the environment. Thus, it appears to be important for the farmers to defend their practices against accusations of environmental neglect, especially in regard to the use of chemical inputs and to the conservation of resources. Two exceptions to this trend were those responses which emphasised a farmer's intention to work with, rather than attempting to control, nature and those which showed an awareness of broader scale environmental impacts such as global warming. The variety and overall number of responses in this category suggest that these farmers – at least when interacting with ARGOS researchers – wanted to present an image of themselves as caretakers of the environments that they inhabit.

Controlled use of inputs

We do do a certain amount of spraying and things. But we don't use a lot of agricultural sprays, only what are considered absolutely necessary (man, Conventional).

The participating farmers – as evident in the number who included this response (5, 6, 7) – appeared to be very aware of outside perceptions that inputs to the farm had a negative impact on the environment as a whole. Among the Organic farmers in this group, the removal of chemical inputs was cited as the primary environmental benefit of their practices. Chemicals were unequivocally perceived to be bad. For the Integrated and Conventional farmers, this distinction was less clear cut. Several pointed to experiences with chemical applications which had proved either ineffective or had detrimental effects on populations of insects – both pests and beneficials – or on pasture growth. Others seemed almost apologetic that the use of chemicals was still necessary in their management programs as they dealt with pests associated with minimum tillage practices or to treat animal health issues. In other cases, low input levels were a positive side effect of capital constraints. It was also common across these responses for the Integrated and Conventional farmers to argue that they were much more conscientious in their use of chemicals than neighbours with dairy farms. This suggests that, for these farmers, the impact of chemical use occurred on a relative scale.

Responses

I mean, because I'm an Organic farmer, I have this thing that I say that I'm looking after the environment by not using chemicals. So [that's] one of the reasons (man, Organic).

Well, my father and uncle started putting aerial fertiliser on in the late '50s and it was a huge increase in production and everything. They discontinued it in the early 1970s and I said, "Well, why didn't you keep putting it on? You're supposed to." And they said, "Well, the ground was getting harder in the summer and wetter in the winter and we don't see any increase in production anymore." And some of the early fertiliser they put on was basic slag which was out of the steel mills in Europe and it had a lot of trace elements and a heap of lime in it. So, now that I know a bit more about it, those soil conditions mean that you're getting soil compaction, and that's going against your worms and all the rest of it (man, Conventional).

See, with the direct drilling, we wanna get rid of the slugs. Cause it's gonna cost you forty bucks a hectare in slug bait (man, Integrated).

We haven't actually done a heck of a lot of fertilising and stuff like that before. We are definitely heading that way, but we're going to be having a lot more stock and putting a lot more fertiliser on, putting more fencing on. You know what I mean? You would want to make sure that what you were doing wasn't adversely affecting your farm absolutely, you know (woman, Integrated).

Encouraging biodiversity on farm

I guess our aim is that you're creating an environment that the native wildlife is happy to be in (man, Organic).

Another frequently practiced activity (6, 4, 7) that was perceived as beneficial for the environment was the attempt to increase biodiversity on the farm. Often, the return of native birds was cited as a goal of management or as evidence of its value. The planting or protection of trees, especially native trees, was considered a primary means of achieving such goals – although some farmers also admitted that trees had aesthetic value on their own. Protection of waterways and building ponds were also regarded as positive influences on the bird population. Responses which established associations between such activities and broader scale environmental problems were less common, with a single farm household noting the value of trees as carbon sinks. Generally, the farmers pursued these elements of the farmscape for personal gratification. One household did, however, indicate their frustration with mandated protection of bush because of the associated loss of productive potential.

Responses

I guess one of the one of the more noticeable things is the fact that, as kids we never ever had wood pigeons up here, and ah, probably for the time we've had children we've had two wood pigeons, then three wood pigeons, now four wood pigeons and we can always tell you when we see wood pigeons because the Maori have regarded that as a sign that the bush is coming back. And we've got two, if not four, resident wood pigeons. So that's quite special to see them soaring (man, Conventional).

Woman: We thought we were going to do ornamentals. That's not management, that's just aesthetic.

Man: Yeah, but that's alright. We're also thinking of planting sort of natives and stuff round here to get the birds and stuff (Conventional).

Woman: Tree planting is good for the environment as well.

Man: Well, trees absorb carbon and produce oxygen. So, less carbon is going into the atmosphere and more oxygen is going towards the land. That's pretty simple (Organic).

Man: We're quite keen [to fence off native bush]; but, at the same time, when we bought the neighbours piece here, we got two hundred and fifty acres or a hundred and one hectares and the Council brought out this plan. And they were going to flog about two hundred acres of our ground for conservation and I said well ... They were, you know, just going to take it. And I thought, 'Well, if you want that, you know you're going to have to pay us equivalent to what we paid for it (Integrated).

Soil conservation practices

Look after the environment? Well, if you don't look after the soil, [the] soil's not going to look after you. So you can stuff that (man, Integrated).

Soil conservation was also considered an important element of maintaining a healthy environment, especially by the Organic and Integrated farmers (7, 5, 3). The practices cited as contributing to the conservation of the soil included erosion mitigation (e.g., shelterbelts and contour barriers), minimum tillage, and rotation strategies. In addition to rotating crop and pasture, rotation also involved managing stock populations so that they were not

occupying areas prone to compaction during wet periods. One explanation for the greater emphasis on soil conservation among the Organic and Integrated farmers may be their reduced reliance on artificial fertilisers and a greater desire to work with nature.

Responses

Direct drilling is looking after the environment, because you don't get all the top soils or whatever blowing away. So, I do quite a bit of that (man, Conventional).

... other ways of looking after the environment ... So, it's just a matter of working out where you put stock. Like we calve them over in this area here and generally save pasture in that area there, and generally try not to bring them into that area if it's too soft, because it pugs it up. So if it gets really wet, we drop them down into the rough places (man, Organic).

Water conservation practices

I'm closely in contact with my rivers – the river down there. And you know when it's not going right. I'm a keen fisherman and a keen sportsman and I don't like the waterways dirtied up too much (man, Integrated).

In comparison to soil conservation, water conservation practices were less frequently cited as contributing to the health of the environment – especially among the Organic farmers (3, 4, 5). Most references involved attempts to control stock access to waterways and rivers on the farms. Several farmers also indicated that the exclusion of stock from these areas could be difficult, and not necessarily desirable, if there was no other readily available source of water on the farm. Protection of waterways was often associated with the protection of native trees, which were situated along river banks and in gullies. As such, some farmers may have implied that they employed such practices while not explicitly mentioning water conservation.

Responses

Woman: It's the same here on the farm because we've got the ... River. We've fenced all that off with the environmental calls that have been made.

Man: I can see it was going to become a situation where we're going to be required to do it and I think should have to personally. So, I just got in and did it because the river's important and I like fishing and we've been able to take children down there and go swimming and things over the years. I'd like to think that would continue to be the situation (Conventional).

I suppose environmentally the only thing that we probably could say on this place is that the cattle get in the water race every now and then. You know, do their stuff in it. So that water runs down country. Further down, I suppose, it contaminates. It's because there's no other way. You can't keep them out of the thing. They've got to have water (woman, Integrated).

Working with nature

I personally get satisfaction out of doing production without changing the physical properties of the place too much - like without endangering the native birds and those sort of things (man, Integrated).

Another group of farmers, all members of either the Organic or Integrated panels (4, 5, 0), were less specific about which of their practices contributed to environmental health. They suggested that farm management involved entering a partnership with nature, rather than needing to control particular environmental factors that were viewed as constraints or problems. As a whole, the practices of these farmers were constructed in such a manner as to harmonize with what they interpreted as natural forces and processes. The farmers who gave this response were also more likely to acknowledge that natural processes were an important element of or a pattern for the management of their farms. This perspective most likely reflects a greater tendency among the Organic and Integrated farmers to view their farms as part of a larger environmental system.

Response

[Looking after the] environment? I suppose, in a word, I'd look at nature. And I would like to see that I'm not upsetting the balance of nature ... How can we get as near to [nature] as we can and yet maintain the best advantage – some return a positive return ... To try and walk down a road where you are walking hand in hand with nature. And in my experience looking at [a certain country] that would be the case. The moment you start fighting against the environment and against nature, it starts costing you money. And, there's usually a consequence to your actions that is unforeseeable, or could be unforeseen and it's detrimental. So you really want to be walking hand in hand with nature best you can (man, Integrated).

Waste management

A few farmers (0, 3, 3) – all of whom generally had some difficulty specifying the means through which to assess the health of the local environment – identified their waste management practices as contributing to environmental health. The waste being managed was generally the product of agricultural chemical use, although two responses involved the recycling of household plastics and a third the disposal of plastics used in silage production. The absence of this response in the Organic panel likely reflects, in part, the lack of chemicals used by those farmers.

Response

It's really what you do, I suppose. I mean, you don't go and put things down creeks and things like that. It's basic management, I suppose. I daresay you can't start a vehicle without sort of damaging something. But just minding what we do around the creeks and dumps and sort of [being] a bit more careful. Now we bury a bit more stuff instead of burning and things like that. Yeah, I guess we're probably better than what we used to [be], definitely more aware of it anyway. Some of these plastics and things like that are a bit of a nuisance really. But, yeah, not doing a lot of burning of tyres or anything like that, or anything that's obviously going to cause damage, or basically just look after the creeks and that round here (man, Conventional).

Broader scale impacts

A relatively infrequent response (2, 1, 0) to the question about environmental health involved references to issues of regional or global scale. Two of these referred to global scale pollution or, more specifically, global warming. The third involved an Organic farmer's concerns about the sustainability of agriculture which relied on large energy inputs.

Responses

This is nothing to do with what the team is doing but I think the whole issue of global warming is going to - even in the time I've been here I think our climates have changed and those things are going to have a huge impact on what happens here (woman, Organic).

I'm quite interested in agriculture – not because I wanna increase my income or anything like that. I see agriculture as the centre for a whole lot of things. A whole lot of things come together in [it]: social things, environmental things, food issue things. And sustainable agriculture is really important. I don't really like what's going on with modern farming where you turn it into a business or industrialise it or depopulate the land. I think that, in the future, it's going to reverse purely because of energy reasons. We're going to look closely again at mixed agriculture and so on. In New Zealand modern arable farming, the farmers think they're efficient, but they're not efficient at all. I'm always arguing with them about their notions of efficiency. It's only efficient if the fuel's cheap, but it's not efficient at all compared with Chinese agriculture (man, Organic).

8.1.3 Perceived limitations to achieving a healthy environment

A small number of farmers (4, 2, 3) claimed that despite their best efforts to contribute to a healthy environment, they faced limitations to what they could accomplish. Discussion of these limits focused on both external (regulations) and personal (lack of knowledge) factors.

In some cases these factors were viewed as impeding the pursuit of more beneficial practices. Some of the farmers also argued, however, that more was demanded of them than was either viable or feasible.

Excessive regulation

The five responses (2, 2, 1) that addressed the issue of excessive regulation in relation to environmental health are diverse. Three involved complaints that farmers were not given adequate compensation for the environmental benefits they were expected to provide – in these cases either in the form of conservation lands or tree plantings. One of the Organic farmers suggested that Organic standards were too exacting and ‘fiddly,’ although her partner acknowledged the need to meet consumer demands. A Conventional farmer was frustrated with council response to his attempts to elicit information about regulations related to the locating of a new silage pit.

Response

Woman: [We] had an interesting experience a few years ago now. He rang up for advice about that silage pit because there’s rules and regulations galore about where you put silage pits.

Man: Well there is now but there wasn’t when ... I just wanted to know what can we do about it.

Woman: ‘Cause there was a bit of leach ... going into the stream.

Man: Yeah, I didn’t know. So, I rang this bloke just for help really, ‘cause I’d been to a day the regional council had put on. So, they sent this bloke down. He threw the book at me!

Limited knowledge

Several farmers (2, 0, 2) also identified knowledge levels as contributing to their relative abilities to affect environmental health. Most who gave this response suggested that their own lack of knowledge limited their ability to manage in a more environmentally friendly manner. One of the Organic farmers suggested, however, that the lack of knowledge was found among those Conventional farmers who dismissed Organic practices out of hand.

Response

The best thing that came out of that award was a two page report from the judges: a general report and the summary and then a list of strengths in your operation and areas that may need addressing. And, you know, that was better than the parts on strengths. You’re better not reading that actually - better looking at these other ones ... there’s areas we can we can look to improve on (man, Conventional).

8.2 ‘Noticing’ animals and birds

The intent of the questions about birds and animals that the participants noticed on their farm was to develop a listing of the animal life other than stock and pets that farmers most readily identified. The tables below summarise the mammals, birds, invertebrates, and other creatures mentioned in their responses. It was expected that such a list could be used to facilitate comparisons of the presence of these species with the biodiversity assessments conducted by ARGOS team members. In addition to listing animals as being present on the farm, some of the participants placed them in categories: some animals were identified as pests; some were considered beneficial to the farm; and others had more aesthetic appeal.

Tables 9.2-5: Animals noticed by growers

Birds	No. of Farmers
Ducks	25
Magpie	24
Sparrow	20
Fantails	15
Bellbird	15
Seagull	15
Hawk	14
Starling	14
Paradise Duck	14
Oystercatcher	11
Plover	11
Swallow	10
Blackbird	9
Wood Pigeon	9
Geese	9
Thrushes	8
Pukeko	6
Finches	6
Morepork(Ruru)	6
Blue heron	6
Pidgeon	6
Waxeye	5
Tui	4
Quail	4
Swan	4
Kingfisher	3
Goldfinch	3
Yellow hammer	3
Shag	3
Skylark	3
Falcon	3
Shining cuckoo	2
Grey heron	2
Teal	2
Dotterel	2
Wading Birds	2
Turkey	2
Pheasant	1
Rosella	1
Cockatoo	1
Pied stilt	1
Crow	1
Dove	1
Spoonbill	1
White heron	1
Rifleman	1
Sea Martin	1
Tern	1

Mammals	No. of Farmers
Rabbits	26
Hares	24
Possums	17
Wild Cats	14
Mice	10
Rats	9
Ferrets	9
Deer	8
Hedgehogs	5
Stoats	5
Wallaby	3
Wild Pigs	3
Wild Goat	1

Fish, amphi- bians, etc.	No. of Farmers
Lizards	17
Frogs	7
Skinks	5
Eels	5
Trout	5
Fish, general	3
Geckos	3
Lobster	2
Goldfish	1
Whitebait	1
Leeches	1

Invertebrates	No. of Farmers
Grass Grub	25
Worm	22
Insect, general	15
Bee	14
Porina	14
Flies	13
Aphid	10
Bumble Bee	8
Butterfly	7
Ladybird	6
Spiders/webs	5
Native worm	5
Wasps	5
Slugs	4
Midge	2
Nematodes	2
Beetle	2
Springtail	2
Moth	2
Caterpillar	1
Wood lice	1
Praying Mantis	1
Sandfly	1
Centipede	1
Weta	1

It is, perhaps, noteworthy that – with the exception of ducks and worms – animals mentioned by more than 20 of the participating farmers are all classified as pests. (A more detailed discussion of pests as constraints on farm management is provided in Chapter 4 on visions and constraints.) Ducks were commonly identified as a resource by those farmers who were also hunters. Worms, on the other hand, are a beneficial animal associated with good soil and, in many cases, sustainable management. While these observations suggest that these counts are a useful place to start in regard to establishing indicators on the farms, the lists should not be considered exhaustive. In addition, the design of this interview did not provide the latitude within which to explore farmers' feelings about or attitudes toward animals, let alone being able to assess the significance each might have on the farms. Thus, the lists should be interpreted as indicating those animals that were most obvious to growers at the time of the interview.

8.3 Comparing responses between the panels

Analysis of the participants' response to questions related to their relationship with the environment within which their farms were located indicates that more similarities than differences exist among the management panels. The majority of all farmers based their assessment of environmental health on those indicators with which they were most familiar – i.e., the health of their stock and condition of pasture and crops. This common trait suggests that the participants share a conception of their farming practice as being interrelated with natural processes and conditions. The extent to which this relationship involves controlling or (alternatively) working with nature is not, however, completely evident from the interview.

A further commonality among the farmers is the tendency to identify specific activities or practices which they perceive as contributing to environmental health. For example, limiting their use of chemicals on the farm is often mentioned by farmers from all three panels as an action that benefits the environment. In this instance there is, however, an obvious difference of degree with Organic farmers more likely than their Integrated and Conventional counterparts to have stated a philosophical stand against all chemical use. Almost half of the farmers equate activities which promote biodiversity on their farms with the provision of environmental benefits. Greater distinction between panels is apparent in responses that emphasise soil conservation, working with nature and waste management as beneficial for environmental health. Organic and Integrated farmers were more likely to cite the former two activities reflecting a possibly greater sense of that their management must cooperate with, rather than dominate and control, natural processes. On the other hand, none of the Organic farmers – who are less likely to have dealt with chemical wastes – mentioned waste management. The significance of these differences as representative of the panels as a whole is questionable, however, given that only soil conservation garnered more than a 50 percent response from a given panel's farmers (and in that case only among the Organic farmers). The remaining issues addressed in this chapter provide little means for comparison of panels – either because of low response rates or because of the form of the questions and the consistency with which they were presented.⁴

⁴ N.B., the latter situation applies to the questions about the animals noticed on farms in particular. It was the case that the framing of these questions evolved with the interests of researchers outside the social team. As such, not all farmers were prompted to focus on worms or birds to the same extent.

Chapter 9: Contribution of Farm to Individual, Family and Community Wellbeing

9.1 Introduction

Questions: How does your farm contribute to your own wellbeing? What is it about farming that makes you happy?

How does your farm contribute to the wellbeing of your family?

How does your farm contribute to the wellbeing of your community?

This chapter describes and discusses the remarks that participants made when asked questions about the social factors through which they and their communities relate to their farms. The first major section considers how participants felt that their farms and farming impacted on their own wellbeing and participants took this as having both positive and negative aspects. The second section describes the impact farming has on the wellbeing of families while the third section considers the impact on communities. Within each section there is a discussion about what has been described and the way in which the responses of each panel are different is mooted. The chapter concludes with some overall comments.

9.2 Contribution of farm to individual wellbeing

We're actually Jack of all trades and master of none ... We look, we see, we learn, we take in what we see, and we believe what we see because we have the experience to back it up. And I think, in terms of knowing things, even though we don't have degrees after our name, I think we know more than what the average person does. We're not the black singled Fred Dagg that we used to be portrayed to be. And, that's on average - I'm always talking about averages here - you always get everybody at either end of the spectrum. Yeah I think it's a privilege to be a landowner and/or a country person ... I think we're rich. We're rich in the sense - if you take the money equation out of it - we are very rich people and ah, I wouldn't swap it for anything (man, Conventional).

Farmers related their wellbeing to many different aspects of their lives. Many expressed a balanced view – that farming had its ups and downs and one had to expect that this would be so. However, for most of the ARGOS participants there were more ups or more downs associated with farming and these are considered here under the headings 'Positive aspects of wellbeing' and 'Sources of stress'. There were those who acknowledged these stresses but described how they were trying to resist the domination of the farm over their lives by developing attitudes to the farm and by organising their work in such ways that they had greater control over what they did and when they did it. All through the interviews participants were constantly comparing their lives with those of others in many different ways. These comparisons are summarised in a section. For some, the stresses of farming were overcome by a sense of purpose that made it all worth while and for others there was a dogged resilience or an attitude of spirit that lifted them up.

9.2.1 The balanced view

The attitude of many farming couples participating in ARGOS was that farming life has its ups and downs which is to be expected but that overall life is good. These couples knew that there will be times when the weather is bad but they have planned for that and done as much as possible to deal with it when it comes. There is nothing more they can do: "But that's the only down because you know you're doing a good job and watching the weather stuff it up" (Integrated).

... but then you get mornings like this morning, where it's cold and it's wet and you're slipping and sliding, shifting break fences, and if it's lambing time there's lambs dying. That's on the down side of it. But you know ... you usually look forward to getting up in the morning and going out and shifting some sheep and seeing the lambs growing ...

whatever, 'cause actually you know, it's a pleasurable job. It's not just a job (man, Integrated).

It's pretty enjoyable some days ... it's mainly the weather. If you get real bad weather and, you're doing your best and you're just, if the weather's against you but – I think that's why you're in farming 'cause no day's ever the same (man, Integrated).

Well, when things are going well it's good. If they're not it's obviously not too bloody good, (laughing) but farming is like that. It has its ups and downs. Some days everything goes well, some days everything turns to custard and you wonder why the hell you do it, but then you get a day like this ... (man, Integrated).

The ups and downs are part of the challenge of survival in farming and many farming couples demonstrate a resilient attitude and resist getting too stressed. In the sections that follow the positive influences on wellbeing, the 'ups' of farming life, are considered, followed by the aspects that limited people's wellbeing, that caused them stress – the 'downs'. This does not mean that people fall exclusively into one or other category – that they are entirely positive or entirely negative about how farming affects their wellbeing. Most people see and experience both sides of farming.

9.2.2 Positive aspects of wellbeing: Introduction

The positive aspects of participants' wellbeing were associated with their work in general as well as work connected to the farm in particular. For some their wellbeing was closely allied with how well things were going on the farm, and to their identity as a farmer. Attitudes to money played a role in wellbeing. Most participants said there were actually other things that made their lives satisfying apart from financial returns, though it was important for their livelihoods to make a reasonable amount of money. Few participants were solely dependent on financial success for their wellbeing. Attachment to the farm as a place and to the environment in which it was located was very important for the wellbeing of many of those interviewed. This attachment often had a spiritual dimension linked to the way in which the beauty of the farm and its environment relieved tension and stress. For other participants the lifestyle that living on a farm provided - its rural and family oriented nature – was highly valued. Many women mentioned the role of the house as a home, its importance to family and its centrality to farm life. Leisure activities – both on and off-farm – were mentioned as important for a few.

9.2.3 Wellbeing related to work

I get my job satisfaction out of doing things myself and trying to do it well (man, Conventional).

There were many participants who loved and enjoyed their work in ways that are quite generic or applicable to any type of work (10, 10, 9). Participating farmers found that their work gave them a sense of achievement, "... the satisfaction of a job done", autonomy, and the chance to use their skills and knowledge. The farmer who is quoted at the start of this chapter took a great pride in what he 'knows'. Farming also provided challenges, feedback and recognition, and the opportunity to do 'good' hard work. For example, the farmer who said, "I think I've got an eye for livestock - every farmer says that - some of them are hopeless (laughing), [but] I think I have" (Conventional) was proud of his skill.

Autonomy and flexibility (6, 7, 5)

The flexibility and choices of farm work gave some farmers a sense of autonomy to be their own boss and make their mark. These farmers said:

Woman: The fact that you don't have to answer to anyone ... do your own thing when you want to ...

Man: ... with farming you can do as much or, really as little as you want, you know, you can, put in as much into it as you want ... (Organic).

... there's lots of decisions to be made, relative to other walks of life ... you can stamp your own mark on the property really in how you go about things. You look at three farms in very similar country they could all be very different in the way people – [the] timing of things that people do and what they do (man, Conventional).

I guess the beauty of it is that every day is different - that's the real attraction to me. The fact that you can be inside or outside, doing whatever (man, Integrated).

Woman: It's good being your own boss.

Man: ... yeah. It's just working for ourselves and being our own bosses and making our own decisions. You know if we don't want to do any work today, we don't. We make our own decisions. We are not beholden to anybody now, apart from a bank. It's just a nice way to live. No set hours. And the variety of work (Conventional).

This autonomy was very important to people: "It's your own job". This Organic farmer was quite clear about what he was in control of, but he uses the collective 'we' to include all farmers:

We are as close, I believe, as we could ever be to being in control of our own environment. Whereas, if we did anything else other than farming, somebody else would be controlling quite a lot of our environment. They'd be controlling when I've got to start work in the morning, when I've got to knock off, when I've got to have my holidays. Someone else is going to control what's put in the environment. Like we control what goes on inside our boundary. I don't like the word 'control' because nature doesn't like control, it does its own thing, but if you can understand what we are saying. It's the closest we can get to putting our money where our mouth is. We believe in certain things and we can actually go and do it without somebody saying you've got to do something else (man, Organic).

An Organic farm manager said, "Our imagination's allowed to explore possibilities here ... and the owner puts the pressure back on me [to] make sound decisions". This Integrated farmer was quite clear. His wife had just said how the farm provided an income, a sense of achievement, physical work and a sense of pride. He responded by saying:

But that's assuming [we're] looking through other people's eyes. I couldn't care less what other people think ... I did it for myself not for anybody else. I didn't do it to impress someone (man, Integrated).

Autonomy is also related to succession because the struggle for autonomy is part of growing up. Taking control of a family farm from one's parents (see later) give a farming couple the chance to do what they want to with a farm: "... taking over is putting your stamp on things" (man, Conventional).

A farming couple have started planting riparian strips along their waterways because the husband wanted to do it before he was told to do it by the local body responsible for the environment! It was important to him that he made the choice, not the local body.

Woman: We've fenced all that off with the environmental calls that have been made.

Man: I can see it was going to become a situation where we're going to be required to do it and I think should have to, personally, so I just got in and did it (Conventional).

Good hard work: physical, outdoor activity (1, 5, 4)

There were many references to the virtues of 'working hard' and the physical, outdoor nature of the work. The Puritan work ethic and the Arcadian utopian ideals that first attracted people to this country are alive and well in farming. One farmer said, "... I don't like people idle ..." (man, Conventional) while another said this about his attitude to work:

Some farmers love the salesmen to drive into the drive. I don't operate like that. I like to be in control of my time and I don't like people just driving up my drive, expecting me to be on [tap]. If they do catch me here I'm irritated because it might look as if I'm sitting

around doing nothing but I've got a programme that is happening and that person has interrupted it (man Organic).

Many farmers said something like this: "You have to work hard but it's good healthy work". This hard work was associated with physical activity, as this farmer said:

I can't stand the lack of exercise or the inactivity of academic type work. It just drives me nuts, ah. There's nothing better as far as I'm concerned, as to go and shift half a dozen electric wires and, and get warm doing so on a cold frosty morning. Because ... the human body actually [needs activity] ... every day ... and you need that sort of activity other otherwise you actually end up with poor health (man, Conventional.).

Challenge (5, 3, 3)

For some farmers the challenge was what drove them and the sense they gained from overcoming the challenges they confronted. These challenges were related to improving their farming practice, land development, making farming into a business, finding and taking on new opportunities. There was "... always something to improve, so I like the challenge of that" (Organic) and "I think you can always improve" (Conventional). As this farmer said, "There's a whole process of sort of working with the environment and nature and harnessing that into a business, ah, and the challenges that provides" (Integrated). Learning to manage a business, and associated activities such as having a business plan and managing employees, was a challenge mentioned by two farmers both of whom were in the Conventional panel. An Organic farmer had an entrepreneurial nature. He said, "I'm always looking for opportunities to ah, go into new things, ah, yeah, I sort of probably tend to get bored after a few years of doing the same thing". Others said:

Most of farming, is sort of, it's a bit like trying to land on an aircraft carrier - it's ninety five percent boredom and five percent sheer terror, and it's a bit like that. It's the stimulation I get out of that, that trying to put something together and actually seeing ... doing what you set out to do, is such a buzz (man, Organic).

Oh, I love farming, I really enjoy developing land, like this land here was not terribly productive when we first came here and I think in the first 5 years we doubled the production both physically and financially and that was tremendous, I really enjoyed that, breaking in rough country and making it into nice paddocks, and I'd really quite like to do that again. Our neighbour's place next door is fairly run down and I'd like to grow more grass there. I enjoy that sort of work (man, Conventional).

Recognition and feedback (8, 6, 6)

And the real proof is when it goes out the gate in a truck (man, Conventional).

Feedback about doing their job well came to farmers from many sources associated with work specifically to do with the farm, or dependent on the farm, as the above quote suggests. It also came from the farm itself – from the farm's appearance, what the grass and other crops were doing, healthy, heavy stock, returns from the meat works after stock had been slaughtered (product performance), and crop yields. For many male farmers, their wellbeing was dependent on how well the farm was doing – production, lambing percentages and so on. This is well illustrated by these farmers who said: "I enjoy watching the sheep grow" (Integrated), "Seeing big fat lambs lying in the sun ... after an inch of rain" (Organic), "... very meaty lambs. I love looking at them. They're very well conformed" (Organic). Seeing the results from improving the farm through the development of infrastructure, farm development and soil improvement were also important. For a few it was about there being no surprises: "I suppose the more things go to plan, I guess ... if things go your way, yeah" (Conventional). The following quotes illustrate these points.

Interviewer: So how do you know when things are going well for yourselves, your own wellbeing?

Man: Well you look at your farm and see that it's in good heart well, you know.

Woman: - that makes you feel –

Man: - makes you think you must be doing alright ...

Woman: I suppose it gives you that sense of satisfaction, so if you're feeling, satisfied and happy that you're doing a good job and that things are running along OK, then, you don't feel stressed and ah, all the rest (laughs) (Conventional).

Man: Yes, if it rains at the right time of the year and snows at the right time of the year and everything else.

Woman: As long as there's plenty of feed and that for the stock.

Man: Yeah, bit of grass growing, um barley's just been drilled so it's through the ground and it's looking good, so, at least I put it in up the right way. But ah no, I guess it's just when you get a job done and it's sort of done up to a satisfactory sort of level, I suppose. If I do something I generally like to do a good job at it, especially when we do most of it ourselves ... baleage all wrapped up and then you get a good shower of rain and you think, oh, that's perfect. But if the stock are healthy and everything else without too much trouble. If the flies stayed away that'd be a good one. Ah no, it's just yeah, as long as everything ticks over without too many dramas, nothing falling over (Conventional).

Woman: Well, you've only sort of got to look around you. You sort of know yourself whether you're um feeling comfortable with the situation or whether you're thinking gosh I've got to buy some more feed. Um, or you know, well, OK, I can shut up a paddock and make some baleage or that type of thing. From that sort of level you know that it's going well. Um, or if you harvest a crop and it's looked good and it's performed and [been] put in the silo, [done] what you expect it to, if you haven't had any climatic, um problems, um so that sort of tells you what you, whether things are going well or not um. If you don't get your yield for you peas and you sort of think well, they should've done better than that or you think well OK it's not great.

Interviewer: So it's based on yield and -

Woman: Yield and yeah, just the look of stock, you know, whether they look healthy or - yes, nothing scientific.

Man: You can tell by the colour of things that you know, nice green colour - things are healthy. If they're not then ... (Conventional).

I'm happy if my stock are happy and they're looking well and they're fattening well and that's where I get my thrill out of. Training a new pup or something like that. That's where I get thrills from. Putting a new fence up - things like that (man, Integrated).

When we put the water scheme in our lamb weights went up from say 14 and a half kilogram average to 16 kilogram average in one year and never went back so to my mind it pays (man, Conventional).

Two farmers (Organic and Conventional) wanted to create their own brand and have the satisfaction of receiving personal feedback from customers. One expressed it in this way, illustrating the sentiments of both farmers:

That's another thing about trying to market the Organic product on the local market. Getting a little bit more control at presenting and representing our product, and, at the moment, what we do offer is definitely superior to what's out there and to a certain degree, without wanting to sound um, conceited but, in some cases, better than other products, and if that can be maintained, then by branding our product we have a reputation, and we can hopefully make full use of that rather than being a nameless, faceless piece of meat, or wheat, or whatever. And ah, hopefully somehow we can gain a bit of strength that way ... I was just thinking one of the biggest ones for us at the moment is the feedback we're getting from the lambs so we must be doing something right. When the chefs, and other people are coming back and saying, well, it's the tenderest and the tastiest ... (man, Organic).

This woman was very proud of her husband's Organic products and how her horses looked:

... even the lucerne that [my husband] grows like, if he sells any lucerne to people for their horses or stock [they] just love it because it's probably got you know better flavour and ... they lick the ground - they don't sort of leave anything. And like my horses are incredibly healthy. Like anyone that ever comes here goes, wow, your horses are so

nice, in such good condition. I don't feed them any high faluting [products] or anything. It's just probably because they're not full of chemicals (Organic).

The last two Organic farmers quoted took a pride in their end product. One farmer mentioned taking a great interest in the feedback provided by the meat works compared to most who only mentioned their pride in the farm stock while it was still alive.

You always watch your killing sheets. You always go through and - first thing I do is ... there's a hit rate and weight and stuff ... getting in the grade - I always check that. If you're in the nineties, it's always a buzz. Um. And the animal health status, you always keep an eye on that. Um. Yeah. It's a great way of seeing how your stock are doing (man, Integrated).

Several farmers mentioned their success in stock competitions at local A&P shows and other external sources of recognition. This farmer mentioned several of these and frequently used an accomplishment as evidence that "we must be doing something right".

I think by paying more attention to getting lambs to fatten quicker and be away quicker. There's not the same dagging involved in them because they're dead before they really need it. The heavy weights - we're aiming to - I like to think we could average 18 kilograms plus year in and year out for our lambs. Um, we've been sending them to Canterbury Meat Packers in recent years and sort of working up the pecking order with them and I believe they're going to offer us a [named] contract this year which is their top level thing, so we get paid a bit of a premium for that. So we must be doing things right by them ... Well, I really do enjoy producing good stock and doing things very well ... we've done very well in recent years, with our cattle. The cattle [breed] is a very high yielding animal and we've done very well in beef carcass competitions. We don't seriously enter them any more but when we did we were placed in the NZ beef carcass competition a number of times and actually won it once. Um, we always enter the local A&P society ewe/hogget competitions and last year we won the Romney section for Otago and Southland which was amazing and um which put us on to the NZ final but we didn't come through there, but um that was nice recognition - we must be doing something right. So you know, those wee things we're quite proud of, and we're proud of our stock (man, Conventional).

We got that report back from Canterbury Meat packers saying ... our livestock was ... in a sample group and we were well up. Anyway, I can't remember whether we were at the top ten percent or something like that. That's the sort of thing that gives me large amounts of satisfaction (man, Conventional).

9.2.4 Being a farmer and owning a farm

An important part of the identity of participants was to be known as a farmer and to own a farm. This identity was of course, reinforced by the wellbeing associated with farm work that was covered in the previous section. It was also associated with having a proprietary interest in a farm and its animals and being responsible for what happened on and to a substantial piece of land.

Identity as farmers (6, 8, 6)

'Being a farmer' and hence, the activity of farming, was an important part of the identity of most farmers. It was the fulfilment of a dream or the 'best job' and often related closely to their sense of purpose: "I've always wanted to farm. I never believed I would achieve it, yeah, in fact I'd pretty much given up on that idea, yeah, earlier on, but it's amazing" (Organic). For this Conventional farmer it was "... doing what you've always wanted to do, I suppose. I am happy with my work". An Integrated farmer said, "It's the best job you could ever have", while a wife said her husband was "... getting the opportunity to do the things he's passionate about". Another Integrated farmer said:

I love what I do. I suppose because it's something, touches all my happy buttons really. It's outdoors, it's livestock, it's healthy - most of it. Um. But you deal - partly with livestock and having a lot to do with the environment. I feel directly responsible for a

patch of the earth's surface, which is - you know - it's quite a responsibility, really. You know, you've basically got six hundred hectares of the earth's surface which is in your care and ah, you really have to be accountable for that to a degree. So yeah, [like] I said ... every single one of my buttons get pressed by that.

For this farming couple it has been the achievement of a dream to have their own farm:

Man: It has [been a dream] for me, it has been for years. I was brought up on a farm but um, the advice of my father was, don't take agriculture at college (laughing) ... it was probably the best advice he'd ever given me, pause, yeah, I'd never have got a farm otherwise. I had a brother that went um, he has been a musterer all his life. He's never even made his own house, at 35, and I could see myself going down that line if I hadn't taken a trade, yeah ...

Woman: I mean sort of like my husband], all I wanted to do when I left school was to be a land girl, but my father wouldn't let me do that either (all laughing) (Organic).

For this farmer it is important that he can be an Organic farmer without having to practice a subsistence or peasant type lifestyle.

I enjoy coming from a farm, so, I enjoy being a farmer, or in that I am a farmer ... Yeah so it's that satisfaction and there's also a satisfaction being a farmer but knowing that, potentially [it's] - you know- [a] profitable way to exist. You're not in a world scene [where] - you know - most agriculture is peasant agriculture (man, Organic).

For an Integrated farmer, his hobby has become his work, "... so I'm in heaven, naturally". Another has no hobbies so cannot imagine life anywhere else:

[I've] no intentions of retiring or leaving the farm in the mean time. It's part of my life. But gradually [I'll be] less involved. Ah [my son] is taking over more of the physical side of it and hopefully we'll be able to produce enough income to um hire maybe a labour unit full time ... Work when I want to. Some of the things I'm still quite happy to do. Yeah, I've been told the worst I can do is to retire because I don't have another hobby that would be as absorbing as this is (man, Integrated).

It was not just being a farmer that was special to these participants, but being a particular kind of farmer. For example, a man said, "I don't want to be a dairy farmer" (Conventional), and another did not want to be a cropping farmer like his father.

When parents saw their children taking an interest in pursuing farming for a career they were particularly pleased. These parents were talking about their 12 year old son:

Woman: ... he spent the day off school, he worked absolutely solidly. We were just thrilled ... with his dog and his bike and his sheep I mean he's very keen ... [we're] giving kids things to do, teaching them a bit of responsibility to look out for animals. [Son said,] 'ooh that lamb there's limping' ... and we've driven past and haven't seen it.

Man: No, he's got an eye for stock ... (Conventional).

Farm ownership (2, 0, 2)

Farmers had a pride in their farm, a special, proprietary, ownership of it. As one woman said, "We're proud of the farm - it's a nice farm ..." (Conventional, woman). The wife of a Conventional farmer spoke for her husband when she said how she felt "... being master of all you survey" was significant. Evidently ownership of land and being responsible for all that happens on that land is very important to some farmers. Land that has been in the family for some generations also has a special significance. An Organic farmer said he gets a satisfaction from "... a certain amount of prestige and how it's a good property and it's well run and, yeah, no, I'm quite proud of the farm". He also took pride in his 'knowing' or sensing of the farm's condition:

I mean you know by gut feeling whether you're going well or not. I mean you know how much grass you've got, and the value that you put on your grass or feed or crops or whatever - how well they're growing. So you get a certain amount of pride in that too (man, Organic).

Other Organic farmers also indicated that they knew their farms intimately. For one this was related to the length of time over which he had become familiar with the family farm:

After driving around it for twenty years on a motorbike there's probably very few square feet that I haven't been over. And, you almost get a sixth sense about your location on it (man, Organic).

Some Organic farmers did not want to make any inferences about one aspect of the farm being more important than any other, saying things like, "We pay attention to everything" and that it was "all important". In this way they indicated that they saw the farm as a whole.

Part of this ownership was related to the accountability that farmers felt for the welfare of their stock and the responsible use of their land. Some farmers took great delight in their stock and their observations of animal behaviour, as these observations reinforced their feelings and identity as good farmers. For example, this farmer had a low stocking rate partly because he felt it increased his animals' happiness.

Man: I've only got a thousand ewes on, oh plus the hoggets - thirteen hundred on, ah five hundred acres which is ... [a] very low stocking rate. Um so it just seems to, yeah, it works. Plus you don't have those um [stock health] problems - if you've got a condensed mob of animals, you get them picking up worms and they just don't get to be themselves. I just let them loose and they run around. You can see them rubbing up against the posts and jumping around and I like that. As soon as you see animals like playing and running around you know that they're fit and healthy - yeah. 'Cause you see, if an animal's not fit he'll just, yeah they'll go all droopy and they don't look like they're enjoying life so. But no, it's a tough life for a lamb.

Interviewer: So you watch the animal behaviour too?

Man: Yeah, it's amazing ... especially on the hills. If you've got singles near that rock ... lambs'll just play there all day and you think shit, yeah. Or ... a tree branch'll fall into the paddock and they'll just love it. They'll bounce around and yeah, you know that ... they're fit and healthy (Integrated).

9.2.5 Attitudes towards financial success

"I've always wanted to be a farmer, but I've got no desire to be a poor one ..." (man, Conventional).

In this section the association between financial success and personal wellbeing is explored. There is some overlap here with previous chapters as participants' visions and constraints to those visions often incorporated a financial aspect, and this has been detailed in Chapter 2, while Chapter 9 presents how participants knew a farm was doing well financially. For some participants (3, 1, 2) their happiness and wellbeing was completely dependent on how much money they made: "Making money is number one" (Integrated). A wife questioned her husband about his motivations in this quote:

Woman: Wasn't that your motivation for wanting to do it, to see what farming methods produce the best economic results and how Organic compares to non-Organic....

Man: Well, I believe that we could make more money out of Organic, so that was one factor (Organic).

Later, the same farmer said:

I'm always looking for opportunities, as I said before, to diversify or change into different markets or whatever. If someone wants to pay very good money for a type of agricultural product then we'll go that way, if possible (man, Organic).

Another Organic farmer also thought organics would be more profitable: "If it turns out I'd make more money being a slightly more Conventional type farmer then we would like to swap back". One Organic farmer commented that it was hard to get advice from consultants or other farmers about organics because "... a lot of the Organic types are sort of small time,

they're not in it for the dollars really, it's a sort of lifestyle thing" and he obviously did not see himself in this light.

The farmer quoted next saw investment in farming as long term and a way in which he had autonomy and control over his own money:

I think farming is a long-term thing. I don't look at it just as a return in the immediate year to year thing because I have this consistently with farmers, I can guarantee over the next two years or so I'll have probably four or five farmers come to me and say, I don't know why I own this farm because I'm only getting three percent return on my money, because look at it [like] this - what my valuation says it's worth and if I take out something allowing for my labour, I'm not even getting three percent on the money. I've heard that several times over the last 20 years, but I don't consider farming to be that in isolation ... there was an interesting article not so long ago ... it came out in one of the circulars from the National, I think it was the National Bank or Westpac did it, and they worked out the rate of return people had on their investment, and farming over the last 25 years. When they factored the capital gains they'd had into it, they were getting something like seven percent, after tax return, on their money. So, I think you've got to look at it, not in terms of this year or next year, you've got to look at it in terms of 15 to 20 years. So, I've looked at it as a secure form of investment, plus with a lot of personal satisfaction in it at the same time, and I'm the sort of person that likes to see - I'd rather invest in something that I can control myself rather than - it doesn't particularly give me a lot of satisfaction to put money in with a funds manager... (man, Conventional).

However, for the majority of farming couples, their interest in the financial returns made by farming was countered by saying, "It was important but ..." (6, 7, 6). They would go on to explain that they needed to have a sufficient income because it was very important to them that they survived in farming - "Just the bottom line really making ends meet" (Organic) and that they lived comfortably. Then they say that they actually obtained a greater satisfaction from things other than financial success. The following quotes illustrate these points.

When we got here she [the farm] was pretty rough. We've sort of knocked it into shape. The next stage is probably trees and a bit more drainage and just sort of tidying it up a bit here and there (pause) but it all costs money ... just get on and do it ... [By the] end result you know we're doing the right thing but it doesn't quite often show in the bank balance... [It] shows out there which is just as important to me as what's in the bank balance (man, Integrated).

We could be down, eighty or a hundred thousand dollars this year, on income. Um. Everything else is going along quite nicely. You know, what we've missed out in the lambs I think we'll pick up on cattle ... and the lambs that we've got remaining. But you know like, all our crop ... yields have been quite good. It's just ... the hiccups of weather management which we can't control. Everything else seems to be going along quite nicely (man, Integrated).

I think for us....we're fortunate ... while I've never been financially motivated, so we don't need to look at the accounts to be happy - well, won't make us happy or not ... some would say, oh, farmers out there trying to get rich or whatever - well, that's not ever been our motivation. I say, you can't hide from it but a farming operation and lifestyle that we try to work towards - we've been of the opinion that if you can get those right and the type of farm you want to run, so long as we're smart about it, the financial side should hopefully fall into line ... we've got to look at ways that we can still do what we want, to make it pay. We're not specifically motivated to turn ourselves into millionaires but we also want to make sure we can get a decent monetary return and live comfortably (man, Conventional).

We're not totally money driven, you know. We like to farm with good stock and good performance and produce a quality product and you know, in a sustainable way (man, Conventional).

There's more to life than profit, isn't there? There's the social aspect of it and there's the enjoyment aspect of it (man, Conventional).

Man: Yeah, I'm a farmer and I want to be a good one ... or ... a reasonable one. [There's] ... probably easier ways of making money

Woman: ... but then you know, you've got to have your enjoyment factor as part of it too, and I mean you really enjoy -

Man: Yeah.

Woman: - what you're doing so, that's why it happens.

Man: Yeah, the money you make for the hours you put in you don't quite get - if you were on 20 bucks an hour you'd be doing very nicely but you're not quite on 20 bucks an hour ... but you know, when you send a load of bulls or something away and you get a big cheque ... that's good (Integrated).

For some their financial success was a matter of security: "As long as there's money in the bank I'm happy" (Organic) or was related to the difficult times they had experienced in the past:

The farm's my life, it's my business ... if it wasn't for that we wouldn't have survived on the farm ... It's providing a habitat for water-bound birds, but it's still a business. You've still got to work (man, Integrated).

Um, for quite a few years we never even came out of overdraft. And so it's a real nice thing to come into credit for a couple of months these days. So that's a good indicator that things are going well. That's the best indicator there is ... when things have been tight and you have a massive tax bill, that's another indicator that things haven't been too bad (man, Conventional).

For most participants, general farm practice was seen in a holistic way, of which financial return was just a part. As one Integrated farmer said, "If you can produce good grass you get good animals and if you've good animals you get good money".

Some participants measured their wellbeing by their relationship (or lack of relationship) with the bank and/or the accountant. For example, one farmer said, "We never hear from the bank so I always think that's a good thing" (Organic), and another:

We seem to be getting on happily with the bank, they're happy with us. The accountant's happy with how it's [going] ... We're happy with it. So as far as I'm concerned, that's all that counts. I mean we won't be certainly running the most profitable farm in the ... county but that doesn't worry me either, but I don't think we'll be running the least profitable one. (man, Integrated).

Others had different measures such as the state of their bank balance. When asked when he knew he was doing alright financially a farmer replied: "... I'm quite happy to go and spend, you know, four or five thousand dollars on a truck load of nitrogen, and not think twice about it" (Integrated). The following farmer took a very pragmatic approach to his financial situation. Money in the bank meant he could purchase a new bit of machinery.

... if things are, like the bank balance is looking pretty good with \$10 or \$20, 000 there to spare, we'll just knock it off our bank balance or buy a tractor or whatever we need to replace ... (man, Conventional).

For an Organic farmer his diffidence about the importance of money is also related to his sense of being different from many others in society:

I'd like to see us being able to draw a little bit more wages than what we are. Um, by society's standards we're probably well under what we ought to be having. But I don't do anything else by society's standards so why should I [worry about what I'm paid] (man, Organic).

One farmer found satisfaction in growing things – even trees that have ended up not being worth much.

It's a bit like owning a pine plantation ... My father planted ... on the previous place ... he sold. He had a thirteen acre plantation and he sold that ... this stand ... thirteen acres just reached maturity, and after all these years, 30 years or whatever, I think there's forty

thousand in it. Alright, so there's not much in growing pine trees but we have the pride the pleasure of growing those trees so that's the thing (man, Organic).

One of the Conventional farmers gave this advice: "You can't take it [money] with you, so you might as well enjoy it while it's here".

9.2.6 Attachment to place

I don't think there is any difference between an Organic and a Conventional farmer in the tie to the land. I think people who become farmers generally develop sort of a - I don't know what it is, how you explain it ... (woman, Conventional).

People were very positive about the place in which they lived (9, 8, 3). They felt connected to the land - as one woman said, she liked "... just being more part of the place that you live in" (Organic). For some this attachment to the land was because they had 'made' it the way it was - they had a sense of ownership of it - but for most it was related to the landscape and the birds and animals inhabiting that landscape and the peace or awe that they sensed as a result.

Some took a great pride in the landscape that they had played a part in creating - the ponds and the tree plantings, for example. One farmer said, "I love my duck ponds" (Integrated). Another couple spoke about the landscape of their farm:

Interviewer: So what ideas drive your vision for the farm?

Woman: At this stage I guess it's trees at the moment.

Man: I think it goes back to what I saw in Britain. Britain's an extremely beautiful place ... with the trees and the hedgerows. And when you see this [farm's landscape] and you're looking at about five plantings of trees⁵ ... that's what I'd like, three and a half thousand acres of parkland ...

Woman: And to develop a property you're proud of and you feel you want to pass on to another generation. I mean there's a huge satisfaction. You know this was a bare paddock 25 years ago and seeing what you can achieve. Yeah, it's a lot of work. You don't just stick them [trees] in the ground either. There is a lot of work in keeping and maintaining and doing everything right (Integrated).

In contrast, another farmer wanted to farm in such a way that the landscape was changed as little as possible:

I guess that it's probably a visual thing [environmental wellbeing]. You see the impact of what you've done or doing and I personally get satisfaction out of ... doing production without changing the physical properties of the place too much. Like without endangering - I like to see the native birds and those sort of things. Yeah, it's given me a lot, perhaps not a lot to do with me - but they [birds] have come back to what they used to be [before the use of 1080 to kill possums] (man, Integrated).

Many women spoke of looking out the window at the view: "Looking out there now has got to make you happy" (Integrated), "When the stress is on ... you sort of look out the window and think, gee ..." (Organic), and, "Looking out on green" (Organic). One spoke about the pleasure she gained while hanging out the washing. This facet of sense of place had a very domestic nature.

There was a sense of people 'knowing' their land. They were very aware of their physical environment - the birds, trees and other animals - and they took great pleasure in it. For example, one woman (Organic) spoke about the birds in the garden, particularly the kingfisher that "... sits in the birch tree". She also said the birds "... sing to us in the morning". A man said, "The oyster catchers normally arrive here between the 10th and 15th of August" (Integrated). They were also very conscious of the views from various parts of the farm. As one Integrated farmer said, when he's out working the sheep or cattle,

⁵ Separate periods of planting significant numbers of trees.

... and it's a good day, and you look out, and you know, it's just – it doesn't matter [that] you might have done it a dozen times before – but you sort of sit down ... you know it's a million dollar view ... (man, Integrated).

The comments people, mainly women, made also conveyed a feeling of spiritual wellbeing: "... the bellbirds ... every time you hear them it lifts your spirit right up ..." (woman, Integrated), "But it's also, you're living - you know, it's like the old cliché - a cycle, but it's a cycle of life and ... that part's exciting, you know" (Integrated, woman), and "I love the seasons" (woman, Integrated). They spoke about how the place in which they lived gave them relief from stress. It was viewed as "peaceful", to do with "emotional things", as giving them "freedom", "space", "beauty", as providing a haven or an escape: "I know I always feel really blessed living in this environment, healthy, peaceful. You know it's got to be good for you, away from city stress" (woman, Organic), and "... we've got loads of friends round here, but I actually really like being able to be on my own and we'll have a quiet time ..." (woman, Conventional), and,

All that stress and that is taken care of when you've walked around the valley and the trees have blossomed and the rhodies are flowering ... The large increase of growth in the springtime and the oak trees start to get into leaf ..." (man, Integrated,).

It's just wonderful to come back [from town]. It's quite recharging to get out there and, even just to look out the window. Um. It has a good effect on you as a person being in environment like this, despite the struggles (woman, Organic).

It is everything isn't it? Oh, it's something about the hills - just peaceful and quiet ... I enjoy the hills. I spend quite a bit of time up there just walking in the hills and working ... just a nice place to be. Solitude and quiet (man, Conventional).

Another woman spoke about an occasion when the family had camped out overnight on the farm:

... we camped [out in the bush] one New Year's night, camped along one of the paddocks in some tents and I was awake about half past 4, 5 o'clock in the morning, and it just sounded like you were surrounded by chimes, it was just echoing, you know, and it was absolutely astounding, I've never heard anything like it and it was all just bellbirds, yeah, unreal, and they all stopped by the time everyone else was awake (laughing) ... I wondered what it was, I've never heard anything like it. It was just bellbirds, yeah (woman, Conventional).

These quotes and others give the feeling that the farm itself was appreciated as an escape from some of the stresses of life. One woman went walking over the farm. One couple (Conventional) wanted to find a way of sharing their farm with others as an escape or retreat place and an Organic couple already did so for adolescent town boys. One wife said that for her husband the farm was:

... the excuse to go out and sit on the hill and stare down the river and look at the duck ponds and plan out his farm and it takes him right away" (woman, Conventional).

A Conventional farmer challenged the land rights given to Maori as tangata whenua (first people of the land) in New Zealand. He felt that his family also had such rights as they had been settled on their farm since 1860 (see later). Others felt pride in being on land that had been in the family for generations. One farmer said his family had been on the farm for "... over 100 years. Yeah, this house is over 100 years old ..." (Organic). One farmer mentioned the pride he felt in farming the land his father had also farmed:

Oh it's a pride ... there's a little pleasure of pride and of having a family farm. My father's worked this land and that that means a lot. It's a bit hard for the bag of wind to understand that but it does mean a lot to me (man, Organic).

9.2.7 Lifestyle

We like the farming lifestyle ... the farming lifestyle is good (woman, Conventional).

We have a good life (man, Conventional).

... we actually have a good lifestyle. We go away and do what we want. We are not tied to the farm like some farmers and the program that [husband] runs is heavy in the winter but we have a crib that we go away to in the summer. The farm hasn't really restricted us at all has it? (woman, Conventional).

The farming lifestyle was mentioned frequently by participants as a positive side of farming (7, 6, 10). In this report lifestyle has been differentiated from 'sense of place', even though it is closely related to it, because it is more pragmatic and less abstract and esoteric, less about the meaning of the place to people and its aesthetic aspects, and often about the place more as a commodity than a privilege.⁶ For example, the location of a farm may be seen as providing "a nice, relaxed lifestyle" (Organic), healthy with clean air and clean water.

When everything's going well, I suppose ... there's not a lot of stress, there's not a lot of desperation if you like, for want of a better word ... the fact of it is it's pretty cruisy really - it's a stress free sort of a lifestyle. I mean it can be as stressful as you want to make it. And a lot of that, those stresses are outside influence dictated which you can't do anything about anyway, but it's a pretty relaxed laid back sort of a lifestyle. You can sort of just, come and go as you please. I mean I know it has its busy times and everything else but ... (man, Integrated).

The farming lifestyle is family oriented with a farm being regarded a good place to bring up children. For some, "It's nice not having neighbours" (woman, Conventional). Flexibility is also a valued attribute of this way of life, as is apparent in the above quotes.

The lifestyle might also involve leisure activities both on the farm – "We're just happy at home" (woman, Organic) - such as walking, shooting game, training dogs and horses, or off farm such as following sports, fishing and boating. For one farmer his love of fishing was a strong motivation for him to care for the environment by keeping the rivers clean. Holidays were frequently mentioned – by those who wanted to have them and those who did (see later). According to a farming couple, "You can't afford not to have one [a holiday]" and, "We've got a taste for holidays and we enjoy it" (woman, Conventional). In two cases, having parents who could keep an eye on the farm was mentioned as also enabling families to be more relaxed about taking holidays.

Having a nice house and making it into a home was something women often mentioned as contributing to the positive aspect of lifestyle. Many had recently built beautiful homes or were in the process of planning them. Houses were seen as a place where family leisure activities could take place. Dad was able to come and go from his farm work, and still be about and available to children, for some of the time anyway. Some viewed the farm house as the hub of the farm, with importance placed on its position as central, both literally and figuratively. Some wanted to have a nice home while the family were still at home, so considerable financial resources had been diverted from the farm to achieve this. Several participants mentioned their gardens. One woman (Organic) said she had a "fantastic garden" and another of how important her garden was to her (Integrated).⁷

Farming couples liked the fact that farm work could allow children to be out on the farm alongside their father and/or mother. One Integrated couple said, "We make a good team". Many valued their freedom to take time off to be involved with their children in sporting or school activities:

Woman: There's lots and lots of variety and the fact that you're your own boss means that you can organise your time and your day to suit you ... or to suit other activities that the family have got on ... like ... you [husband] went to prize giving at the school ... I couldn't go 'cause I was working and I couldn't get

⁶ Lifestyle has also been discussed earlier (Chapter 4) in connection with participants' vision.

⁷ We wonder if the few references to gardens were because the participants thought this interview was about farming. It was obvious to the interviewer that gardens played quite a part in the life of most participants because most farm houses were situated within beautiful gardens.

the time off but he could go because he was on the farm so he could just say, well that's important so I'll go - you know what I mean?

Man: Oh and Christmas time and that - when the kids are home and it'll be a stinking hot day. You'll have something to do and they say, oh, what about the boat? Oh well, as long as we can do this after we come back in [well] -

Woman: [In the] evening when it's cool.

Man: So the boat goes out and later on we do [the work], so it's sort of, some things you can be a bit impromptu in what you do ...

Woman: It's nice the way we have all the family working together too (Integrated).

A mother described the experience of the night before:

Last night, [my husband] was away on the tractor quite late and [the farm worker] rang up and said he needed help to pull a calf and I had to get the kids up, because I won't leave the kids alone in the house, no matter what, and we went down and helped [him] pull a calf out and they thought that was fantastic. If [my husband] had a town job there's no way they would have had that. They wouldn't have seen such a thing. They were quite thrilled - that was amazing, I really enjoyed seeing their faces ... (woman, Integrated).

An Integrated farmer liked the day-to-day control he could exercise to take time off with his wife. He said:

... there'd be a number of times I can say [to the worker], right, I'm going up [to the house], and so we'd have a cup of coffee the out on the thing [deck] there - the two of us [wife and him], and that's what it's all about. ... there's times, during the week or whatever you can say right, let's go, [and] we'll bugger off for the afternoon (man, Integrated).

9.2.8 Negative aspects of wellbeing: Introduction

I think stress is quite a big one for farmers. I talk to lots of my friends, a lot of our friends farm, and lots of girls anyway, think that their husbands really are terribly stressed (woman, Conventional).

'Wellbeing' was viewed by participants as having both positive and negative connotations. For many, farming was a very stressful way of life. This stress had many different, and not necessarily mutually exclusive, origins and could be related quite simply to what many saw as part of the nature of farming - the inherent risk posed by extreme weather conditions, and the consequences of living on the job which meant that there was a pressure on farmers to work all the time. The greatest source of stress was the use of time, in particular the conflict between time devoted to farm work, mainly by the male farmer, and the ability to get off the farm for holidays or short periods. The weather and its impact on animal and farm life was the other greatest source of stress. Stress was also be created by the fact that farming demanded that farmers made choices about how money and time was to be spent. This had an impact on wives and families who may have felt that they took second place to the farm. There were additional tensions between husband and wife: financial stresses through carrying large mortgages and getting through difficult times; succession issues; and isolation. Succession and how it was managed also produced stress between parents, their grown up children, siblings and spouses.

9.2.9 Working all the time

... most farmers, are yeah, are flat out and are struggling with the work, um yeah, and I hope that somehow we can learn how ... farming can become a good lifestyle again as yeah ... we've sort of got to - you know - to keep above things. We've got to keep pushing things further which eats into your lifestyle and we really haven't as an industry, I believe, addressed that issue very well, ... I'm hoping ... through all this to try and balance the whole work-lifestyle thing... not so much just on our farm but as an industry I'd like to see it. It's a concern I have, yeah, because it affects families and relationships, everything, all the important things.....mm, big flow on - affects the children (woman, Conventional).

Living on the job and not being able to "... leave it behind at the end of the day" are some of the very stress creating parts of farming life. One woman (Conventional) said that even if they do get away on holiday her husband is still worrying about the farm. The idea of 'escape' was evident in the language that people used to talk about time off the farm. Some participants talked about "... having an escape from time to time" (Conventional), "... getting away off the place" (Conventional), "... remove yourself from it" (Conventional), or "... if you can, get away and enjoy life ... have holidays with your family" (Conventional, man).

Difficulty in taking time off (4, 1, 9)

The difficulty of finding and planning a time to take a break from farm work was mentioned most frequently and finding the time to do all the things that have to be done on a farm. As one Organic farmer's wife said, "... you do manage your time well. It's just that you work too much!" It was mainly the women who stated this issue most strongly.

Woman: We seem to be working 12 months of the year ...

Man: Yes we probably have been sort of like [that] in some ways. It probably doesn't sound like we're actually changing a lot even now, you know, we still seem to be doing, you know, a range of different things ... in the past each thing was just carried on into the next, and we're there full time. Trying to find a week or ten days when you can actually remove yourself from it has been sort of fairly hard, but then, I think this year with the drought – um - the harvest was finished quite early, and this year, at the end the drought ... broke and we were able to get in all our grass and bits and pieces and like a lot of that work was done reasonably early, and because we didn't put in wheat, there really was quite a gap there, where you have actually got a bit of time for a bit of sport and holiday time. [But] it doesn't fit in, totally well with school holidays (Conventional).

Stock have always got to be looked after ... but ah, you've definitely got to have someone, like you can't go away for any more than a couple of days, sometimes you can't go away for any more than a day but, never mind, that's just all part and parcel of the job (man, Conventional).

Woman: The only draw back is that if you do want to go away, it's a hassle.

Man: Yeah. Holidays are a bit hard.

Woman: We just don't have them (laugh) (Conventional).

I want to do things that I haven't done in the past while I still can, like fishing which I kept putting off and I don't want to put it off any more (man, Conventional).

It's hard to manage to get some time off. And he doesn't actually know that a Sunday is a Sunday. Just every day of the week is the same for him ... it was supposed to be three of them [children] playing sport this year ... because it's feeding out time - he'd have to stay here ... He didn't get to see any of their winter sport, which is not very good (woman, Organic).

Time's a big one. Time to do what you want. Yeah well, like now, we're also in that lifestyle thing, getting away and off the place. You've got to be able to get away and off the place cause we all feel a hell of a lot better when we do do that (man, Conventional).

Whether you 'have to' work on Sundays and/or Christmas Day seemed to be iconic measures of the domination of the demands of the farm on a farmer's time, or symbols of the sacrifice of family life to the demands of the farm. One Conventional farmer said, "It would suit us better if Christmas was probably about April/May". Another farmer saw it this way:

It's the nature of it. If it's hay making, it's hay making. It doesn't matter if it is Sunday or Christmas day or whatever. You can plan it not to be Christmas day but sometimes the weather can [mess it up]. If you cut hay and think it's all going to be in the shed before Christmas and then you get three or four dull days and it ... comes ready on Christmas day. I mean that's not good planning (man, Organic).

For some Organic farmers it is the demands of customers that seem incessant. This farmer is trying to have a "break" from it all, not necessarily a holiday.

It gets a bit of a struggle sometimes to keep churning stuff out week in week out, and ... we are starting to ... have a little break ... apart from our main suppliers like bakeries and things, we can work them out by supplying them ahead. But ... sort of stopping for a couple of weeks ah twice - two weeks a couple of times of the year ... (man, Organic).

As is apparent in these quotes and the ones used earlier in 'the balanced view' it is more likely to be the men who take the view that 'this is how it is', and be more accepting or phlegmatic about the demands of farming life on their time.

Tiredness and health issues (3, 3, 1)

Farming takes its toll on people's health and this is obviously also a constraint on achieving particular visions (see earlier). Farmers said, "... your shoulders click, your knees click" (Conventional), and, "The winter and spring is the hardest. It's pretty tough now, especially when your legs are shot, your knees are shot ..." (Integrated). Hip and knee operations were mentioned several times and one man spoke of using painkillers to get by. The farmers mentioning these problems were mainly in the 50 year old age group and found the physical side of farming very difficult at this point in their lives. Others talked of how difficult it was now for them to even do the dagging, "As far as my back's concerned farming is not very healthy" (Organic). One farmer also talked about how when you were tired you were more likely to have an accident:

So you tend to push yourself to make up for the three or four wet days that you've lost and ... [that] can become counter productive. And that's when accidents can happen ... when you are over tired, if you are thinking of something else when you are doing a job. And accidents do happen on farms unfortunately, and I think a lot of them happen because people are up against a timeframe or weather. I mean really it comes back to us. We are in control and I think we have just got to get smarter at when to and when not to - and being disciplined too (Organic).

9.2.10 Factors outside the control of the farmer

Weather (5, 6, 3)

"This is good rain - that makes you happy. Oh, there's nothing better than waking up [hearing the rain]" (Conventional).

"... rain when it's needed" (Conventional).

The extremes of weather – snow and drought – created the greatest stress on farmers in particular locations and consequently 'good' farming weather was also a source of wellbeing. (Weather conditions are, of course, also one of the constraints on farming practice, see earlier.) The wife of an Organic farmer said, "Waiting for rain is another stressful time" and her husband admitted, "I find it very difficult in droughts, it's a very stressful situation". Some, like the farmer quoted below, see this as part and parcel of farming:

Man: Well when things are going well it's good, if they're not it's obviously not too bloody good (laughing) but farming is like that, it has its ups and downs. Some days everything goes well, some days everything turns to custard and you wonder why the hell you do it but um then you get a day like this ... the weather has a big bearing on it.

Woman: Oh yes, especially at this time of the year with lambing.

Interviewer: And when you say going well, what do you mean by that?

Man: Well, ... you've got enough moisture, the grass is growing, um no stock problems, not losing any, you know things like that, but moisture, it all comes back to water, if you've got plenty of water you know the grass is going to grow, um.

Woman: And if the grass grows you know the stock are going to do well

Man: Yeah, so basically it takes us back to that water problem, the water thing, you know even with the irrigation it's still damn nice to get rain, you know, irrigation's only half the battle.

Woman: Yes, it's the big safety net.

Man: Yeah (Integrated).

For others even the memories of snow and both its immediate impact on their stock as well as that several years on, is still with them.

When I started off farming back in '92 and we got hit with that two weeks snow, and that stuffs us up for four to five years. 350 of our ewes stopped, the breeding stopped, 120 of our younger hoggets stopped, and that will effect us financially and also effected our flock because those were the best breeding years. So, it took a while to get back on track. So, it's a major [issue] (Organic).

Another farmer (Conventional) told these stories about the impact of the nor'west wind (familiar to Cantabrians) and then the rain, on his land.

... we were going to sow something in the autumn, and we had a nor'wester come through, and it blew all the soil and we couldn't see the knoll down there, and it was absolutely heartbreaking and I rang my cousin down in Ashburton who's been ... an agricultural contractor, and I was telling him that I couldn't see the knoll and I was pretty upset about it and he said, Well, what about where the soil is up against the fence at the end of the paddock? And I said, "Oh, it might have been up four or five inches up to the second wire", and he said, "Oh hell", he says. "I've seen them up to the top of a gorse hedge. Oh, don't worry, that's alright". And I thought, "Geez that's all that soil going away". And it's like the other day after 20 millimetres of rain, this brown slick going out and that's all soil ... (Conventional).

Animal health (4, 0, 0)

Although farmers obviously do all they can to take care of their animals some do inevitably have health problems and/or die. Noticing healthy animals was important and frequently mentioned, so presumably when they are not healthy, this is a source of worry. One farmer, already quoted, talks of how he carried a lower stocking rate in order to make sure that his sheep are 'happy'. This is obviously had quite an impact on his financial situation. Another farmer spoke of the cost to stock health of the high stocking rates he has carried in the past. One Organic farmer mentioned how he had trouble coping with "death and destruction", or in other words the death of stock both on and off the property, but he had noticed that it did not seem to worry his father.

Disappointments and mistakes (2, 0, 0)

Most farmers work very hard and then find that things still go wrong. This Organic farmer commented on the sheep the interviewer saw as she arrived on his farm, relating their condition to the complexity with which he has to deal:

[It's] bloody hard work actually. I mean you saw those sheep this morning. I'm, disappointed with them. But ... also, it's a fairly realistic expectation [that] they're gonna look like that so, I'm not going to beat myself up over it. I've done what I can in a difficult situation but ... I have to look at what I've done and do something differently to make sure it doesn't happen again cause I don't want to feel the disappointment. I want to be able to say look at my ewes. Look my ewe lambs are doing as well as anybody else's. And there's a whole lot of things that could contribute to that. I mean [it could be the] genetic makeup of the stock, it could be the pasture they're grazing on, it could be where they're grazing on the farm - whether it's a cold face or a warm face um, whether I'd find an Organic treatment that's gonna work on lice, um, whether I sell more lambs earlier and just try and do fewer better ... (Organic).

One Organic farmer spoke of how a consultant recommended he buy certain rams which had not produced the traits in their offspring for which the farmer had bought them. He found that very frustrating because he had to operate on trust but he did not know who to trust. (A lack of such knowledge also constrains a farmer's vision.)

Challenges to autonomy

The demands of modern day farming to spend time 'in the office' was not appreciated by many farmers, and this was sometimes seen as reducing their choices to do what they wanted to do. 'Office' or 'book' work was not valued as 'real' work. As one farmer said, "I just hate the stuff" (man, Integrated). However, another farmer had learned to cope with this feeling because he has found how important it is to plan ahead.:

Woman: He absolutely loves tractor work, and he gets frustrated with the - or he has got frustrated with the amount of time that is required in the office, because he's always been wanting to be out there and getting dirty, but I think you've ... probably in the last two years, realised that to make the whole ship run a little bit smoother, it does take those extra hours in the office, and when you've got the time you enjoy it don't you?

Man: Yeah, it's fine.

Woman: It's when he was trying to juggle the two.

Man: ... you can see the benefits gained from it. There's many times I used to say I've done nothing today - you know - I haven't got any sheep shifted, I haven't ploughed any paddocks, and [my wife]'d be saying, but you've done this and done that in the office. I said, but I've done nothing. You know? I mean, you've got to get past that and see that, but I think what helps me to see that is the fact that with an intensive operation, which is what we aim and want to have, timing is everything, and to get the timing right it's got to be planned. It can't just be made up as you go along. You've got to set some deadlines ... you've got to ... set those times up. For me, obviously, weather plays a part in what we're doing so you've got to learn to have some degree of flexibility but nevertheless, if you haven't got a timetable set, you don't know when the weather comes if you're actually falling behind (Conventional).

Woman: I mean you hate sitting at your desk, sorting through all your -

Man: Yeah -

Woman - crap.

Man: I should be more computer literate but I'm not ... I probably haven't ... made enough time to actually learn - actually to get on top [of it]. You need to put in quite a bit of work to actually get it going and ... practice and when you're working quite long hours the last thing you want to do is sit down and play around with the computer. But I have said that I'll do it over the winter time but I've never got round to doing it yet (Integrated).

Politically farmers were concerned about the challenges of government, or local bodies, to their autonomy as farmers and land managers. Public access to their land was a big issue:

I find it, you know, if we paid for this land and we own this land I think it is our responsibility to farm it as we see best, now I know that, that's a broad general statement to make but, you're being told who can and who can't walk over your land now what you can and can't do and what your men have to wear on their legs and you know its taking away your responsibility to make sensible decisions somebody else is making all the decisions so basically to some degree you're becoming a manager aren't you? (Conventional, woman).

9.2.11 Succession issues

There was frequent mention of tension between fathers and sons or daughters over doing things differently on the farm, or as a legacy of how the succession was managed (see later). This was spread over the panels but was more prevalent in the Conventional panel (1, 3, 5).⁸

⁸ Dave Lucock (ARGOS Sheep and Cattle Field Research Manager) suggested that it might be that Integrated farmers are more likely to have employed consultants who might have, as part of their planning, sorted out succession difficulties. We surmise that Organic farmers are more likely to have already dealt to this issue when they became Organic. Also, four Organic farmers (plus one converting) were not working on farms that involved issues of succession, compared with only one in each of the other panels.

It's probably, to be fair, would be a measure of probably our age ... 'cause a lot of our friends have just gone through family sort outs and things and I mean that is stressful for our age and it's the same for my parents. I mean, it's been stressful for them as well ... I think succession is particularly stressful for everybody concerned. You know, it's stressful for the person going onto the farm and for the parents to try and be fair to other siblings (man, Conventional).

In some cases fathers had practiced different types of farming to their sons and the sons found it very difficult trying to manage what they wanted to do while maintaining what the father wanted as well. For example, some fathers had placed an emphasis on cropping whereas the son wished to focus on sheep or cattle production. As one farmer said of the conflict with his father, "It sort of wears you out after a while". This farming couple were having trouble working through what they wanted to do with the man's father.

Woman: ... we're not really looking to change anything or do anything different. We just want to, you know, just sort of have a little more control over our own lives ...

Man: ... we got a farm consultant and we put a plan together. And I put it in front of him [father] and they [parents] said, yeah, it's OK, fine, but then you actually get to wanting to do it and they say, oh, you can't do that.

Woman: He sort of said oh, you've got to grow some wheat, but you know, we don't have to grow wheat, not this year. We might grow wheat next year, you know, it's just what fits into the rotation of the cycle ... we're not doing something because we're anti it. We're not anti anything but we're just happy to do, wanna do what suits the time and the place, sort of thing ... not just because we've always done it like that for the last ten years - we have to do it that way ... We've done it this way for so many years and we can't change it, but there's no such word as can't (Conventional).

9.2.12 Tension between husband and wife

There were many examples of the tension created between husband and wife by the husband putting the farm first in many different ways, by them having different levels of feelings of stress about risk, and even about the choice of farming (4, 3, 6). One unhappy wife (Conventional) said she wanted more choices over how they spent their money and their time.

Women often placed a greater emphasis on having a nice home than did men. This inevitably took money away from investment in the farm. In one situation the wife was finding the living conditions of the family home difficult as it was very cold and needed renovation, while the husband was placing a greater emphasis on farm development. Women saw the home as an investment in family life.

... he keeps going on about the money, how much the house costs but... [it's a] fraction of the irrigation, yes, and as we all say, children in their own rooms, make for a very peaceful life (woman, Integrated.).

Men also indicated by how they spent their time that the farm came before watching the children play sport or taking time off for holidays as described earlier.

If a couple lived on an inherited family farm and the wife became so discontented that she wanted to leave farming, her husband could be confronted with a difficult choice. One farmer described this issue:

... [my wife] came here because of me and she - like it or lump it is part of that - and I mean, if she said look, I'm gonna leave, for whatever reason, I mean it would be very hard for me, to leave ... We were seeing the doctor over in [town] some years ago, 'bout some family stuff, and he said, he couldn't imagine it until he'd been here for a few years, but he said, in the city people move house, they move business, they move employers, and you know, you shift house every seven years on average, but he said, it was a big shock to him to come [here] and find that for people leaving the farm, it's like ripping an arm off or it's like ripping a limb off. It's not, we sell the farm and go and do this ... you physically wrench a limb off. It's interesting that ah, you know the Maori concept of

Turangawaewae, a place to stand, and yet we put our hand up and say well, we've been here since 1967 (Conventional).

Where money is invested can be a source of disagreement between husband and wife:

... [my husband] will actually lease some more land probably and do things that way whereas I would far rather buy property in the city and things like that ... Buying more is what you'd prefer to do but I think we've got enough capital tied up in the farm. It doesn't seem to be a very good investment as far as I can see, the farm (woman, Conventional).

You know, [my husband] will disagree with me intensely, but I think there's far too much money been spent on machinery and it devalues, and I'm not sure that it's giving us the returns that it should do, and that's my catch cry (woman, Conventional).

Some couples felt differently about the level of risk the farm can bear. For example, there could be a lot of tension between them about how much debt to carry. This conversation between a couple illustrates some of the tension between husband and wife having different thresholds for taking financial risks.

Man: [My wife's] the worrier. I'm the more philosophical one.

Woman: I find it extremely stressful.

Man: Yeah, [wife's] stress is about debts and things. I don't.

Woman: Well, I do the paperwork.

Man: Yeah, but you can rest up.

Woman: ... because I was making some important decisions, when I wasn't actually keeping an eye on the figures, it got out of hand and, and -

Man: In spite of my saying, who listens to their wife? I don't know a man that does (laughs).

Woman: To your detriment (Conventional).

He went on to tell a story about being out with his mates playing golf and how never listening to your wife came up. Then he does make some acknowledgement of how it is for her:

Her [wife's] threshold, as it were, of worry, when it comes to debt levels, is quite different to mine. And what I've come to realise is that if [my wife] wants to keep good health we've got to have the threshold lower than what I'm comfortable with. So, yeah, I'll go along with that. And that actually keeps us together and it keeps us sane otherwise we'd actually part company (man, Conventional).

This next exchange between a different couple illustrates a similar tension that was more good natured than some the interviewer encountered. In this case, it was the husband who is more risk averse.

Woman: Oh, we're always having this discussion about whether we should, like especially as far as the fertiliser goes, whether we should um just, you know bite the bullet and, like go into overdraft more than what we can really do and fertilise the whole property and carry on in that vein because I'm sort of the opinion that if we do that, although we mightn't get the return instantly we will get it sort of later on down the track and that'll, you know, it'll even it out. It might take a wee while to even out but, yeah [my husband] is not a great one for [that] ...

Man: I don't like getting in too much debt, that's my worry.

Woman: Whereas ... I say that you will get the benefit from it in the end, so you're not actually going to lose money.... but it's trying to convince him of that.

Man: Until you get the drought one year -

Woman: Yeah (laughing).

Man: - and the flood the next year (Organic).

They may also disagree in other ways. The same couple again:

Woman: Yeah, I have to say [my husband] has very high expectations.

Man: There's nothing wrong with that.

Woman: No, there's not, I'm not saying that there's anything wrong with it, but ... I perhaps set my sights lower, and I mean, like I said earlier, as long as we've

improved, that's all, whereas [my husband] wants us to improve faster, yeah (Organic).

Others differ over what comes first – money or something else. In these quotes the wives are obviously more financially motivated than their husbands. In the first the husband is more concerned about the way he farms than financial return, and in the second about personal health.

Man: Measure my sustainability? Well, obviously using things that are compatible with nature, really.

Woman: Well and obviously it's going to be an economic thing as well. The outcome economically is going to be one of the major -

Man: But on the whole, if you lose money -

Man: Well, yeah, no. But yeah, well the indicators I guess for me are the soil tests. You try and make sure your soil is back into balance ... more earthworms in the soil, contented stock... um, yeah, but you know, I think that's it for me (Organic).

Man: Having lots of money is not necessarily, the be all to end all in terms of social, things ... I think having good health is more important.

Woman: But I agree with that too but as you've never had lots of money you really can't But we've had good health.

Woman: You reckon? (Conventional).

Many wives do the farm books and there is potential for conflict in this situation. Twice it was mentioned that husbands did not take any notice of what their wives said about their financial situation, for example, the wife who said, "He's always coming and asking if he's got any money but it doesn't have any affect whatsoever".

9.2.13 Financial stress

Some people, mainly women, gave the impression that financially they were finding things difficult (1, 2, 5).

At the moment I'm working off farm to subsidise his [husband] eating, or whatever. And really, for the size of the business, it should be able to provide us with a living and it's actually not. And I question that I'm afraid (woman, Conventional).

One woman said that it is all very well saying living on a farm is a wonderful lifestyle, as urban people were wont to do, but "... if you live on a farm and you're scrimping and scraping – well, you can't live on sunshine and fresh air can you? So, I think that's quite an important thing" (Conventional).

For some farmers the cost of secondary schooling for their children was a great worry. One admitted to an almost unspeakable thought in the following quote: "We say geez, why didn't we have two kids or no kids um. Every now and then it would be nice not to have to worry about it" (man, Conventional). For instance, some may live in an area where they need to go to a boarding school but they are just inside the distance which would give them a government subsidy, even though their farm is quite isolated – more by the nature of the road than the distance to the nearest town.

Choices about spending money on the home took money away from investment in the farm and such decisions can create stress and need strong justifications. The woman in the flowing quote explains how they made the decision to build a new house.

And we're encouraged a wee bit I guess from when my own brother sold a beautiful - smallish but beautiful - house to go to a bigger one, in town. We were starting to think now why do farmers put up with average houses just because it's your business? Other business people, who own a business in town and live separately still set living standards and so we quite purposely [spent money on a new house] and we've had people say, oh, but farm houses don't return. You know, it's the farm that returns. You look after that first ... (woman, Conventional).

9.2.14 Resisting stress: Strategies for resisting the domination of the farm

Some farmers were very conscious of the way in which the farm could or had dominated their lives "... because it can be all consuming. The work is never done on a farm ..." (Organic) or, "I'm not going to be a slave to the place – used to be but ..." (Conventional, man). In response they had decided to organise the farm around the needs of their families and themselves (7, 9, 6). For some, the decision that they had to change had come about because they could no longer work as hard physically as they had in the past.

Reorganisation of farming life

One strategy for resisting the domination of the farm has been to employ another person which then means that farmers and their families could get some time away from the farm and/or the farmer did not have to do the heavy physical work. For example, one Integrated farmer said:

Part of the idea of growing our business to this size is being able to have a full time person working for us so if there was actually time for ourselves, time for me to try and possibly do some more bookwork than I do but yeah, we're just, we're actually, we're trying not to work 80 hours a week ... (man, Integrated).

For others the strategy has involved making choices about how much work they do, changing their priorities and planning. Another Integrated farmer said:

I could push this farm a lot harder. I could make more money. Um, but you've still gotta enjoy life. One fellow said we're here for a good time not a long time so yeah, cause some people certainly lose focus in they just get so focused on working from dawn till dusk and then some of them live to a ripe old age but some of them find themselves dead in a hurry and think shit, jeez I worked hard - didn't have much fun but I worked hard (man, Integrated).

An Organic farming couple put it this way. They have organised the farm around how they want to live their lives.

Man: It could be that the best way of making money here would be to be for me to be here by myself, doing whatever it is, and working all the time. Well that wouldn't really pass the test really.

Woman: No. And you could grow the most beautiful perfect crop of some thing, and it might not have any market for it, or not a very high price, and that doesn't really do much either.

Man: Yes, so the crop activity thing really is that we can live the life that we want to do, and do the things we want to do when we want to do them - I think, for me anyway (Organic).

This Integrated farmer had also weighed up the pros and cons of irrigation and decided against it. He described it like this:

We got offered, irrigation and that was a big nightmare ... We looked at what we were going to gain out of irrigation, and financially we wouldn't be any better off - only when we sold – yes, we'd be better off. But we're not gonna [sell]. Hopefully, we're gonna be here for a fair while. And if we put the irrigation on the debt was gonna be pretty savage, and, since we couldn't irrigate all of the farm, we had to work the dry land a lot harder, and if we did have a drought - if you were stocked up in your dry land, you were to push it back onto the irrigation and it was already probably, yeah, you were virtually running it at max. And then we sort of got down to the labour there wasn't enough to employ an extra person to work it. And all I was gonna do was work harder and for very little gain. Oh gain at the end, but it's a long way up that tunnel. So we decided to go dry and yeah, enjoy it. Well, enjoy life better ... we try and get our holidays at Christmas time when the kids are on holiday and we go up the lakes. If you've got irrigation, that's when you're flat out. So we thought, yeah, usually when you're lambing you're doing from - well usually June, July, August between feeding out and you're sort of seven days a week really, and then you get to the end and you've got all your lambs and you get green feed and then

you can back off a wee bit, but if you've got irrigation, yeah, there doesn't seem to be any quiet patches (man, Integrated).

One farmer changed to farming fat lambs and cattle, and another was making similar changes to lamb finishing so that he would not have to go through lambing (both Integrated).

Several farming couples spoke of how having a set of parents still living on the farm, or nearby, enabled them to go on holidays because the parents could keep an eye on the farm.

Through an awareness of their own autonomy and the flexibility, choice and control they had over what they did each day and from year to year they had developed certain strategies and acted on them to change the way they lived, relieving the stress of their former lives.

Changing personal attitudes

Making such changes also takes a particular attitude. This Integrated farmer said it was important to be:

Enjoying doing what you're doing. And if ... [someone says], oh, we make x amount of dollars per hectare and blah this but I had to work 21 hours - 20 hours a day, seven days a week, to get it - I'm not into that. You know like I'll do the time. I still work seven days a week here. But I don't have to work seven ten-hour days or seven fifteen-hour days to do it. I'm not going to. I think why should you - no-one else does. And what ... [will] Helen [Prime Minister] do? She'll take it all off you anyway. Um. The more you earn, the bigger the tax. The other ... thing is that as long as we've got a little bit of lifestyle we can do what we want. We've got three meals on the table. We can go away and have a holiday. We can do this or, do what you wanna do at the weekends or during the week ... That's all I'm interested in, and our retirement ... I'm not interested in going and being a big shot farmer and, buying up half the area and having huge gear ... (man, Integrated).

Several men stated that they were not going to be like their father and put the farm first all the time and have no other interests. A Conventional farmer's wife made a clear assertion against the dominance of the farm:

... because we actually have a good lifestyle. We go away and do what we want. We are not tied to the farm like some farmers ... The farm hasn't really restricted us at all has it? (woman, Conventional).

An Organic couple spoke of how they are trying deal with the husband's attitude to farming:

Woman: [My partner]'s standards are too high ... he won't actually let himself do half a job - it's the whole thing. And we've got it down to a sort of ninety percent, instead of a hundred and ten percent.

Man: It's like I've decided that excellence is quite acceptable and I don't have to try and achieve perfection. You never get there, it's unachievable and you set yourself up for failure and disappointment.

Woman: That's taken ten years though, to get to that and I think probably having a family has probably ... made him realise that the extra time spent doing that [work] is time away from another precious thing that's developing so, yeah (Organic).

Another possible strategy is acceptance by wives that their husbands are going to work long hours. In this situation the home base becomes important because, if it is a good place to be, then children will be happy to be at home (and to come home if they are away at boarding school) and to bring friends home. When the father comes and goes they will be around to see him and to participate in what he is doing, and he too will hopefully be able to share in their world more.

The attitudes referred to above, and in the awareness that farming had its ups and downs and taking these in their stride, also played a part in farming couples coping positively with the stresses of farming life: "But that's the only down, because you know you're doing a good job" (man, Integrated).

9.2.15 Making comparisons: identity under challenge?

Farmers seem to be the great comparers (9, 8, 6). They appeared to be constantly weighing up something against something else, perhaps as a process of learning, or as a competition, a way of measuring their own worth against the achievements of others. Is it just part of who they are and the way they learn that makes them like this, or is it part of a 'modern' competitive life? This attitude may also indicate an uncertainty about ARGOS participants' identity as farmers in a political environment in which farmers are no longer valued as 'the backbone of New Zealand', and hence they have developed a habit of constantly making comparisons.

In the section below we describe all the ways in which farmers in the interviews compared themselves with others and with other situations. For example, there's the perception that city folks have the perception that farming is a very relaxed, easy going lifestyle. This contrasts with the view of those who 'do it'. Repeatedly dealing with such perceptions can be very stressful, particularly when it comes from close family, who might expect to come for holidays 'on the farm', not expecting that farm work has to continue while they are there. Farmers in the interviews were very prone to make comparisons with wide range of people and situations, and this in itself can put them under constant stress. The quotes in this section will often reinforce the points made already.

Comparisons with individuals

Of course, the obvious person a farmer compares themselves to is the neighbour, or all those farms that they pass as they travel. Many farmers had accountants with a large farmer clientele, who passed out anonymous comparison tables over certain measures across their clients. Such tables were much appreciated by farmers because farmers could then work out where they fitted. Some were proud of how well they had done in competitions at A&P shows. One farmer compared himself with those who had not changed, had no vision and had not invested in the farm.

Not only did they compare themselves with other farmers, but it might be with other members of their family who were not farming, or they might say what a visitor noticed on their farm compared with another area.

It was not only farming practices, farm production or money making that were compared. One farmer saw that a neighbour was successfully farming organically so thought that he could do it too. Another felt that it was the way his neighbour failed to manage his stress that contributed to his death from cancer. This farmer thought that his Christian faith helped him deal with such stress. Farmers also had an eye on how the neighbour's marriage was getting along or whether the neighbours take time off – one farmer noticed that his neighbour did not take any time off even though he had two other people working for him.

Comparisons with the past

People compared what their farm was like now compared with how it was when they had taken it over: "Especially when I know ... what it was like when we took over. You look back to that and um, you realise how far we've come".

Man ... the stock health here has improved in the last five or six years. I think it's about 6 years since we started using a minerals product which is a mix of minerals, trace elements, and it is chemical free so we've been using that for that long and the ewe deaths are about half of what they used to be. They used to be 5-6% which is quite normal for sheep farming and now they're about half that.

Interviewer: And what in particular do you attribute that to, do you know?

Man: Well, I can only put it down - well there may be another factor - the fertiliser thing I put it down to mainly, but we did change breeds to the Texcel a little bit before that, and whether that has helped the mortality rate, I'm not sure, but I'm sure the soil and the fact that there is a balance there now that there wasn't

before and the grasses are taking up nutrients and trace elements that they couldn't before because of being locked up in the soil and I'm sure that that is the main factor for that. The lamb deaths also - between tailing and lambs going to the works, used to be about three and a half percent deaths, now we're down to about one, one and a half percent, yeah, and that happened at the same time as the ewes. Stock was dying so much, and the stock visually look very healthy, they do particularly well, yeah, so it's just very pleasing really (Organic).

Farmers compared their own experiences in the past and how they had shaped what they do now. One Integrated farmer spoke of how he had been a shearer, working from "dawn till dusk" and then spending the evenings on the phone organising the week ahead. Through doing that he missed out on his first two children growing up. Now he thinks "... it's comparing it [farming] to other things, and you think, oh no, this isn't too bad a life at all". Comparisons were made with the knowledge required to farm now, particularly in relation to their father's or grandfather's time, and the number of people the farm used to be able to support compared with now.

Comparisons with other kinds of work

There were a lot of farmers who said how important it was to them to be working outside rather than inside and this was often cited as a reason why they hated office work. One Integrated farmer said he would "go nuts" if he had to work "inside", and added, "I couldn't handle that". The flexibility of farm work was also often cited as a comparison against other work. In this regard, a Conventional farmer's wife said, "We're free to come and go as we want, which you haven't got with any other job, really".

Comparisons between urban and rural lifestyles

The rural lifestyle was often contrasted with the urban, and usually the urban was found wanting. Rural values were seen as preferable to those in the city where there was more emphasis placed on competition.

Woman: ... our friends in the city are very caught up with -

Man: - their houses -

Woman: - how much everyone's earning, and what cars they're driving, and what labels they're wearing, and what their houses are like, and where they're holidaying. Amongst our friends in the country, because ...most of us are all in a very similar place ... we'll go to each others houses, eat sausages and cabbage or something ... our country friends, they're much more that way. So, financial things aren't such a big [deal] (Conventional).

However, a few wives missed their former city lives before coming to the farm.

Sometimes the rural was seen as the 'real' life where people were in touch with life and death - the cycle of life. By living in the city, on the other hand, people could be out of touch with these basic realities. However, for others, city life was 'real' and they were pleased to escape from it into the country. In fact, some felt they would not be able to cope in the city. One woman (Conventional) said, "I think you'd get a bit swallowed up in town". Another conversation about farm work went like this:

Man: ... how's the farm contributing to my wellbeing? ... there's a real sense of purpose ...which can be a bit overdone. I think the contrast with the city people is really valuable. It is really motivating and gives a really sense of self worth and in a sense it's a bit like, you know, we out here are the last of the hardy types, I think because we can actually be out here because you know, it's so tough.

Woman: What you do out here is real. This is something I've felt from when we first came here. You're in control of your own destiny so that's one thing. You know you really feel you're in control of your life but also what you are doing is real. You're not going into an office and shuffling pieces of paper and going home

again. You're actually contacting ... you've got your feet firmly in the on the earth ... (Organic).

This woman also includes responsibility for your own life as part of rural reality. The conversation with another couple went like this:

Man: ... when we go to town, the big city, we just look at people and think how removed they are from the reality of, yeah of life really, in some ways (laughing).

Woman: The base of the country [nation] still is the land (Conventional).

In contrast there were those who felt that the real world was off the farm:

... though it is hard. I mean some days you wonder why you do it, and, you know, you're quite depressed about it. But when you go out and see what the rest of the world is doing, then I get really depressed and I'm [glad to get back]. I've always been here. I don't know what it's like to live in the real world as it were. Um. And I think with the way that I process things, I would struggle out there. I think I really would (woman, Organic).

Another comparison that was made was that if the farm was sold, the capital raised could provide a return which would enable the family to have a very nice life in the city.

Comparisons nationally

Some farmers knew the national or regional lambing percentages, or average farm earnings, for example, and compared their own results to these measures. This quote demonstrates how the farmer is comparing his stock health over his time on the farm and also how it compares nationally.

... the ewe deaths are about half of what they used to be. They used to be – five to six percent which is quite normal for sheep farming and now they're about half that (man, Organic).

Some also compared their rights to the land with those of the tangata whenua, the Maori people.

It's interesting that ah, you know the Maori concept of Turangawaewae, a place to stand, and yet we put our hand up and say well, we've been here since 1867 ... you can have somebody who's one eighth Maori and can't trace their lineage but they have huge perceived rights over us or better, PC rights or something, and it's unfair. I mean, we'll work hard to be fair but, you know, they've that Turangawaewae, that relationship just isn't recognised. There's um a guy over at [place] who's done a lot. They're farming but they've done a lot with ... extending their business through kayaking and stuff ... [This chap] got up at a meeting ... and he said, you know, he took exception to dealing with the Department of Conservation. He said, we're the kaitiaki, we're the guardians here, and again, that's not recognised and ah you know Michael King - tragic that we lost him but – oh, I can't think of the name of his books - but basically, you know the people who've been here for a number of generations, and who expound that culture - it should be recognised as such (man, Conventional).

Another issue related to the functioning of local authorities is that of farmers who go along to hearings or act on committees and compare themselves with the consultants who also attend these meetings. In particular, farmers noted what the consultants were paid, whereas they were acting in a voluntary capacity and not getting paid at all. Two farmers mentioned this and what they said is represented in this one quote.

But it struck home to me, just recently with dealing with consultants and things in terms of these, water rights and what ... some of these guys charge. This one particular gentleman, who's an economist from Wellington, that was going to oversee what our consultants had done. And he was going to charge \$1, 250 per day plus GST plus expenses. Well I thought that was just probably a little bit much and you know, I'm doing a similar job of work ... for our community scheme, and I'm actually not getting any money at all. In fact, because I've got my own water right, and I'll probably have to relinquish that and go onto the community scheme I'm probably going to be out of - actually out of pocket. But, I still think for the good of the community we've gotta go down

that road and persevere with it ... I think \$1, 250 a day is a bit obscene. I really do. But there's a whole industry out there that is built on that. A whole consultancy industry and ... tied up in their own little world ... I liken them to the parasites that take down the poor crop. They'll pull us down to our knees if we're not careful because they're actually taking more than their fair share (man, Conventional).

Another farmer (Organic) who worked his farm alone, said he had found it difficult when he had chaired the school committee and gone along to working bees at the local school. When he was off the farm, no farm work was being done. The more wealthy local farmers, his neighbours, just sent along their 'man' to working bees and did not come themselves.

One Organic farmer even felt that he was pretty lucky because he farmed in a country that was not at war.

Comparison with others in the management of succession

People were aware of how other farming families were managing succession issues between a father and his children. One couple had noticed how the children of farming families in the area were not coming back to the district and they wanted to learn about how to encourage and provide for young people to come back to the farm and the district to work, not only their own children but those of others in rural areas farming or not.

Man: But one thing we have talked about is that we ... see good opportunities here ... in setting up tourist ventures in relation to the farm. And we've sort of talked about ideas with that ... some of them [kids] are quite keen on different things that might tap into that. That's just from my watching. I don't want to do what my father did. Well I suppose I had the choice of being here but I felt I didn't really have the choice.

Woman: Which makes it not a choice. If you feel you haven't then you haven't.

Man: Yeah, so I don't want to put that on my children. They've got to want to be here. I think that whatever you do is what you've got to want to do because that's what you're put here for. And it's a purpose isn't it? And you've got to find that purpose.

Woman: And we would like to be able to have something going so that there is a bit more employment here so that kids don't have to leave and go off to Wellington or London or whatever. They can have a really good life here. And at the moment those gaps aren't available...

Man: And you know we've seen other families that are a bit older than us. And older kids are just going away all the time

Woman: Five, six kids just gone miles away.

Man: So ... the community is - we've got quite a few people our age but then we've got a missing gap of younger ones coming through. And it's really affecting the community, you know, farm workers and that.

Woman: Yeah

Man: You know it's hard [to get] any sort of rural employment. It is hard to get good young people and that affects the whole community. So, I'd like to see opportunities where people can be employed and be still rural based and um lots of opportunity. There's vehicles going past here all the time.

Woman: Hundreds of them. [We need to get a] way of stopping them. Come in and give us your money.

Man: Yeah. And this is all totally unique to them [tourists]. And one thing that they love is seeing a sheep. But they can't. They just actually drive past and can't actually get within anywhere of it. So I think there are lots of opportunities for unique things to do with the [area]. Adventures could sort of be set up. We've sort of got ideas of things - well, that's all we've talked about is the ideas (Conventional).

However, for many farmers the main comparison was with their father and how they were not going to be like him! This man spoke of his father who:

... retired, sort of, at 71 ... he was still here when he died – semi-retired. I'm not going to do that ... there's golf to play, there's fish to catch and there's places to see. That's my goal anyway (man, Integrated).

A Conventional farming couple engaged in this conversation:

Woman: We know we don't still want to be here farming ... until we are geriatric, until we can't do anything else which can come down to that sometime. You can't leave it till it's too late, it's too scary.

Man: I don't want to be like dad. Dad is still, well, he's supposed to be semi-retired. He's got his own bit of land as well but he still helps me. But his life is farming and he enjoys that so he doesn't want to give up because what else will he do? So I don't want to be like that ... there are other passions I have. I enjoy farming but I believe at the moment that's what I should be doing but I'm wanting to hand it over to my children and get them working and managing as soon as possible, so that we can be free to do other things. I mean still perhaps be around, not necessarily go away.

Woman: Just have the freedom to sort of be able to do that I think is a big thing (Conventional).

Comparison with other kinds of farming

Many referred to dairying – both as a form of farming they did not want to undertake, either because of its lifestyle, or because of its impact on the environment which they saw as detrimental. One farmer had even moved farms because there was such pressure for his farm to change to dairying. Farmers also made comparisons with 'modern' farming.

I don't really like at all what's going on with modern farming, where you turn it into a business or industrialise it and depopulate the land and ... I think that in the future it's going to reverse purely because of energy reasons and ... we're going to look closely again at - even mixed agriculture - and so on. In New Zealand modern agricultural ... arable ... farmers think they're efficient but they're not efficient at all ... I'm always arguing with them about their notions of efficiency. It's only efficiency if the fuel's cheap ... but it's not efficient at all compared with say, with Chinese agriculture ... (man, Organic).

One man felt that the emphasis on technology and scientific measurement in modern farming, particularly for those meeting quality assured criteria meant that people were paying less attention to their own observations:

... this is a bit of my own philosophy, that using more of the eye-ometer and the necktop computer we can actually make some good solid progress forward for our own businesses ... without needing to be bogged down under more and more paperwork and bureaucracy and recording and measuring 'cos I nearly wonder some days if that's not going over the top ... sometimes you think, well when is the actual time for practical farming ... if you were to subscribe to all this measuring and recording and data and, you'd probably need one day in five for doing it. I don't subscribe to that. I don't give it one day in a month ... Hopefully there's still other people out there that are still in my way of thinking, that we're not a dying breed, and that there are people that are younger than me that are thinking that way, because I know a lot of them are being squeezed into this funnel that's going to turn them out as recording, and measuring and we're losing our base of people with what I call stockmanship skills, those basic things that they can just assess with their eyes and their ears and their head - what's actually happening here. They don't need to go away and get it all recorded and data-ed and da-de-da-de-da-ed - why is this performance here not going right? They should be able to absorb it all in, out there (amongst it) and see that things are wrong. Ah to me, you can see stock are losing weight before the scales will tell you ... in how little they're getting to eat, or how they behave when someone turns up. If they're being fed a lot of supplementary feed, if it's nearly a riot, well, they're not getting enough, or it's the wrong sort of feed and it's not satisfying their appetite Those skills certainly have got thin on the ground in the dairy industry ... you could say I probably learned it from the cradle upwards, because my parents had a very good set of those skills (man, Integrated).

Others talked about mixed farming as going back to the way their grandfathers had farmed.

The Organic farmers made the distinction between an almost peasant, subsistence, 'hippy' lifestyle compared with their farming which they expected to make them a reasonable income and enable them to live just like everyone else rather than being different 'Organic types'. For example, an Organic farmer commented that it was hard to get consultants or other farmers to seek advice from about organics because "... a lot of the Organic types are sort of small time, they're not in it for the dollars really, it's a sort of lifestyle thing" and he obviously didn't see himself in this light.

There was also a comparison made between Conventional cropping farming and Organic – that it was the cost of weeding that made the difference between the two. When this was dealt with Organic farming could seriously out-compete Conventional cropping.

Well for me if we can keep reducing our handweeding costs, we can lower our production costs. That's huge 'cause that means that we can then compete not only against other Organic farmers, but then we can start competing against Conventional farming systems and at the moment when we're getting - you know - huge premiums, you know we're not really a threat to Conventional farming. They're a threat to themselves but if our production costs keep going down and our productivity goes up, it may be a serious way that farming should look at (man, Organic).

9.2.16 Personal identity: sense of purpose and attitude

A strong sense of purpose or reason for being a farmer, and particular attitudes to living can help people sustain their wellbeing and see what they do as important. The next section describes some of the underlying reasons and attitudes that have kept people in farming. They were many and varied. For example, there were attitudes to caring for the environment and attitudes to change. Some were resilient and some responded to the challenge of surviving. Some felt farming was a privilege. (Several of these themes have been touched on in previous sections and chapters.)

Caring for the environment: generic succession (7, 6, 2)

Several farmers had a sense of 'generic succession', meaning that they felt they had a responsibility to care for the land and pass it on to the next generation, whether that generation was made up of their own descendants or not.

I'm only here to try and improve it for the next generation ... I'm only a caretaker of it. I'm here to try and leave it in better order than what I found it and hopefully the next generation'll do the same and yeah, it's just I want to try and do the best I can do and hopefully it'll be the best for me if I look after it (man, Integrated).

I feel directly responsible for a patch of the earth's surface (man, Integrated).

I think we've got to, an obligation to the environment and got to look after it (man, Conventional).

Well, I suppose I'm a bit of an old sixties person in a way ... and [my wife] ... she's a greenie from ... antinuclear protests, that sort of thing. That's us. ... a greenie, somebody who wants - just environmentally motivated, in a broad way - that sort of thing (man, Organic).

I am an Organic farmer. We do other things like [have] hedgerows. We leave green strips round our paddocks - things like that ... I mean because I'm an Organic farmer I have this thing that I say that I'm looking after the environment by not using chemicals ... (man, Organic).

It was interesting that on one of the Organic farms there were considerable resources being expended on the environment of the farm rather than that just around the house. For the woman on this farm one of the rewards for this has been the arrival of a wood pigeon:

Man: Well, we spend a lot of money like we've got a guy that does 600 hours a year, you know, planting trees, looking after trees, doing all those sorts of things, so I don't see other people doing that but whether that's actually looking after the

environment [I don't know]. I have got no measurements. And we've built ponds and - you know - fenced all the creeks off and planted them in natives and different things. You know, so we've got an ongoing programme for that sort of thing.

Woman: We've got a wood pigeon that came to visit. Chose our place ... Yes, it arrived about ten days ago.

Man: ... I guess our aim is that you're creating an environment that the native wildlife is happy to be in (Organic).

This farmer obviously does not see his emphasis on creating such an environment as incompatible with agricultural activity.⁹

Attitude to change (2, 3, 2)

Some farmers had a positive and constructive attitude to change. They saw the need to change and for this change to be led by what was needed at the time. For the first farmer quoted, this involved using new technology and producing what the market wanted. For the second farmer, it related to doing the office work required and building an office on to the house in order to do this work more efficiently. For the third farmer, it was all about doing something new.

... just carry on running it in the best way possible, adopting the new technologies and stuff as they come along. I think that is pretty important. And to produce what the market requires. There is no sense in not listening to what they are telling us. And if there is chances to expand definitely look at that. Or even off farm investment yeah just whatever comes along. Not to sit still I guess (young man, Integrated).

We are going to build an office in the corner here. We've got papers there and papers there and papers in the cupboard. It's really got to the point these days in farming [where] you've got to get a bit more organised (man, Integrated).

[I've always taken] the view that if you don't try something new you're never going to make any gains (man, Conventional).

Persistence, perseverance and resilience (5, 4, 5)

As described in the chapter on vision, "... resilience, is an active response with the purpose of increasing the capability of the farm to overcome negative stresses, both ecological and economic. Perseverance is more an effort to put up with such stresses and survive as a farmer." In the chapter on vision these farmer characteristics were described in connection with a wish to 'maintain position' – that is to keep the farm going the way that it is at present. In this chapter these characteristics are being used as attitudes that give people a sense of wellbeing. Some farmers exhibited a persistent attitude which enabled them to persevere with farming and survive whereas others were more resilient in that they had taken and were taking active steps to make sure of their survival. Both of these outlooks are epitomised by a 'this is how things are and we'd better learn to live with it' attitude, as exemplified in this quote because this farmer has adapted his farm to manage times of drought as well as possible and to maximise production. At the same time he is aware that the purpose of producing lambs is to produce meat and for him it is better that he does not dwell on that.

Yeah, what do you do? You just look after sheep really ... I suppose we're the midwife for a thousand ewes ... (laughs) you bring lambs in and then you get them through and then you send them to the works. I've never actually seen ... how the lambs get killed. It's always been a bit funny cause you go all that time to keep them alive and then you get to the end and - but that's the way things are (man, Integrated).

Perseverance often seemed to be a matter of having an attitude that enabled one to hang in there, seeing the challenge in surviving rather than actively responding to the challenge.

⁹ Thanks to Marion Reid for this observation.

I survived '85. We actually were technically bankrupt in '86 when they changed the rules. Our debt was as high as our asset because the farm value dropped so much. So I simply dug in and made the philosophy that I was going to last longer than Lange or Douglas in politics. So they didn't last very long and I carried on - so yeah (man, Integrated).

We feel good about it because ... bank managers - all sorts of people - they were all saying that they knew what was going on - they're expert, you know? I'm still here. We're not millionaires or anything like that but we're still here (man, Organic).

I find it very difficult in droughts. It's a very stressful situation but we are Christians and that has helped immensely - just to know God's peace through our stressful times, yeah, and that is a huge [thing] (man, Organic).

Physically because of it's all sort of a struggle - trying to balance just your mental [and] physical health. You know I think you're balancing well [by] the fact that you haven't ever thrown up your arms in disgust and walked off and joined the dole cue. I mean that's the big thing (laughs) (man, Organic).

... to be a farmer you've got to be an eternal optimist otherwise you'd never bother, 'cause there's always something - what about the poor fellows in those flood areas? ... they're a whole lot worse off than what we're ever going to be. And most of them will survive it, amazingly enough. But we're - no, farmers are very resilient people (man, Conventional).

... it's perfectly possible I could leave here and do something else but at the moment I will keep working really hard to be able to stay here in this, and I do say that there's unfinished business, there's a bigger plan - why we're working so jolly hard to stay here, and I'm not sure what it is. Um. You know, courses I've done in the past, things that [my wife's] done, that in the future will come in to be a huge asset somewhere ... but there's certainly a bigger plan up there. And I can't explain it more than to say there's a drive ... (man, Conventional).

And farming teaches your children to be resilient too:

Man: And it teaches them [children] about life too, about you know -

Woman: death -

Man: Yeah.

Woman: Pet lambs die, you cope with it (laughing).

Man: Yeah, and you know about birth, and just real stuff.

Woman: Yeah.

Man: Reality.

Woman: That life can be dirty and gritty and grubby and you still just have to do it - gotta get your hands dirty. Fine - they'll wash (Conventional).

Privilege (2, 1, 1)

Many farming couples felt it was a privilege and honour to have the care of land and to be able to have the lifestyle that farming gave them. Associated with this was the close connection to nature in terms of being part of enabling plants and animals to grow.

It's a great honour or privilege to get a crop to grow, and see the end results ... we always put the effort into every crop that we grow. We give every crop every chance to do its best, and it's not through our own fault [if] it doesn't work. It's just through weather, or you know, a hiccup (man, Integrated).

The following participant and his wife felt so privileged about their circumstances that they had young boys from town come and stay on the farm in order to share this privilege with others:

You know the land is really, really precious - to have given me, at this stage, the liberty to live in a place like this - and when we [have] our financial woes, you stop and you think. You know, I live in the best half of the world, I live in the best country in that part of the world, and I live in the best island in that part of the world, and I've got one of the best jobs, at the end of the day. Apart from the money woes, there is nothing I would want to change. It's just fantastic, and it would be very selfish not to share that. And you see

these guys come and yeah, they do, they see a different world. And, it doesn't mean they're gonna be farmers but they do take a different perspective, a different attitude away from it. It's good (man, Organic).

Interest – wide ranging (3, 0, 0)

Organic farmers in particular seemed more likely to place agriculture at the centre of a complex set of questions about which they had an abiding interest.

I'm quite interested in agriculture I mean not necessarily because I wanna increase my income or anything like that. I see agriculture as the centre for a whole lot of things ... a whole lot of things come together in [agriculture] - you know - social things, environmental things, food issue things, all come together and um sustainable agriculture is really important ... (man, Organic).

Associated with such wide ranging interests, agricultural practices were also about learning to get along with nature:

Man: There's also a whole personal development. Farming is about the personal experience of developing really. I think that's implicit in the whole biodynamic thing, you know. It has it in common with being a doctor or teacher or farmer. You know, to do that well you really need to work on yourself and align yourself with nature and not force nature to do what you want it to do and yeah I think that's an important ... not a physical aspect of the farm. I think that's implicit in it's actually never mentioned.

Woman: ... I wonder if it's not mentioned much because you aren't actually aware of it happening - you're sort of busy with daily stuff and it's only when you reflect ... (Organic).

Using things that are compatible with nature (woman, Organic).

Simplicity, health, getting back to nature and using natural things (woman, Organic).

... philosophically I feel good about what I'm doing but ah, at the moment it's pretty hard work (man, Organic).

For Organic farmers there was also an association between their wide ranging interest and a hope that the learning that came about through farming itself would encourage a greater practice of organics. As one such farmer said, "... wouldn't it be fun to be part of a movement that actually changed agriculture?" Another thought that:

Plus, I mean we believe that organics is the way NZ should go, to market itself, because we're such a small country I think that's something that we can have over so many other countries that we are competing against ... (woman, Organic).

When asked what the ARGOS programme should be measuring this woman said:

Woman: I suppose the farm product. Well I mean a good service to the public and a healthy crop. Just the obvious things really.

Interviewer: Well they're not obvious necessarily because no-one else has said service to the public.

Woman: It's just good healthy crop really. Shame everybody couldn't do it. Be a healthier place to live wouldn't it really, 'cause you can smell the spray drift sometimes like, you know, unreal - from other farms. It's probably ten miles down the road - [a] dairy farm - but you can still smell it in the air (Organic).

Her vision for the products from her farm extended out into the community. She wished them to be seen as serving the community because they were healthy. One Organic farmer wanted to run his farm as a share cropping operation and another shared his farm in an informal way, with young men from the town who came to stay (see above).¹⁰ In these examples, Organic farmers' visions also demonstrate their interest in things beyond the farm gate.

¹⁰ These examples are obviously also examples of Organic farmers' visions and hence part of Chapter 4.

9.2.18 Comparisons between panels

As is apparent from the description of qualitative research provided in Chapter 2 of this report, making distinctions between the different management systems for sheep/beef farming involves pointing out how a particular panel/management system has added a unique dimension to the description of a certain topic or theme as well as attempting to take into account a greater emphasis being placed in one topic area by one group over the others. This latter distinction is often a hard one to make because we have to take account of what meaning we think participants are making in what they say, as they are unlikely to use the same words. Even if they do use the same words they may not be giving them the same meaning. With that in mind we offer the following thoughts on possible differences between the panels in terms of how farming affects their personal wellbeing.

Conventional farming couples appeared more likely to stress the problems they have with the farm demanding all their time and making it difficult to 'escape' from the farm (or words to that effect). Integrated farming couples were more likely to have worked out how to deal with this and have done so.¹¹ It may be because of this stress difference that tension within Conventional farming couples was more apparent. Conventional farming couples were more likely to have mentioned succession issues. They were also more likely to have emphasised positive things related to the farming lifestyle whereas Organic and Integrated farmers emphasised their attachment to the farm as a place.

9.2.19 Discussion

It is apparent from this analysis of the interview data on the personal wellbeing of ARGOS sheep/beef farmers that the way that they think and act is complex and interesting. Farmers balance many of the issues to do with running and owning a business which they cannot get away from. They have to make decisions about how to balance their financial situation and how to spend their time, and these decisions can impact strongly on their lives, both in the present and in the future. Many of these decisions have a potential for conflict – raising issues between partners and within families. As well, farmers have to face the risks of large mortgages and bad weather. However, most of the interview participants exhibit signs of resilience and not only resilience but great enjoyment of, fulfilment from, and enthusiasm for, their chosen life.

It is evident from these interviews that farming couples place a high value on their autonomy and the flexibility that farming gives them over their work. However, there is a noticeable contradiction between these expressions of autonomy and the actual control that many farmers exercise over the time they take off for themselves, family and holidays, indicated by the high level of stress some couples expressed on this subject.

There is an obvious overlap between the different aspects of personal wellbeing described in this chapter and the visions and constraints of farming couples to do with the financial, succession, health, and attitudes to risk taking aspects of farming, described in Chapter 4. Visions and the constraints to those visions are often going to be linked to how well people are doing in the present and their attitude to life.

9.3 Relationship between the farm and family wellbeing

Most of the ARGOS participants had dependent or grown up children and were able to talk about bringing up children on a farm. They felt that this way of life had many positive qualities and gave their children particular benefits over others. However, having children also produced certain tensions between meeting farm and family goals. Farms were often

¹¹ This difference between Conventional and Integrated farming couples is unlikely to be related to life cycle stage because the average ages of the man, woman and first born child of the farming families in each panel are very similar.

isolated and this had significant impacts. The farm also provided and presented possibilities for children's futures.

A most important way a farm impacts on the wellbeing of families is related to the issue of succession. What makes a farm a family farm? How is the succession managed from one generation to another and how does this affect the lives of family members? These questions are dealt with fully in the last part of this section.

9.3.1 Quality of life on farm for bringing up children

Physical environment (4, 4, 1)

Participants talked a lot about how healthy farm life was with children able to be outside in the open air with plenty of space and the opportunities that provides for activities such as shooting rabbits and possums, riding motor bikes and riding and looking after horses. This helped to make them independent and resourceful.

They're quite good at making their own fun. It's quite nice for children. Dashing round on their bikes and ... (woman, Conventional).

We have a pretty good life ... We're lucky ... Living the plain green life I suppose and they're well fed, well provided for, yeah, they certainly don't miss out, they don't need for anything (woman, Integrated).

They can go out and get covered in afterbirth and dirt, and cow muck or whatever (man, Integrated).

Woman: I discovered very quickly that I needed farm clothes and school clothes, because [daughter] is just - dirt is attracted to her like a magnet ...

Man: You get her up the farm there and she's away up the hillside or she's down a gully. She enjoys it when she gets out there.

Woman: Yeah, she overturns rocks and she's looking for bugs and things like that and [husband] is really good because he'll get down and explain to her what they are. She knows more about bugs and bees and than I do - [a] mine of information.

Man: Well, it's just good. It just allows the whole mind to develop and see (Integrated).

The family members' participation in some on-farm activities for both work and leisure involved considerable exposure to risk. Children on farms tend to be involved with machinery, ride motor bikes and drive tractors before they are legally allowed to do so and this aspect of their lifestyle has its costs.

Little [son] - I shouldn't say this - but he used to take the big four-wheel motorbike across the paddock to visit [his grandparents], didn't he? Someone would probably call on me for that now (laugh). Kids, you know, kids just in town can't often go and do that - can't say I am going to Grandma's now (woman, Conventional).

Man: Probably in their younger days we were able to spend more time with them. On the farm they could always come with me. They were never left.

Woman: No, they weren't ... Most people thought that was bad probably. Little kids on the motorbike, out with Dad. Not being regarded as good now is it? Kids aren't supposed to go on motorbikes. You know but on a farm that's what they love to do - sitting in front of dad on a motorbike (Conventional).

They can all drive a vehicle now, even the young fellow can reasonably safely drive a vehicle even though he's not allowed to, but um, he does (man, Integrated).

For one of the Organic farming couples part of the attraction of organics was that it protected them and their family from chemicals:

And how, it's so much better to know that you're trying to sustain your health more by not continually being exposed to, the sorts of nasty chemicals which, have been proven to be nasty chemicals and I was thinking this morning how I don't see any farmers who when they use them, follow all the recommendations and are completely masked up and

covered up and, and it's gotta have a long term effect and I think that, that's sad so (woman, Organic).

Farm environment (10, 8, 8)

"It's the family farm that's made the family ..." (man, Integrated).

Living on a farm meant some families worked together as a team as children worked closely alongside their parents. This was seen to strengthen family bonds: "It makes all our activities very family oriented" (Conventional). Women particularly mentioned that they felt their children had a closer relationship with their father as a result compared with fathers in different occupations.

Like when he was a wee fella, I never went anywhere without him tagging along. And even after school he was with me every [day], like his bag was thrown in the door. I was always home here for a cup of coffee when the [school] bus arrived (man, Integrated).

In some families the whole family was involved in farm decision making. Mothers frequently worked at home and on the farm and so were considered to be more there for the children also. This is not necessarily all positive as this woman describes it:

I remember we were TB testing out in the yards one day and it was cold. It was wet. It was muddy. And I really didn't want to be there and I certainly didn't want to be there with a kid on my back but what else could I do? The kid on my back was safer than having him running round. And the TB tester said to me, "Don't suppose you've got any childcare centres around here?" and I thought, "Boy this one's a (?) one and I said, "No, we haven't" ... we did this TB testing and he was a bit of a yapper, as they can tend to be ... and at the end of it he goes, "Oh well, it's a good life though isn't it?" And you know, we'd been in mud - I was splattered with mud, everybody was hungry, everybody was cold and wet, and I thought "lifestyle" and I'd say he got it from me both, barrels. And he turned and walked off and hopped in his vehicle and drove out and I said to [husband], I think I just killed the conversation (laughs) (woman, Conventional).

Two mentioned they had sons at Lincoln University and they were providing input into farm decision making.

Farms provided employment opportunities for children to earn. Several mentioned that the children helped with tailing, for example. In this way they learnt the virtues of hard work. The farm was a training ground as these virtues and others were regarded as transferring to later working life.

Woman: Yeah, well when you get reports from where they're at, from the people around them - that they've brought the country values ...that they've learnt here. They seem to go with them wherever they go.

Man: Well most country children are the same. They go off to boarding schools ... and anyone that you speak to in that [area] always say that the country kids are so easy to deal with. And they know how to work and they have a sense of work ethics which a lot of other ... children don't have. And generally the ones that come from the country are set up with [those skills].

Woman: Yeah they seem to learn more life skills at an earlier age than what city children do (Conventional).

They see the real world. They see life, death. They see success. They see failure. You can't hide it from them. So um, I think it gives them sort of - well I hope it gives them a realistic perspective on life anyway (woman, Organic).

Young people also had opportunities for jobs locally because they knew about farm work. The farm could also provide opportunities for future employment and careers, not necessarily in agriculture but perhaps in tourism, say, developing other interests that children might have.

I mean we're sort of getting into the science side of things and enjoying that and I think that's what's coming out with [daughter] - that she's suddenly thinking, "Hey, yeah. There's something that I can do here", and she has definitely got a natural interest there and it's probably cause we're yabbing on about it all the time (woman, Conventional).

The farm was also a good place because not only the children wanted to come home when they were away at school, but extended family and friends were happy to visit.

Man: Well it makes them happy to come home from boarding school and ah get a bit of fresh air and get out on the motor bikes and create havoc.

Woman: They don't wish to go anywhere else. That's probably just a boarding school thing and they come home and go on the motorcycle. They don't want to go on holiday or go anywhere which doesn't benefit the parents at all! (Organic).

The flexibility of farm work meant that parents could follow their children's sporting activities, go to school camps, and take family holidays. A few mentioned being able to take the boat out in summer because they were close to a lake or the beach. Many were involved in the local primary school being on PTAs and school committees and participated in fundraising and working bees. Others were involved in sports coaching. Holidaying overseas seemed to be an often-mentioned goal.

Urban and rural comparisons (5, 1, 3)

Woman: Oh, it kept them away from all of the evils (mutual laughter). Well we hoped it kept them away from the drugs ... although you can still get into that but not to the same extent. Yeah, they've just got things to do. And it's not easy for them to access the town. You know kids in town can go to the shopping malls and mix with the wrong crowd. Yeah, I wouldn't want to be a town mother, I don't think (Conventional).

Man: Not with teenagers. Well, they end up pretty well rounded people, I think. They know that if a lamb gets born it will end up on someone's plate someday. They know how the world goes round, to a certain extent in nature.

Woman: There's probably some restrictions as far as travelling for sport and things like that. You're limited to the sort of education they might receive as far as where you can send your kids to school (Organic).

Also, having our children brought up in this environment has been very important to me. You know the upbringing they have had and all of those sort of things - away from the city, temptations and things like that. They have freedom - hunting and fishing ... (woman, Organic)

Many participants made strong distinctions between rural and urban life for bringing up children: "Oh, farm kids are always different (both laughing) - different than town folk" (Integrated). Another person said, "I think rural kids have a more fundamental, more basic foundation" (woman, Organic). One woman commented on her daughter's thinking about this subject now that she has left home:

... my daughter who actually hasn't shown an awful lot of interest in farming - like she doesn't go out and help shift sheep - she lies in a hammock reading a book all the time. She said to me just last week, in town she's a real townie, she lives and works in town. She realises now when she compares herself to her town friends, how incredibly precious her country upbringing was. She's only just nineteen and I don't know how she just suddenly came to this. She feels a little bit like a fish out of water in town. Well there's part of her that's not right when she's in town. She's comfortable in town but there's a part of her that still needs to be here unless she comes back regularly and is here in the country she doesn't feel real. She feels her life is artificial, you know. It's go to work, come home, go out clubbing, come home - and there's nothing to connect her to the real world and she feels that her country upbringing was incredibly important without her realising it at all at the time - connected - feeling connected to the earth (woman, Organic).

... the thing I have noticed with children - we have the children from the [named] School come here on class camp and that's really my only observation of town children ... then we'd have the country school and I've been on class camp with them and observed them on class camp and the country children are just so - there are naughty kids and there are disruptive kids but as a whole they're more centred, they're calmer in themselves ... they just have a settled sort of centred calmness about them that the town kids don't have and

I think that's a precious thing the country bringing kids up in the county has (woman, Organic).

They knew what was 'real' because they were confronted with life and death, were involved in physical work and activities, and this made them resourceful and able to make their own entertainment.

Interviewer: And how does your farm contribute to the wellbeing of your family?

Woman: Oh, it keeps them out of town.

Man: Oh yeah, plenty of space.

Woman: They get to experience so many things that town kids miss out on, that are real life things, you know, like life and death out on the farm - those sorts of things, I think that's good for kids to experience things like that.

Man: Well the responsibility of looking after a pet lamb ... you're getting the kids sometimes to, you know, lamb a ewe, all things like that.

Woman: Yeah, and they come out and they work on the farm, you know? They help with tailing and things like that, and you know, that sort of shows them that there is real work out there, that life's not just all about fun and games, um, yeah. Yeah, I just think it's a really neat life style for children to be brought up in, and you know, I don't think, like they don't miss out on anything, just because they live out in the country... (Organic).

In contrast the cities were 'evil' and full of temptation and distractions. Children in the city were more likely to sit in front of TV or play on the computer: "You know that they're home and always quite happy hunting outside. They don't sit around in front of TV all day" (woman, Organic).

Man: It's also a lot easier to monitor what they're up to than in the town, because they get on their bike in town and say they're going somewhere, but you know, there's lots of other opportunities to go somewhere else in a town ...

Woman: Well, they just don't go anywhere on their own do they? They let us know where they are all the time (Organic).

Besides, anything children wanted to do in the city cost too much. A couple discuss this in this interchange:

Woman: Well, what did we [spend when] we went to the movies - all of us.

Man: Oh thirty something dollars or -

Woman: No, no, no, no. By the time we did the popcorn and the -

Man: That's the tickets and -

Woman: - rubbish and stuff. It was it was about eighty odd dollars I think (Conventional).

The isolation of some of the ARGOS farms limits people's educational options for their children and may also limit other activities because of the cost and time involved in travelling. One person said that she felt that it also may be a social isolation which could mean that children do not have the opportunity to see how other people live.

Some people were fortunate to live in farming areas where there still was a strong local community. One person mentioned how it was great that when she went shopping locally everyone knew her and her children. Another talked about her local community:

It's a very social community here and we have quite a lot of things down at the local hall and, I mean apart from the annual cabaret, everything is - you take your family along and they're catered for. You know, they have a Christmas party and the kids get - you know, Father Christmas comes in and all this kind of thing, but all the local kids just sort of band together and play with one another and the older ones look after the younger ones and yeah, it's just really neat (Organic, woman).

9.3.2 Tension: meeting the farm goals and time involved with and cost of children

Many participant couples spoke about the tension for them of finding the time to spend with children – particularly the male partner – and also the cost of education for children whom it was assumed would go to boarding school (6, 4, 5).

Probably the big thing for us [is we need] a lot of money in the next ten years - we've got to pay off debt ... it boils down to this farm generating income to pay off debt which was incurred through buying the farm ... I wouldn't say in the next five years I'm gonna spend [anything]. All the same, in saying that, I also want to spend time with my kids, because it's the last five years I have them - my youngest is thirteen and my eldest is sixteen so, you know, the next five years is quite crucial - they're going to be moving away (man, Organic).

From my point of view I see I see a ten year chunk as being pretty focused on my children, 'cause in ten years time they'll be just [leaving home] so I think that this next ten years is my time to focus to make sure that they get through and are supported in their education ... we want to try and make these next ten years very productive and get as much income as we can and build ourselves up ... I also see the next ten years - maybe not ten years but maybe five - is going to be money needing to go out for things ... on sort of family things - house and education - but also expenses on the farm. I can see so it's sort of both - we want to be able to make as much and consolidate. I can see money over the next ten years is going to be the money going out, well in different areas (man, Organic).

Farming couples who had dependent children were often at a time in their lives when they had the greatest debt. They may be paying off their parents and/or siblings for the farm or be into farm development. Yet they wanted to provide for the education of their children and to spend time with them while they were still at home. As one farmer said, "... often we say, geez, why didn't we have two kids or no kids? Every now and then it would be nice not to have to worry about it [money]" (Conventional).

Having time to spend with the children was a major issue for many (and has been described earlier). This was related particularly to holidays and following children in their sports.

People mentioned especially the importance they placed on following their children's sporting activities. They were often dependent on parents to get away on holidays and taking time off farm work was sometimes just too much for a father to countenance. For this family, their children are all at boarding school but their mother still follows their sports:

And especially now with the children away ... three of them playing sport this year ... because it's feeding up time he'd have to stay here. So I'd be away a week at time. I'd be there for the first game. He didn't get to see any of their winter sport, which is not very good (woman, Organic).

Many seemed to feel the need to send their children to board at schools (usually private) when they reached the secondary school stage rather than go to the local area school. Sometimes this was due to the distance they were from the local school, but often there was a feeling that the local school would not be as good, particularly if the parents themselves were privately educated. They also thought they needed to provide for a tertiary education, rather than their children taking out student loans.

9.3.3 Succession

The majority of participants spoke about succession in some form in these interviews (9, 10, 11).

The situation of the ARGOS participants

The farmers who are participants in the ARGOS programme ranged from those who were farming land that had been in the family since the 1860s to those who were the first to own a farm in their family's history. Some lived in houses that had been built one hundred years ago, so that it was not only the farm that had family connections but the house also. One

man was working for his father aged over 60, who had only just taken over the land because his mother had recently died.

What is a family farm?

There are many different ways in which a 'family farm' can be described. It may be that at present there is a family on a farm who may have no previous association with this piece of land. They may own the land or be farming it under another arrangement. There are those who are on land that was farmed by previous generations of the same family either through the male or female's side of the family. When one man said, "We've been here since 1910", he obviously did not mean himself but his family! There may be a family on a farm which was purchased using money from the sale of a farm owned by previous generations – that is the family has a farming heritage. A family in any of these situations may hope to pass the farm on to the next generation either through the son or daughter, though from these interviews it was usually regarded as the son who would be more likely to become the farmer in the next generation.

... there's a little pleasure of pride ... of having a family farm. My father's worked this land and that that means a lot (man, Organic).

And to develop a property you're proud of and you feel you want to pass on to another generation. I mean there's a huge satisfaction (man, Integrated).

We bought it off Mum and Dad. I'm the second generation. Hopefully there'll be a third generation go through here (man, Integrated).

Woman: He [son] is the sixth generation from this farm and he is very proud of that.

Interviewer: Yes. I bet that is something that your husband feels proud of.

Woman: Not as much as [son] no, no. [Husband] actually wanted to sell this place.. but no, [son] wouldn't hear of it (Conventional).

I was brought up on a family farm and by that ... it doesn't mean that the family will stay here and work on this farm - our farm is our home base as well ... and um also by a family farm I don't mean that when I'm due for retirement I'll give it to the kids and give it to their kids. I'm very much of the view we had to buy our way in, um, this actually wasn't the family block, um but we certainly did start out, leased the family farm. So we like to farm it that way and that base round what we see our kids wanting to do with it well, and that's an important part to us ... so that, gives us another focus that you know the family farm even if it's nothing more than a training ground for what [daughter] does want to do (man, Conventional).

I'm, a bit loath to sell it in so far as it's fifth generation it's sort of an heirloom ... I suppose it gives you a root ... some sort of ancestral, hold on it um. You know where you come from (man, Organic).

The legacy of the family farm

But you know there's so often we - we're probably more positive about it now but, in the horrible times you'd think, you know, if we were in town and I was an accountant or a production manager at a factory or something and [wife] maybe worked maybe part time, you wouldn't have any of this baggage, and we've spoken on several occasions and said, you know, they go, "Oh, you've been there since 1867. Wow". And we say, "It's like you get up every morning, put a big overcoat on and you cart it round 'cause, the family comes at Christmas and they expect all the trappings they got as farmer's children or, what they perceive, you know, a farmer should put on or whatever and they, and not only the wider family, but the community, you know, we're the longest, extant, family here and they expect you to uphold certain perceptions that they have, um, because you know, you're long standing in tradition and all the rest of it. And every now and then - I mean it's a card you can play when you need to - I mean our address [farmer's name] Rd ... like you have to fill in ... your physical address and you write that in every time - "Oh wow - must've been there a long time" (man, Conventional).

... for people leaving the farm, um, it's like ripping an arm off or it's like ripping a limb off. It's not, we sell the farm and go and do this ... you physically wrench a limb off ... (man, Conventional).

Carrying on farming the land that has been in the family for past generations was not always seen positively. For some it was a heavy burden and brought with it not only the weight of the expectations of other members of the family about the farm and the family, but also the perceptions of the community on how such a family should behave. One family (Integrated) felt "trapped", having been enticed back by a father to a piece of land that turned out not to be an economically viable unit, while promises of further land made by the father were not met.

For some farmers, the lesson to be learnt was that they did not want to be like their father. For one in particular, the lack of choice he had and the domination of his father in his life meant that he felt he was without identity.

Farmers also inherited the impact of practices of their fathers. Things that were mentioned were: the farm infrastructure or lack of it in terms of the farm design and the tree plantings, and the effect on the land of the fertilisers used in earlier times. One farmer mentioned how he had inherited the man who had worked for his father.

The family farm can also be a way of providing a legacy for the future. The farm can also provide security for the future generation whether they intend to farm it or not:

Oh I sort of look a bit further than that you know, like, I'd like to see the farm be able to be used as a way of securing a future for our children. Not just in farming but ... used for - whether it be security for them or whatever (woman, Conventional).

For an Organic farmer had a more generic concept of 'passing on' agricultural practices that would be good for the land.

I believe that we have a responsibility to pass on to the next generation a land that is still alive and still able to produce well and so, if the land's getting pumped full of superphosphate, how long is that sustainable? (man, Organic).

Experiences of succession

I see us being in a situation where we can retire comfortably at a certain stage, whenever that will be. Um. And I would like to see the farm continue, in some way, form or shape, but not at the expense of our family because of what we've had to go through ... I've just seen it happen so often with um family farms, that the family destroys itself and I just, oh I would rather sell it up, and divvy it out, and that's the end of it. Um, and yet that in itself is not a solution. Um, so I just - I don't know (woman, Conventional).

When people recounted their experiences about how they had come to their present situation as inheritors of a farm also farmed by previous generations of their family, their stories were many and varied but usually of a negative and difficult time for both parents and 'children'. At some point the "We've got Mum and Dad to get rid of" (Integrated, man) process had to be negotiated, and often not only Mum and Dad but brothers and sisters too. The arrangements reached in doing this were many and varied, though it is notable that farms seemed to be equally divided between siblings independent of gender. Some were paying off their parents and siblings. This had a major impact on their financial wellbeing and on how much farm development they could undertake or whether they could employ more labour. Some worked for a family trust or worked the farm through a leasing arrangement. The period of negotiating these times was often recounted as involving the breakdown in relationships with parents or siblings.

... we've been through, you know, two deaths in the family - Mum and Dad you see, both passed away and the estate is not wound up yet. That's another saga on our lifestyle, on our life. I've got one sister who's been ... a pain in the butt virtually. I've just borrowed some money to go and pay her out, get rid of her. Now that sister and brother are quite happy with what we're doing. We're just paying them on a yearly basis. We might

struggle this year ... like there's a few things we've gotta address on the farm maintenance wise, machinery wise, this year (man, Integrated).

The present situation

Many people expressed the problem of passing on land to family in the present political climate in which only \$27, 000 is able to be gifted each year and how this is far too small an amount when compared with the value of land at present. Rogernomics and the impact of the public sector reforms of the late 1980s and early 1990s on the primary sector were still very much in the minds of some farmers. One participant's father had gone deeply into debt to pay off money from this period and this debt was inherited by his son. An Organic participant, for example, lamented the fact that he has had to buy out his sibling at present day prices, his half share now being worth \$2m rather than \$200, 000. Yet another had found some of his father's rate accounts and found that what he has to pay in rates quarterly is what his father used to pay yearly, so that it is not only the price of land that has increased.

... I'm the third generation that's farmed it [this farm], and the way the value of the property is now, we've just had a new valuation in the last week, and the value now is at a, what would I say, a high that you really just can't pass it onto your son the way we used to, from father to son, whether its kept into a large family trust or a company or whatever and just managed by the children but ... they can't afford to borrow \$2m just to buy 450 acres - not the way things are - so hopefully it will stay in the family and be farmed as is, but I can't see it going from father to son like it used to in our generation, no not in their generation, but the farm will still be here for the kids the way they want to ... well they [government]'ve got to increase the gift duty for a start, that's something they've got to increase ... 27, 000 a year you can't do anything ... it's been 27, 000 for years and years, so that's if they want to sustain family farming they've got to increase the old gift duty anyway and make sure death duties don't come back ... (man, Integrated).

Um it would be nice to think one of the children come home to the farm, if they can afford to buy it of course (man, Organic).

Specifically, many participants were in a holding pattern, waiting to see whether their offspring would demonstrate an interest in pursuing farming as a career: "By the time they would be ready to [take over], we're not ready to go, so possibly they would have to wait a bit" (Conventional). None saw this as a given. They wanted their children to have a choice of career.

Woman: It's ridiculous to force them to do things they don't want.

Man: I think those days have gone. Too much money involved for parents to coerce the next generation in if they haven't got their heart in it (Organic).

They also often wanted them to have space to decide by having a time away from the farm or time working on another farm. Biding their time in this way also had implications on farm practices and where and how farmers chose to spend their money.

You've got to be so careful about what you spend, because you've got to be mindful of the fact that, ah, we'll probably sell it one day, or pass it onto the next generation or whatever, and you don't want to be doing things that are not necessarily going to add value (man, Conventional).

The future also brought its worries with some being concerned to develop ways of encouraging younger people to stay in the local region, even if it was not to farm.

Some participants were farming in partnership with parents. In this situation continuing communication about farm practice was often described as not easy.

Man: If you want to go a bit deeper [we're] in a bit of a sticky situation because we've a partnership with my parents and it's pretty difficult ... we're doing, you know, this cattle thing here and they don't like cattle, so it's a partnership but it's not. We're sort of doing two different things, going different ways really ... It was when we got a farm consultant and we put a plan together. And I put it in front

of him and they said yeah it's OK fine, but then you actually get to wanting to do it and they say oh you can't do that, [you can't do that].

Woman: He sort of said you've got to grow some wheat but you know, we don't have to grow wheat, not this year. We might grow wheat next year, you know, it's just what fits into the rotation of the cycle ... we're not anti anything but we're just happy to do, wanna do what suits the time and the place, sort of thing, is really what we're aiming to do um, not just because, it's because we've always done it like that for the last ten years, we have to do it that way ... they're still on this, oh gosh, you know. we've done it this way for so many years and we can't change it, but there's no such word as can't (Conventional).

And you just feel with those sort of things you are just pushing against it. It isn't ever said – "I think that is a load of cobs wallop. What are you wasting your time for", but that is the undercurrent and it's there ... that's probably a reasonably large constraint to [husband]'s confidence as well ... You always just feel you are pushing against a little barrier that's not actually visible or spoken (woman, Conventional).

However, for at least two farmers keeping their father on the farm or working on the farm was a way of also caring for him.

For some the experience of succession was yet to happen.

Man: ... my Dad he's still the boss. He lets me run the place by his graciousness, as it were but, at the end of the day, he's still got the cheque book. Sometimes I know where we are, sometimes I don't ...

Woman: So, getting through those turbulent waters of farm succession with everybody still intact would be really good {laughs} and everybody happy, yeah (Organic).

Having Dad about can have both positive and negative implications as this farmer recounted:

He [Dad] still keeps the finger on the pulse. Yeah, sometimes we have a bit of a run in now and again but ... that probably still gives us a chance - we can sort of go away on holiday at Christmas time ... he's in his late seventies - but he can still, yeah I can set it up so it's just, go round and just, monitor things and there's no anything that's gotta be done um like drafting and that we'll just come back or I'll fit it in but no, he comes up and he knows where to look and how to do it (man, Integrated).

There was a slight hint in some interviews of gender issues. It seems to be mainly the father's who are 'tricky' but often they seem to be backed up by the mothers. In one instance the son was in partnership with his parents so when they go to meetings with the accountant his wife does not go. This same son spoke of "Dad's house", even though his mother was still alive. There was an assumption that it will mainly be the son who wishes to take over the family farm which gives daughters more options career-wise.

9.3.4 Comparisons

Conventional farming participants had far more to say in the area of succession than the other participants. They talked more about the stress of succession and more mentioned succession issues (1, 5, 9) and had more to say about what made a farm a family farm even though comments were evenly spread across the panels (3, 3, 4).

9.4 Impact of farm on community wellbeing

In describing how their farm impacted on the local community ARGOS participants provided different pictures of their ideas of community and these are described in the first part of this section. They also mentioned how these communities were changing both through land use change and other changes in farming practice. A wide range of voluntary participation in communities was revealed, contrasting with that found among the ARGOS kiwifruit farmers. In particular, the emphases on involvement in activities associated with rural primary schools and with sport were apparent. People were also very aware of how their farming flowed on

to benefit the local and wider community financially. There was quite a lot of talk about neighbours and a little bit about local bodies and politics.

9.4.1 What is community?

... they [the locals] have been fantastic and ... we've had people turning up, bringing us meals and cakes, and you know, real family - a family sort of farming community type approach which was fantastic and even though we've only been here a short time we've been really well looked after (woman, Organic).

I like being part of a community like [name]. Yeah I'm from a city and I never really knew that, so I suppose maybe I notice that part of the community. There is that little town and every shop knows who you are, they know my children, so [when] they walk down the street every shop will know where they belong and I like that sort of sense of belonging I suppose. I like it that you actually moving with all different types of people people have sort of accepted in a way for who they are or whatever even if there might be things you don't like ... healthy to be part of that, it seems quite affirming too ... that you know, the community will rally around. It doesn't really matter if you're rich or poor, you know if your house burned down people would come [and help] ... (woman, Organic).

We're sort of at a dead end up here aren't we, and that helps in that respect, plus, when we came here the people up here are just brilliant, they really were you know, as far as us not knowing a lot about farming and that, there was all the advice. You only had to ask somebody and they were more than happy to help you out (man, Organic).

Very few people described the farming community of old – the one associated with regular times when the community gathers together in the local war memorial hall, to farewell families leaving the district, to welcome new ones, and to celebrate Christmas with family activities. The main exception was a little valley out of Waimate where three of the ARGOS farms are situated:

Man: Well there's a group of us too that run all the - that's the social committee and we've got a do tonight. There's two families to be welcomed to the district and other events. We usually have a mid year -

Woman: - cabaret

Man: - cabarets and Christmas -

Woman: - and barbeque and get together before Christmas (Conventional).

The local primary school was the place that appeared to dominate local communities. In fact one couple said that once their children left school they had no further contact with other people in the community. The emphasis was on the primary school because a majority of farmers sent their children away to boarding schools once they reached secondary school age.

Members of the Organic panel dominated the discussion around what made a community: "There's so many different levels at which you can look at it - I mean, if you go on a big circle, and the farm isn't an entity, it's part of a community" (organic, man). Perhaps this was because as organics is regarded as different they had to ask themselves more than others about where they belonged or fitted.

... we have two communities. We have the community that is interested in what we do on the farm and none of them live here ... they're pretty well centred in [nearest city] but I suppose we count in our mail order customers many of whom are rural people and then there is the community we live in, which is a typical [community name] private boarding school - very Conventional community. There is a little subgroup in the community of alternatives (woman, Organic).

There was a clear description of being both insiders and outsiders in the local community. For one Organic farming couple, because the man had grown up in the local community the other farmers accepted them, whereas for another farmer, also a 'local', he was still found to be 'different'.

... you see [husband] went to school with most of the farmers from here so we didn't come in as outsiders with different ideas. People who have come to the district with different ideas have been almost completely excluded but because he came in, you know, being friends with the farmers that got us in and they are almost exclusively very tolerant and interested in what goes on here, so there's nothing to prove ... they always ask - you know - how's it going, and they're genuinely interested and they're genuinely glad that it's going well but they're not in the slightest interested in doing it themselves. The odd farmer who's come into the district later who [husband] didn't go to school with has ... well, they usually don't know that we're an Organic farm when they come and they sound off in the most incredible way about organics - so in a way I suppose some of these blokes that [farmer] went to school with if we hadn't been here they might also've had incredibly prejudiced ideas about organics that the new comers have and it's funny, you know. I'll stand in a circle and the newcomer will be going off and I can see all the others just sort of nudge them and smile tolerantly and you know, well we won't say anything, but you know, he's on the wrong track. So it has - I guess it has shown them that there is a way of farming organically that works and so they don't have to carry their preconceived ideas with them (woman, Organic).

... people don't take us too seriously. A lot of people, they think we're a bit of a fixture, bit of an eccentric, you know, colourful people ... it's a pretty conservative area ... Presbyterian farming stock, you know, yeah, lot of 'Mc' names and things, you know, but some farmers don't wear it, don't ever talk to us about organics - they pretend we don't do it (man, Organic).

- but I know it is quite an impediment for some - for a lot of farmers who are interested in organics. One of the things that happens with Organic farming is that the female partners are the [ones who] push organics and I've seen that a number of times, ... You know sort of like you won't be taken seriously as a serious bloke if you go too far in that direction, you know - sort of thing. And it doesn't really bother me 'cause I spent some ten years in Christchurch and Wellington before I came here and, so it doesn't bother me at all. I'm sure there's a world out there ... a lot of farmers have been on the farm all their lives - even ones that've been to Lincoln College ... it's just like an extension of the farm really. They just meet people like them there, yeah. But that's changing (man, Organic).

The other thing is that I feel that a lot of the people [early Organic farmers] had been probably not been very successful and, as I said when things went wrong here, it was pretty tough on the old mind, watching stock die all the time. A lot of them had been through that and were a bit bitter and twisted and they'd probably been ridiculed at the local pub, which I got too, but they don't say too much now. Um. So that they were not at all [supportive]. I'd come out of the deer industry where if somebody discovered something in Christchurch yesterday, within a week the whole industry knew. Whether - because of the type of people and the stress and that that they'd been under and the ridicule that they'd had, they were very, very uncooperative. Yeah, I would go as far as to say, unhelpful about [tips for farming organically]. They would like you to believe that they all had these secret potions and lotions and things but um, we never pissed round with garlic and apple cider and we don't use anything like that and I think it's a load of bullshit actually ... but just good farm management, feeding animals well is by far the best defence against needing chemicals and I just couldn't bring myself to line up [with those sorts of practices] (man, Organic).

Others thought they were under scrutiny by the locals. Some felt very much accepted into the local community. So the insider/outsider distinction could just be related to how long you had been around in the area where you farmed, or it could be seen as relating to whether or not you practiced Organic management.

The Organic participants spread their notion of community very wide, as this woman said, "I suppose in a way we sort of benefit the world wide community 'cos we're supplying them with you know, healthy food" (Organic), whereas another was very concerned about keeping his business within the local community wherever possible: "I get our lambs killed at the local abattoir and the local butcher does it rather than taking it to Christchurch and that sort of thing. Um. So there's that there's keeping the money in the community" (Organic, man). Some even included the world-wide community of Organic growers who hoped using Organic

farming practices would have an international impact on farming in general while others thought they performed a function of making difference visible and hence a possibility for others.

Man: ... we're not bombing our neighbours with toxic things ... and just the fact that it's here, and the big one is the fact that we haven't turned the whole place into viticulture, so that's gotta have an impact on the community - the fact that, there's one pocket of land that they drive past that isn't in posts in a row. So that's nice ...

Woman: I think the fact too that we're here and we're doing something different, and people know that it's a struggle but we're still committed to trying to see if we can make it work, that maybe in some small way, we could somehow, perhaps, not inspire, but, be a bit of an example that, OK, we've got a bit of kiwi ingenuity or innovation around People being prepared to take risks that are avant garde, you know, instead of just following like sheep - the status quo (Organic).

9.4.2 Changing communities

ARGOS participants described communities that were both growing and declining – dependent on place (3, 3, 7). For example, it seemed that around Fairlie there has been an influx of younger farmers, whereas others described how the local school had closed or was just hanging on. Several were concerned that there was missing age group in their community and they would like to see that change. For example, one couple said:

Woman: And we would like to be able to have something going so that there is a bit more employment here so that kids don't have to leave and go off to Wellington or London or whatever. They can have a really good life here. And at the moment those gaps aren't available. There not quite right it's just not quite right yet.

Man: And you know we've seen other families that are a bit older than us. And older kids are just gone away all the time.

Woman: Five - six kids just gone - miles away.

Man: So what we've got - the community is - we've got quite a few people our age but then we've got a missing gap of younger ones coming through. And it's really affecting the community, you know, farm workers and that (Conventional).

Another said:

Well the community itself, it doesn't really exist like it used to. The local school's shut. It's surrounded by dairy folk and most of them are North Islanders and they don't contribute to the community at all. So we've actually lost our community now (man, Integrated).

In some areas change has come through the conversion of land to dairying or viticulture. Dairy farmers were seen as not contributing or participating in local communities:

I mean you don't even know your neighbours, used to know your neighbours for miles, but dairy ... all the dairy farmers all come in now, and they don't talk, you don't know them. It's a shame actually, because I know they'll get into trouble. You always knew if your neighbours were in trouble – just, you know, if the tractor was at a different [place], something wasn't going right, he was looking to find out, but now you never look across the fence at your neighbour's. No. You used to look in on one another and make sure everybody was all right, but no, it doesn't happen now (man, Integrated).

However, for this farmer the changing local scene with the increase in dairying has provided him, as an arable farmer, with new opportunities, as have the addition of sheep:

... you know, arable farming is changing now, and it will keep changing and the exciting thing is that the way that the type of [incoming] farming that fits in so well with all the other farms around us. You know we're able to produce, straws and stuff for dairy farmers. We haven't found any benefit – well, we've tried everything and found disadvantages for us with the grazing (of dairy cows) stock because it doesn't fit in with our routine but yeah, the sheep complement it [and] we think that we can improve that (man, Conventional).

Viticulture was seen as having a negative environmental impact because of the use of tanalised posts which leached chemicals into the soil making it unusable for farming in the future and tainting the aquifers. Such changing land use was seen to change the local towns because they now focused their service on these industries rather than sheep/beef farming.

But the other thing I've noticed in [local town], there's still a farming infrastructure but continually the whole infrastructure is being geared towards serving the viticultural industry. So, we're now the poor relations really (man, Organic).

The increasing business emphasis of farmers also contributed to lessening involvement in communities because, for example, they chose to irrigate and so had to spend more time moving the irrigators and could not get off the farm the same. Of course, changing ages of children also changed the type of things people became involved in.

... I have taken a backward step from that [community-based activities] of recent times alright, because of the kids ... My kids came first really, and my wife ... now I've become very business orientated in what I do because I've got a lot of learning to do, so um and that's the big thing. This business is what counts for the family and for our security, for them all, so ... I've said for the next few years I'll concentrate on that ... now we've got irrigation - well that's more important to make sure that irrigator works twenty four hours a day ... it's the biggest tie but it's the most important thing really (man, Organic).

As people have become more mobile too, they were more likely to travel to the nearest city to meet their recreational needs rather than find them locally.

9.4.3 Contributing to the local community

Voluntary sector activities

In the rural communities portrayed by the ARGOS participants when interviewed the idea of public service was still very strong (0, 9, 8), particularly in the Integrated and Conventional panels. The cost involved was mainly in time as it was measured against how that time could have been spent doing farm work. Anyone who had school age children at present or in the past, had been on the local school's board of trustees or PTA. Parents helped with working bees, looked after the school swimming pool, provided meat for fund raisers (a thing which continued onto boarding school involvement), coached sports teams and so on.

Outside of the school there was lots of involvement in the local community – again with sporting activities – coaching and playing both rugby and netball, gun club, pony club, other riding groups (more likely to be amongst Integrated and Conventional farmers). For the women there were playcentre, mothers' groups and Plunket. Several farmers mentioned how they allowed others access to the farm for riding, tramping or other leisure activities. Many farmers (particularly Conventional) had been or were still involved in the local or provincial Agricultural and Pastoral (A&P) show committees. Three Organic farmers mentioned they were involved in the voluntary fire brigade. Civil Defence, looking after the local hall, Church, Lions, a singing group and a theatre group were other things mentioned.

Several farmers mentioned how they had been involved in farm discussion groups but that these had petered out, one because it became user pays. One ARGOS farmer postponed his interview because a group started up by a farming company was coming to his farm on the day arranged for an interview. This may be a new way of operating similar groups in the future. Several mentioned their participation in 'green feed' competitions:

[I go in] local green feed competitions every year just basically to improve what I want to do. ... [I] like to do one day on the till where I go and help [out at] the local A & P [show], and cut green feed or something and as soon as I see what I want to grow and it's really good then I stop and ask that farmer and they'll tell you. They'll tell you everything, farmers [laughs]. So you just pick out the ones you want and question them and go from there - sort of style (man, Integrated).

There were some people who mentioned their support of and loyalty to local businesses and the same stock company.

Financial sector

Participants were very aware of how their earnings from the farm financially benefited their communities (6, 4, 5), both through their spending power and the employment farms provided through the whole supply network.

... 50% of our annual turn over goes out in costs so [we've got] shearers, we've got transport companies, we've got contractors, seed merchants. We've got and we spend - even a small farm, you know, likes of this one - we spend a lot of money in the local community (man, Conventional).

Some emphasised their support of local businesses. One Organic farmer got his meat killed locally. Another farmer talked of his wool:

... my wool. I sell it to Summit Wool Spinners and they're based in [local town] so that's a industry that's survived. That was very much in the border line - so I send my wool in there. So it's nice to see a local industry doing well, 'cause people say, "Oh, why don't you just put it down at the auctions?" and I said, Oh no". Well, I've done exceptionally well out of them in there ... I've got quite a few friends in there that work there and you think well, just that little cog in the bloody wheel ... (man, Integrated).

The first speaker in the quotes below told how the financial wellbeing of farmers impacts on local towns. For the second speaker, this aspect of farming was not appreciated by people he felt, and this made him quite aggrieved.

In a place like [local town] if farmers aren't doing well the whole township isn't. Because if farmers aren't doing well they don't spend - they don't buy at the local stock firms and say the production's not that hot. They are not sending as much stock to the freezing works, therefore, there is not as many people getting jobs there. Therefore, it is sort of a spider web effect from that point of view (woman, Organic).

I think it's probably, in a lot of these small communities, I think ... probably a lot of it [financial input by farms] goes unnoticed by - well, people don't actually think about what a lot of farms actually put into their community and they put a hell of a lot into the community (man, Conventional).

9.4.4 Neighbours and friends

There was not much mentioned about neighbours and friends (1, 4, 3). Some ARGOS farmers mentioned that neighbours were often close relatives – their parents or brothers or sisters and their families. There was an element that farmers still kept an eye on the neighbour in two ways. The first as a way of checking on their wellbeing, as in the next two quotes:

We know all our neighbours and we sort of look after them if um you know, they're sick or need help or yeah (woman, Integrated).

... it's also media driven too. I mean you watch TV and they portray the farmers as the absolute 'thicko'. And they don't portray them as business people. And what gets me is you know, you have these floods in the Manawatu - we've had the floods in the Bay of Plenty and the media do a huge rave about, how these people are all pulling together and they're all doing that. Well, if you're in a rural community, that's how you survive. You have to pull together. I mean we're in a little country school here with twelve kids. Most of those people down there [we] either have nothing to do with and have very little in common with, apart from the fact that our kids go to the same school, but because of that and because it's a small community, we are thrown together. And you get on and I mean if we were in any strife - well we've been in strife this time last year we were in the Wairarapa for a month, and we let our farm run over the cell phone, but neighbours did the scanning for us and they did the shearing for us - you know all that sort of thing. You'd never get that in town um but that's just the way it is and I mean we never paid those neighbours. What we did say is, your turn will come and we will be there. And

that's all that was needed - that was fine. And you know, it's like a small wee loan, you know, that they've done to us and we will pay back in time, one day. And it might be ten years it might be twenty years but we'll be there and you know it's just the way it works. But I think that needs to be recognised and acknowledged in some way, instead of down played [all the time] (Woman, Conventional).

The second as a way of assessing the neighbour's and friends farming practice as a means of comparison with their own. One farmer met up annually on a farm with friends from his Lincoln University days and they talked farming. Comparing themselves with others was also a dominant part of the conversation between man farmers.

Woman: We go to, always go to parties - I don't want you to think that we party all the time, but ... [the men are] always saying, "Oh, I scanned such and such, and such and such is doing ..." - very tedious ... they're always talking about it ... not competitive in a nasty way.

Man: It is competitive. Of course it's competitive. Yes, it's bloody competitive ... amongst our friends, we're quite competitive. But it's good. I mean it's all healthy. It's all right (Conventional).

9.4.5 Politics – local and national

There was little talk about interaction with local bodies, regional environmental councils and national politics (0, 3, 2). One couple spoke like this about their response to some material sent out by their local council about environmental matters:

Man: I think just about every farmer on the Peninsula put in a, submission against it so they had to sort of ... see that pile of stuff there.

Woman: There was another book as well ... OK, we're supposed to read this whole thing (laughs) you know? I think it's actually - they're really - instead of being responsible, I reckon they've just done that to mind boggle everybody (Integrated).

There were some strong feelings expressed about access to land by the public in reaction to proposed legislation, and around the purchase of high country farms by DoC. There was a general feeling that farmers were not appreciated by those in power in Wellington:

[I] would also like to see the financial contribution of the farming industry at large and that includes truck drivers and shearers and fencers and all people that we employ and have in our communities. There was a farmers weekly that came yesterday talking about Helen Clark at the recent Federated Farmers Conference and she was - oh, I've forgotten what the words that the journalist had used but ... basically farmers were very lukewarm to her, getting up there and saying how farmers were the backbone of the economy, because I mean, this government particularly, treat farmers with contempt, you know? (woman, Conventional).

Government regulations have also changed life on farms in terms of the farmers' responsibilities for visitors:

Oh, there's another thing that is making a difference. OSH is another thing ... That's made a big difference. You know we are always petrified if we have friends come with children in particular um because they want to go and explore. But you're always wondering where are they? Because the parents don't seem to worry too much (woman, Integrated).

Chapter 10: Farm Management: What is Being Well Managed and What is Hard to Manage

Questions: What are you managing well? What is hard to manage?

10.1 Managing well

Most farmers in each panel were able to say that they managed certain things or all of the farm well (11, 9, 10), however many still said things like they were “always striving to do something better” (Integrated), “staying on top of it” (Integrated), or “not letting the stress get to you” (Integrated). Wife/husband dynamics played a role in what was said here, with the wife often prepared to say more positive things to support her more modest husband. For example one woman said that the stock were fine but her husband always wanted them to be better (Integrated). Another said, “I’m sure that you know it’s not all your fault really” (Conventional).

The things that farmers said they managed well were:

- Farm management
 - Many saw the farm as a whole system/enterprise and talked of “fitting it all together”, “achieving a balance”, its complexity, and crop rotation (5, 2, 4).
 - Stock and pasture management – including stock health, lambing, lamb and cattle production (8, 7, 7).
 - Finances (2, 2, 5) (more Conventional farmers felt they were managing their finances well).
 - Staff.
 - Planning.
- Family relationships (1, 3, 3).
- Work-life balance/time management (2, 2, 2).
- Management of soil fertility was only mentioned twice, and management of the environment and of water resources once.

10.2 Things that are difficult to manage

The extremes of weather, especially drought and snow, and also the unpredictability of the weather were mentioned evenly across all panels (4, 4, 4) as what farmers found most difficult to manage. They also mentioned these other aspects of farming that they found difficult.

- Farm management
 - Stock health (3, 2, 0) (no Conventional farmers mentioned this).
 - Pasture management (3, 1, 2) – including stocking rates.
 - Finances (3, 4, 4) (this was a concern across all panels) – exchange rate, prices, difficulties of spreading income etc. “The whole year’s income is dictated in three weeks of lambing – that can be pretty hard to get your head around” (Integrated).
 - Staff.
 - Planning.
- Family problems (0, 2, 2)
 - Difficulties in dealing with parents, particularly fathers who still had an interest in the farm. (No concern about this was expressed by Organic farmers.)

- Work life balance/time management (6, 2, 3)
 - Stress of the farming lifestyle and its workload. (Six Organic farmers expressed concern about this, compared with two or three in the other panels.) “He doesn’t actually know what a Sunday is ...”.
 - Wives were more likely to mention difficulties in finding a satisfactory work-life balance.
 - Personal health and workers health: “Winter and spring are hardest – especially when your legs are shot, your knees are shot ...” (Integrated).
 - Impact of busy farming lifestyle on involvement in children’s sporting activities.
- Stories: one or two in each panel told stories about difficult times and how they had survived.
- Paper/computer/office work (0, 3, 2) (not mentioned by Organic farmers): “We just get so bogged down with so much paper coming in” (Integrated).

Woman: I mean you hate sitting at your desk, sorting through all your crap.

Man: I should be more computer literate but I’m not ... I probably haven’t ... made enough time to actually learn actually to get on top [of it]. You need to put in quite a bit of work to actually get it going and ...when you’re working quite long hours that’s the last thing you want to do is sit down and play around with the computer. But I have said that I’ll do it over the winter time but I’ve never got round to doing it yet (Integrated).

10.3 Differences between panels

Organic farming couples were more concerned about work-life balance, and more were likely to talk about business relationships (because some produce a large variety of crops and supply to small businesses). Two expressed their difficulty in dealing with the “death and destruction” involved in farming, because it involved loss of stock at lambing through disease, and so on. One Organic farmer thought that the answer to producing good healthy stock lay in “... just good farm management. Feeding animals well is by far the best defence against needing chemicals ...”. Another felt that farming organically was just like the way his father used to farm:

I mean in many respects it’s just like my father used to do it really ... mixed the rotations - a lot of this stuff’s pretty similar, it’s just we don’t use any [artificial fertilisers]. You know, in his time you didn’t use nitrogen fertiliser. It only came in the seventies really. That’s the traditional system in Canterbury ... the Canterbury mixed farm system’s ... a brilliant system ... down country - your dry land areas down round ... and ... they burn the stubble and they’d sow lupins in the ground and ... they’d feed those off. In winter time they’d sow another crop and that was happening for years. And who does that now? Not many people do that now. They’re pouring water on - high energy (man, Organic).

Some of the problems distinctive to Organic sheep/beef farming that were mentioned only once were not being able to direct drill, the lack of Organic seed, flystrike, salmonella, parasites. The use of RPR – rock phosphate - was regarded as an advance on conventional fertilisers. No Organic farmers said that paper work was a problem.

In the Integrated system two farmers mentioned how they did not chase the market but were loyal to particular companies, two talked about how they had “survived” as farmers, and two were concerned about the impact on stock health of the intensification of their farming practices. They were less likely to talk about the farm as a whole system.

Two Conventional farmers mentioned how they were achieving an all year round cash flow, and three mentioned how they were positively engaged in learning and change. Conventional farmers were more likely to feel they were doing well financially. They did not mention problems with stock health.

Chapter 11: Hopes and Concerns About Involvement in ARGOS

Questions: What do you most hope to get out of your involvement in ARGOS?

Do you have any concerns about being involved in ARGOS?

(If concerns are raised) How can we best manage these concerns?

... yeah, if we're both not learning, well, we're both wasting our time so might as well call it quits now. To be honest, I like to learn something (Conventional).

In this chapter we report on participants' responses about what they expect from their participation in the ARGOS programme. They were asked both about their hopes and concerns but this distinction is not always appropriate as a hope may also mask a concern. For example, if a participant hopes that they will learn something from ARGOS then there is always the worry that this learning may not happen in the way that they expect it to happen. The panel numbers fitting a particular heading have been put in brackets where possible. Often because the themes overlap and what people say also overlaps it is difficult to make this judgement. Rather, what participants said builds into a full description of a particular theme.

11.1 Hopes of ARGOS

The participants in ARGOS ranged across those who wanted a definite personal benefit from their participation through to those who were happy just to be part of something that may only have wider implications. The most common benefit was seen to be learning something that would help them as individuals to farm better. For some, part of this learning was expected to challenge to the way they practiced farming at present while others expected that what they would learn would just help them fine tune their farming practice. Many hoped that ARGOS would contribute to some larger goals that would ultimately benefit farming in general and the image of farming with the public and with policy makers.

11.1.1 Learning (11, 9, 10)

ARGOS was seen as another way in which farmers could find out how other farmers farmed. In other words, it was another way of getting a look 'over the fence'. They expected this to happen in these different ways and to serve the following purposes.

- Comparison/benchmarking across the same and different farming systems:
 - to 'position' themselves relative to others: "... but they {competition organisers} have sent, our result but we actually want to see everyone's results" (Conventional).
 - to gain reassurance, "... knowing you are doing 'the right thing'" (Integrated).
 - to provide "... that feed back, that comparison because there seems to be a lack of information on Organic farming that's reliable and objective" (Organic)
 - to provide indications of what is best practice: "What is the optimum?"
- To provide feedback: "We want to excel at what we're doing and if we aren't excelling, we want to know why" (Organic) and "... because there's not much point in doing it if you're not going to be advised or learn something ... Well especially if you're doing something you really shouldn't be doing" (Conventional).
 - One farmer (Conventional) wanted to talk to researchers who come onto his property.
- Information/communication - "... what will work, what won't work, and what might work":
 - ARGOS will provide independent, unbiased and objective information compared to most others they come into contact with who are associated with selling a particular product or process.

- this information should enable them to find a “balance between the farming and the environmental side” (Integrated).
- the information should be accessible (easily understood and able to be applied), useful to them in particular, individualised, on-farm help (not generalised like information found in farming publications such as in the ‘rural news’).
- it will provide them with data they do not have time to collect themselves.
- it will be a way of “picking up some good ideas” (Organic).
- Learning for its own sake.
- Learning for a purpose:
 - for “tweaking/fine tuning” (Organic), to get more “switched on” (Organic).
 - to increase efficiency (less work for the same return), profitability, sustainability etc.
 - for improvement: “things ... that’ll make a difference” (Integrated).
 - will provide help towards the achievement of goals – what people want “to get out of life ... to have a life” (income and time, Integrated), to “make life easier” (Conventional) and, in contrast, “... to make a better business” (Integrated) or “... to structure my business ... better ... [I’m] winging it at present” (Organic), retirement.
 - to be able to implement best farming practice.
 - to get ahead of “the game”.
 - “making good practice profitable” (Conventional).
 - to give direction.
- To “... clarify my thinking” (Organic), “helping us to really know what we want to achieve” (Conventional).
- To provide a ‘forum’, a place/space for “throwing ideas around”.
- Personal experience:
 - a few farmers had seen how other farmers involved in monitor farms (or whatever) had changed.
 - some had noticed how changed practice can have an impact on soil, for example.

The following quotes back up these points:

I’m really looking forward to learning a lot. Yeah, I just think it’s a wonderful opportunity to grow in our knowledge and understanding of our farming ... to have that input from people, from different areas of the farming picture. I think that it’s an amazing opportunity to ... get different - you know – views - ah, not views but perceptions - you know - how people perceive what’s going on, on the land. And the research - getting the measurements and the feedback back as to what’s happening out there, on the land (man, Organic).

Like, are we doing a good job or a poor job or are we right in the middle and not only that, what about it is it [that] we’re doing well and doing poor[ly]? (man, Organic).

I hope you’re going to tell us we’re going in the right direction, you know, what we’re doing is sustainable. It’s the big thing (man, Conventional).

I’m always a bit of a nightmare ’cause every time someone rings up on the phone and wants to survey me, I always say yes (laughs). Yeah. It’s to find out what everybody’s doing. Farming is a very closed book. We could, you could ask anybody, what their neighbour down the road’s doing and they say, I’ve got no idea (man, Integrated).

Probably some comparisons maybe to other farmers, and some more direction - how I want to go, how I want to get there. That’s really what I want them to do for me. Do me some directions, how to go about [it], just sort of trying to achieve top results all the time but just sort of have a bit more of a goal rather than just good results (man, Integrated).

All the information that’s collected in any project has got some bearing on something or someone somewhere down the track, whether it’s ten years down the track that someone thinks, oh yeah, well this is what this joker’s done, and it’s still going alright. You know,

like we're all in the same game, and we're all there to help one another. You know, we go to a lot of meetings ... we've got one on Tuesday. There's about twenty farmers or twenty five farmers get there and we get have a bit of a yarn and what not - what people are doing and do field trips and what not, and it's just little things they tell you - what they're doing and you sort of take some of it back to your own operation which just makes things easier, better. You can better yourself, make a few more dollars, retire earlier, do those other things that you really wanna do, you know?. ... my motto ... is work hard early and enjoy life later (man, Integrated).

You go to field days and that ... Most of them are done by fertiliser companies or stock and station [companies]. And they're just trying to sell the peak stuff ... but they don't give you the average run of what the results [are]. Like farmers come in and say, oh this worked. You actually get a [feeling], oh this stuff's good. But yeah, how good is it? Ah, that's why I sowed this grass here 'cause ... [name] he's a farmer and he swore by it. He reckoned it was bloody great stuff, and it was grown in the same area as us ... (man, Integrated).

It's a matter of sometimes what is actually necessary and what's salesmanship, also the same can be said for grass, grass seed, there's as many different brands on the market and of course with lack of govt research into those things now, you know when you had people like DSIR locally doing it, but now there's so much commercial interest in it you don't know whether you're just being sold a good story or um whether there is genuine data backing up the, like everyone's new rye grass is better, but laughing, I must admit I'm somewhat sceptical about [it] (man, Conventional).

I think that by being involved with them [ARGOS] I would focus on these things that we've been talking about. And, as a result, become much better informed, and therefore be able to, for want of a better expression, farm better. Yeah. Farm more at one with the environment, as well as the sort of synergistic effect of having to focus on the farm and really sort of look inwardly at the way and why and wherefores of what we're doing. There would be a natural inclination if you like, to do things better. And I think that that will happen. I'm sure it'll happen. Whereas ... as opposed to just sort of bumbling away there. So I'm hoping it's gonna be, to a large degree, educational for me (man, Integrated).

I want dollars and cents at the other end ... 'cause we don't want to stand still, you know. We're here for a business. We're not here for a lifestyle (man, Integrated).

11.1.2 Advocacy

Some in each panel (4, 1, 3) thought that ARGOS might act as an advocate of farming for the wider community and for policy makers in particular. It might provide participants with ways of answering questions people put to them about what they are doing to the environment. Organic farmers hoped that ARGOS would be able to demonstrate the benefits of farming organically. The following quotes illustrate these points:

... that Organic farming would be shown again to be a really ... long term sustainable option than Conventional farming and ... once that's shown it there's another hope - I mean you can show it and still people can take no notice of it but the ultimate hope is that people further up the top who are making the decisions about farming will be influenced by it and will give Organic farming more support, more credibility ... the credibility and support is streets ahead of where it was twenty five years ago when we started but there's still a long way to go, yeah. Particularly, one pet hope is that support will be given for the conversion years - those first couple of years in conversion - that there be - not as an incentive to get people to change perhaps but to enable the change to happen for people that really want to do it (woman, Organic).

... the point about it is if you can find agricultural solutions through rotations and crop mixes and double cropping, I'm convinced it's the more far more efficient and less energy intensive way of farming. If you can double crop, you know, if you can put your clover your clover with your wheat and stuff, you trade it off against - you don't get the same wheat yield, but then you're getting double the price for your wheat at the end of it all but

... all those sorts of things add up in the end. And they look much better when ... all the energy inputs go up, which they will do (man, Organic).

... it is ammunition for ARGOS to improve the industry and I want to be a part of that. I wanna help, the Organic industry and if that means opening yourself up to a little bit of sort of the cold hard facts, well then, that's good, as long as it's in a positive sort of manner (man, Organic).

My hope is that the non-farming community might see, that farming isn't a greedy, environmental risk ... I'm no greenie but I believe I'm as green as any green claims to be in our love of [and] protection of the land, and I'd hope perhaps in the long term, out of this programme, see systems ... might be put in place that could demonstrate to the wider community, that there are some very good farming practices that make it sustainable, while recognising it has to be profitable, cause people have to have a reason to do it and I've said, our reason isn't driven by profit ... we've got to live and we've gotta be profitable as well ... and people have gotta accept that, farmers do need to be business people as well now but that doesn't make it have to be any less sustainable operation ... and if this programme can identify ways of improving what we do, then that would be good and if it can be done in a way that can demonstrate ... to the wider community then that'd be great (man, Conventional).

... well, as I say, if its not going to be used in law against me ... I think if ... some[thing] positive comes out of it, whether it be to help here directly at the farm or to help the bigger picture of sheep and beef and wool producers, or in farming - whether you're growing kiwifruit or milking cows, the rural scene against the threat from the urbanisation mad hatters brigade, then it's got to be good ... and then potentially, of the people enforcing and monitoring it all, the green police or call them what you like, it's another growth industry. So, that's where I'd be worried if this information sort of gets out and fuels their arguments, rather than the production end of the line - out to the consumers where we want it to be, and if we can subtly use it to educate people further, well that's got to be good (man, Integrated).

I'm sick of seeing farming being whipped because somebody has got an agenda ... Well I won't be told I can't do something but I will work in with the system if it's in my interest. I actually - I just know you've got to keep your balance up here or some day, some where along the track the trees will fall out - even being on top of the water catchment (man, Integrated).

Yeah. Economic measurements don't tell the full thing, don't give you a true picture. For instance, the year that we made a good profit was the year the exchange rate was low. Now I suppose that's useful to know but the point is, we've got no control or, as an individual, I don't have any control over that. But collectively, we could actually say to the people we've elected in power, we don't want you to do it this way. We want you to do it this way, because economically and socially it's better for the country. So yes, if we've got hard data to present to them, ah, we might get somewhere because, we are, those of us on the land, are actually a minority in terms a voice. But hard data might talk. Who knows? But somehow or other it's never worked in the past, so I don't think it's going to now (male, Conventional).

11.1.3 Altruistic

Some participants in each panel were happy to participate in ARGOS without any expectations of benefit to themselves (3, 3, 2) in the short-term anyway: "There's gotta be some good out of it somewhere down the line – five or six years, or ten years ...". For some there was just the enjoyment of participation and others were happy for ARGOS to help the farming community as a whole.

11.1.4 Long term monitoring and visibility

ARGOS would provide documentation of how things are – the present state of the land, particularly the soils:

... run a few tests on soils and stuff like that and I'm not too sure how often they retest or whatever but it will be interesting to get some idea of whether things are improving in the soils and what sort of shape they're in for starters, because I guess that's really the grass roots of everything isn't it? I mean if the soils aren't right well ... things can be improved in that area (man, Conventional).

I think it's going to give us a good picture (pause), a deep picture - not just a layer of - this is the land and this is what's happening to it, but just have a lot more depth to it, that this is our particular patch here ... 'cos a lot of what we do is very surface. The fertiliser goes on, the swedes grow, the sheep go away, yeah. Perhaps just to give you a deeper picture that if we do this now, in four or five years time the soil might be like this, and so should we do this differently here - just to give you a few more layers of information (woman, Conventional).

Participants liked the long-term nature of ARGOS. They thought in that over a six year period ARGOS would be able to monitor what was going on, on their land. For example, one farmer said:

Monitoring gives you a record of what you started off with, and what you end up with. And we should be able to get some useful information out of that (man, Conventional).

11.1.5 Social – building morale and hope

The social aspect of the ARGOS programme was very much part of many of the comments farmers made, such as a lot of of those to do with learning, already mentioned above. People felt ARGOS might encourage them and provide them with support and reassurance. For example, participants said: "I was going to say some sort of social side of it, know that everyone else is in the same boat and how they're dealing with it" (man, Organic), "Yeah, just needing and wanting that support to keep going and not jump ship" (man, Organic), and "It would be good to hear, you know, that from other people too, a bit of reassurance isn't it?" (man, Organic). Another participant thought, "... coming off a poor season you get a bit despondent about the whole industry. It's only things like this that could kick you back into gear again" (man, Integrated).

11.1.6 Provides a challenge

it was only some Conventional farmers who mentioned that they hoped ARGOS would provide them with a challenge in many ways. One such farmer saw it as challenging him to make their farming more sustainable and more profitable. It could give them a new way of looking at how they farmed: "[It]... really makes you look at your own property" (man, Conventional). Or, it could challenge them to do better by giving them a "bit of a shove" or it could challenge the "we do it because we've always done it" syndrome explained like this by one couple: "... we hear somebody else's point of view as well, as opposed to my Dad did it and the neighbours have done it [this way]" (woman, Conventional). Some acknowledged they may not hear what they would like too but they were prepared for that: "I guess we all have it - there's a fear of being told you're not doing something right" (man, Conventional).

11.1.7 Controlling the dirty players to protect our markets

One participant hoped that ARGOS might be used to set up some ground rules to regulate others:

But there's still a few out there that are a bit rough. And there's a few out there that are, what you'd call raping the ground, where they're just out there to strip it of every [thing] and, who cares in, ten or twenty years. They've really gotta be - yeah there's gotta be some sort of a pull back on those fellas ...If we're gonna keep overseas markets,

research has gotta be done ... and, hopefully, whatever comes out of it is gonna have to be yeah - I suppose there'll be some control things out there that'll stop these fellas going overboard (man, Integrated).

11.2 Concerns about ARGOS

The major concerns about ARGOS were to do with the potential time it would take from a farmer's work (5, 2, 3). For some it was definitely not to involve extra time on paperwork or in the office (2, 1, 2). The other major concern was to do with confidentiality (2, 6, 2). Some participants did not want any of their farm information becoming public knowledge because it could give others a business advantage. They also did not want there to be any chance of information being used against them, especially in the political arena. For a very few this was related to a concern about the consequences of a rare species of wild life being discovered on their property. Several people asked what they were going to get out of their participation in ARGOS and some suggested perhaps there should be a draw for a trip somewhere that they could be entered in, or prizes of some sort. A couple of people were concerned that it might be expected that they would have to talk in public and they were not prepared to do that. One hoped that information would be reported back to them in language that they could understand. These issues are expressed in the quotes that follow.

There's a real fear of the green lobby now because of - I don't think we've got any lizards that are of any interest so probably I would say, yes, but if I was a high country guy I wouldn't let you do it - not that physically they're gonna be any problem at all but as soon as you start looking for rare [things] and, you know, there's big areas round Macraes that've been shut up because of bloody lizards and I'll guarantee the people that own that property are a bit pissed off that they ever let anybody look for them ... Yeah the green lobby is very distrusted by the rural community ... they've got their power base in the urban Auckland area. The very people that've got no control over what happens on the farm and all the coastal farmers and the ones that own the native bush and that hate their guts basically ... basically farmers are pretty good conservationists. You know, we've got stands of native bush and that sort of thing - quite a number of them fenced off and because I like it. And I think it adds value to the property. But come a survey of resources like that, ah yeah, no, I don't think I'll cooperate because they're likely to come in and say you're not allowed to do this or you can't cultivate that area ... No, I don't think that I should put my head in the noose for no particular reason even though I don't think that we've got anything of any great interest ... (man, Organic).

The whole deal of like, you know, the government wanting public access on private land and you know, I think that's fine as long as they'll accept me coming and having a barbeque on their front lawn in Wellington. You know, there is absolutely no difference between that so yeah, you know, that's fine if Helen Clark decrees that people are allowed to cross my land and do whatever, I haven't got a problem but she should let me go and set up my campsite on her lawn. Just because the area of land involved is larger I don't see that it alters the principle. You know that with this whole talk of access and that they'll actually closing down far more access than ... they'll ever get open, you know, people are - 'specially with OSH you know, why would you let Joe Boggs - who you've never known ... go onto your property to hurt himself and then come back and bother you. ... Farmers - they - and me still, if anybody asks to go on the property unless there's a specific reason that they can't the access is almost automatic. But if I thought that I was going to end up in court because they'd hurt themselves or got tangled in an electric fence and killed themselves or something like that - it's just as easy for me to say no (man, Organic).

I'm sick of seeing farming being whipped because somebody has got an agenda ... Well I won't be told I can't do something but I will work in with the system if it's in my interest. I actually - I just know you've got to keep your balance up here or some day somewhere along the track the trees will fall out - even being on top of the water catchment (man, Integrated).

So long as I'm getting some of the benefit from it it'd be alright [time for being interviewed] (man, Integrated).

Oh no, no concerns, you know, long as at the end of it the information is there, available to everyone ... there'd be no names or figures bandied about though ...? 'Cause I wouldn't want to know what someone else is doing and I wouldn't want anyone to know what we're doing on our [farm] (man, Integrated).

Yeah, well I just hope, you know, this doesn't just become another one of those profit building things. You know there is just so much more to life than working five days of the week to build profit, isn't there? (man, Conventional).

... as long as I didn't have to do too much talking was the main thing (man, Conventional).

... we sort of went over it just briefly sort of what was going on and I made it quite clear - as long as I didn't need to stand up in front of anyone to explain why ... (man, Conventional).

Part D: Conclusion

Chapter 12: Discussion and Conclusion - Approaching 'Ideal Types'

12.1 Introduction

Whereas the previous chapters of this report have focused on providing an indication of the richness of the participants' responses within the preliminary interview, this final chapter presents initial efforts at generalising across the diversity of response encountered. First, we discuss the construction of 'ideal types' representing each of the panels. We expect the presentation of ideal types will facilitate the engagement of others with the interview data. Next a different approach is briefly presented that considers the different life cycle stages of farming families and how these affect farm management practices and wellbeing. The chapter concludes with a section which reflects on insights to New Zealand's agricultural sector gained from this preliminary interview as well as the future research questions it has raised..

12.2 Ideal Types

'Ideal types' have an established place within sociological analysis. The concept was formally introduced by Max Weber in the early 20th Century (Gerhardt, 2004; Blaikie, 1993). He, and subsequent researchers, employed the concept as a means to develop greater understanding of case studies. In examples relevant to this research, 'ideal types' have been successfully employed for the typification of U.K farmers' strategies of adjustment and adaptation to the reduction in farm subsidies (Shucksmith, 1999), and as a way of describing the British countryside – preserved, contested, paternalistic and clientelist – that facilitated the consideration of the changing contexts in which people have power to act (Marsden, Murdoch and Abram, 1997). Here, we utilise descriptive ideal types relying on the comparison of responses to questions in the preliminary interview as reported in previous chapters. This process leads to an account of the structure of the ideal type and provides explanatory insight into the adoption of a particular management system. While we acknowledge there may be other groupings for ideal types in this research such as life cycle stage, we argue that types reflecting Organic, Integrated and Conventional farms are highly appropriate for our present task of understanding approaches to management.

In order to account for the degree of shared characteristics across panels within ARGOS, we have constructed what we refer to as 'ovoid' ideal types. This typification reflects our understanding that farmers share a solid core of characteristics surrounded by more fluid sets of properties which coalesce into a coherent approach to management which is distinct from the core. We have attempted to visually represent this idea in Figure 13.1. The process of developing ovoid ideal types begins with the construction of characteristics of a typical farmer which forms the 'solid' core. Subsequently, ideal types for each of the panels are created by focusing on those differences identified as meaningful in the preceding descriptive analysis. These ideal types do not have any moral connotations, neither do they represent the perfect or best farmer within a given panel. No single individual is expected to demonstrate all of the characteristics of an ideal type. Rather, the ovoid ideal types 'stretch' (or exaggerate) the fundamental characteristics of a typical farmer, and by comparing actual cases to the ideal type we can illustrate the extent to which a farmer fits a particular management system. This point causes the circular core to be stretched into an ovoid or egg shape. Hence the three stretch points of each ideal typical management system around the core form the triangle shape Figure 13.1 illustrates.

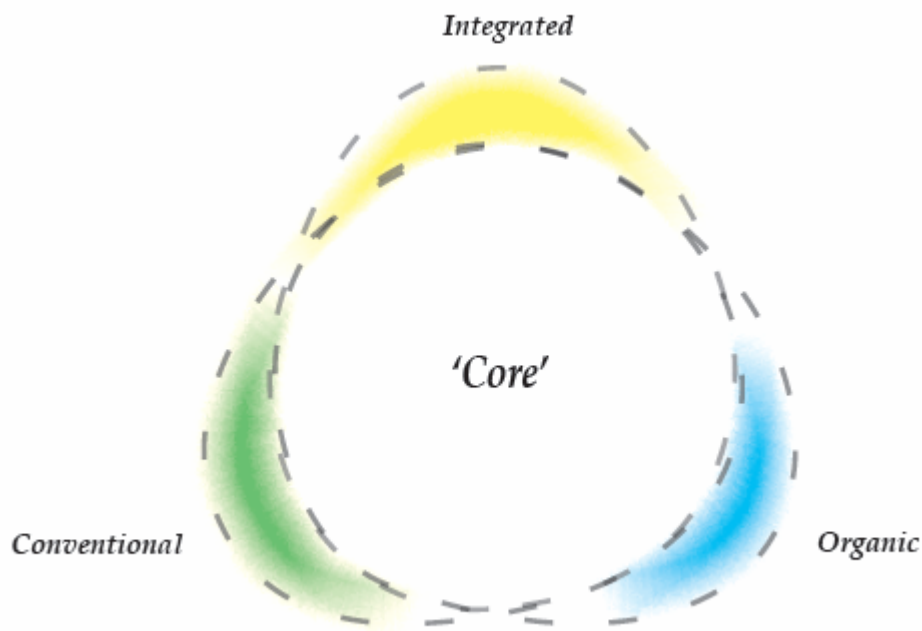


Figure 12.1: Ovoid ideal types

12.3 The typical farm couple

The sheep/beef farm couples interviewed for the ARGOS programme exhibited a strong set of 'core' characteristics with relatively minor deviations towards ideal types associated with the management panels. The core characteristics appear to reflect a largely shared response to the uncertainties and structures of the meat production sector. In particular, the typical couple adapts management (for example, stocking rates) to climatic extremes and feels that the farm's viability is subject to the vagaries of the market. Among the couples interviewed, it was much more common to adopt a conservative approach to these possible constraints – farming below the highest potential of the farm in order to avoid the risks of drought or market downturns – than to push productivity. It is in regard to this aspect, however, that some differentiation among the panel types becomes apparent. In other words, the ideal Integrated and ideal Organic farm couples are more willing to alter their overall management system in pursuit of perceived market rewards than the ideal Conventional couple. It would further appear that Conventional farmers talked about stress more than those in the Integrated and Organic panels. In order to present these characteristics and comparisons, we will first provide a description of the typical sheep/beef farm couple followed by separate sections detailing the differentiation among the ideal panel types.

12.3.1 'Core' characteristics of the typical sheep/beef farmer

As suggested above, the most notable characteristic of the typical sheep/beef farm couple is what might be described as an acceptance of the tenuous nature of profitability for farmers in the sheep/beef sector. In relation to their vision for themselves and their farm, this is expressed as the desire to maintain the farm and as taking pride in their ability to persevere in the face of climatic extremes or unfavourable market conditions. Thus, they are more likely to emphasise the importance of survival – being able to remain in farming and to provide the possibility for succession – over that of wealth creation. Further evidence of this

aspect of the typical couple is found in the limited extent to which improved productivity is an explicitly stated goal. The typical couple is also likely to include social goals such as providing a family-friendly lifestyle or being involved in a local community within their visions. The most commonly recognised constraints to these visions involve climatic and political economic factors (currently associated with the high exchange rate for the New Zealand dollar) – both of which affect farming, but are considered beyond the control of the couple. Despite the challenges of sheep/beef farming, the typical couple remains committed to farming because they identify themselves as farmers and find most aspects of the farming lifestyle appealing – especially in regard to raising their families.

The typical farm couple employs a variety of strategies in order to deal with the uncertainties of sheep/beef production. They have, for example, assumed an approach to good farming that emphasises both perseverance and a strong work ethic. That is, the couple believes that the most appropriate means of pursuing their visions involves a high commitment of their resources of labour and time with reduced expectations of consistently high annual returns. A number of understandings of the benefits of a farming lifestyle are embedded within this response. In particular, the typical couple values the relative autonomy and flexibility of their workplace – in seeming contradiction to the power of climate and markets over their level of success. Their practice of sheep/beef farming is viewed as a craft – something that is learned through experience and the trial and error of farming. It is also common for the typical couple to diversify their income sources – both on and off farm – in order to secure a more consistent cash flow. The typical couple constructs their identity as farmers on the basis of a wide range of comparisons, justifying their own situation and practices in relation to those observed on neighbouring farms, those of the farming sector as a whole, or those of urban society.

On the other hand, the uncertainties inherent to sheep/beef production are also the source of significant stress experienced by the typical couple. This stress is derived from numerous sources ranging from family relations to social expectations. Farm work is seen as all important and time off at Christmas or on a Sunday is given up when the farm demands are regarded as more important. The issues to do with their succession to the family farm have created tensions in the past or may still be creating them in the present but they are determined that their children will be able to choose their occupation. In this regard, boarding school, the cost of which is an additional source of financial stress, is regarded as the best option for the education of teenagers. Public service within the community is a taken for granted aspect of rural life and the typical farming couple is likely to be or has been involved heavily in the local primary school and in sports clubs and/or such activities as A&P show committees. Rural life is regarded as the ideal environment in which to bring up self sufficient, independent and well grounded children.

The relationship of the typical sheep/beef farming couple to the environment reflects their role as producers of primary products. The environment enters their outlook primarily as a force with which they must, of necessity, contend. Generally, however, the environment is not defined as a constraint as such, but rather as an ever present factor of the management system. In their assessments of environmental health, the typical couple emphasises their own stock and plants as indicators of that health. They also identify themselves engaging in practices that are beneficial to the health of the environment, ranging from soil conservation to waste management.

12.3.2 Ideal type: Organic sheep/beef couple

The main distinction from the core of the ideal type derived from the response of participants from the Organic panel lies in the willingness of the latter group to adopt a system of management that is distinct from that of the remaining participants. As such, the ideal Organic couple exhibits greater dissatisfaction with existing conditions and pursues change to make their practices more resilient both economically and environmentally, as opposed to merely 'persevering'. The ideal Organic couple has adopted Organic practices – or perhaps

more accurately conformed to the regulations of Organic certification – in order to attain access to more lucrative markets, among other reasons. While they tend to emphasise their desire to ‘work with nature,’ few are willing to admit to strong philosophical commitments to organics as a movement. This attitude toward nature is exhibited in their greater tendency to view soils as a biotic community rather than placing importance on the chemical aspects of soil fertility and to rely on natural resistance and breeding to overcome animal health issues. They are particularly interested in the health of their pastures and crops and less likely to be interested in monitoring productivity. They do not rely solely on ‘returns’ as a measure of their financial wellbeing, being also aware of the costs of farming.

The differences of the ideal Organic couple also extend to their social interactions. They are generally able to deal with the stresses of the sector because they enjoy the challenge of growing Organic meat. They also benefit from the perception that their practices result in both a higher quality product that is rewarded by the market as well as a safer environment for their communities through less use of chemicals. They rationalise their persistence as sheep/beef producers on the basis of being more in touch with the realities of life associated with farming. Finally, the typical Organic couple held a broader perspective of community that extended well beyond the locality and beyond the current generation.

Organic farmers have made a choice to adopt Organic management practices, and perhaps that choice gives a greater sense of control over their lives, even if that choice involves restrictions on management practices. The typical Organic farming couple exhibits a commitment to the environment and to organics that gives them a sense of importance and identity. They also know that their product is valued based on the premium they receive for it. These farmers are more likely to express a sense of purpose in terms of having a responsibility to care for the environment and they have wide-ranging global interests.

12.3.3 Ideal type: Integrated sheep/beef couple

The ideal Integrated farm couple is distinguished by its participation in an alternative marketing sector within the sheep/beef industry. The members of the Integrated panel, on the other hand, are those who have accepted a contract with a meat processing company to produce a product for a particular international niche market. As part of the process they are required to comply with an audit system and meet specific requirements for delivery dates and standards of product. This often means they are treated as part of an elite group, which confers a higher level of recognition relative to fellow sheep/beef producers. Hence it appears that certification and audit processes provide validation of a farmer identity for this type. The Integrated type are also more organised and structured (perhaps as a result of conforming to the timetable of the audits) and are more able to find periods of time when they are free of the demands of the farm.

The Integrated farming couple has a vision of increased productivity and is more likely to see farming as constrained by factors which limit such productivity. As such they actively pursue practices that increase their farm’s resilience in light of the ups and downs experienced in the sector. In the process, they have created successful strategies for reducing the stress in their lives. Like the typical Organic farming couple they like to see themselves as working alongside nature, and emphasise their attachment to their farm as a place rather than the lifestyle it affords.

12.3.4 Ideal type: Conventional sheep/beef couple

The Conventional farming couple is the least removed from the core characteristics of the ideal type. They are the type that is most susceptible to the stress of the farming life and as such emphasise their ability to persevere through the hard times they have experienced in farming, and this thinking is included in the vision for the future which involves maintaining the present situation. This stress is apparent in their difficulties to ‘escape’ from the farm, in the tension between husband and wife, and in dealing with succession issues. Where the couple is able to approach the constraints associated with their situation as sheep/beef

farmers as challenges or accept them as part and parcel of farming life, they are often able to achieve a greater control of conditions and reduce their level of stress. In spite of the stress they associate with farming life, they are still more likely to emphasise the lifestyle side of farming. This includes their commitment to the social sustainability of the communities they live in and their valuing of the traditional rural community. They do not describe their farming as 'working with nature' and are less interested in environmental monitoring preferring to see economic factors monitored.

12.4 Life cycle stages

As the earlier chapters of this report have focused on participants' responses to the questions asked in the interview, a way of analysing responses has been omitted – that of life cycle stage. The management practices that farmers adopt are likely to be also influenced by the stages they have reached in their life cycles. To briefly address this we suggest that it is possible to assign the farming couples who participated in the interviews into four life cycle stages. In a sense these stages strongly correspond to the age of a couple's children and/or to the age of the couple, however, the stages are not distinct in that they have rather fuzzy boundaries. First there are those who have just taken over a farm and who may have young children, and are usually young themselves. Then there are those whose children have reached school age. Next there are those whose children have probably left home or are taking up lives of their own, and finally there are those couples who are planning and putting into action their retirement options.¹²

12.4.1 Stage 1

Farm couples¹³ in the earliest part of the life cycle are characterised by their youth and may have young children. The couple is likely to find it hard going because they feel the need to prove themselves as farmers. The farmer (male) is seeking perfection and finding the limitations frustrating. He is working hard to make a farm profitable and if on a family farm may well be having succession issues with parents, particularly his father, about farm management. Money is likely to be pretty tight.

12.4.2 Stage 2

Man: ... you sleep at night (laughs) ...

Woman: A different sort of sleep. I mean, there are times when you can't sleep because you're like, really excited. There's so much going on that you just want to do it, and then there's the other sleep where you lie down [and worry] (laughs) and I think it if you can measure your wellbeing [by that] ... We're happier now, aren't we? ... you know, when you're establishing a farm you've got nothing to come and go on, like if you have a year that's gonna let you down, it can really hurt whereas now, you get excited because you can try new things, because if it doesn't work you say, hey, it's part of learning, and it's not going to affect the whole operation and - well you're more relaxed about it because of that aren't you? (Conventional).

By this stage any children are likely to be at school and farming couples are thinking about the house and doing it up or building (not so much for some of the Organic farmers) to meet the needs of family and to make it an attractive place for children to come home to. There will still be succession issues if they have not been dealt with earlier. This is the time when the couple finds dividing their time between the demands of work associated with the farm and family demands, stressful and difficult. Hence, the woman is likely to be getting upset about the amount of time the man spends working and feeling that her partner should be spending more time with the family and that they should be having regular holidays.

¹² These observations are drawn solely from the analysis of ARGOS interviews. The extent to which they conform or contradict those in the existing literature on life cycle in agriculture is not addressed in this report.

¹³ One of the ARGOS participants is single.

12.4.3 Stage 3

The farming couple are now middle aged and their children are starting to take up higher education or careers of their own. The farm has been hard going but they have learned a lot and are more relaxed, more professional, and more distanced from the demands of the farm, saying 'enough of this'. They realise they have a need to take time for other things and have set about making sure that happens. As one farmer said, they are more likely to admit to their mistakes and share their learning: "And oldish people actually say more about their failures because I think you can probably learn from failures more than the good results" (man, Conventional). At this stage, the physical demands of farming on hips, knees and backs, have also become more noticeable and farmers may be making arrangements for others to do this sort of work for them.

12.4.4 Stage 4

By this time the farming couple are planning how they will manage succession issues and working out how to get off the farm or stay on it in a limited capacity. They will already have had many holidays away from the farm. From descriptions of some of the fathers (who are also farmers) in these interviews it would appear that at this stage in their lives a farming couple is less likely to be trying something new or adopting a different management practice.

12.5 Conclusion

This report demonstrates both the richness of the qualitative approach to data gathering and analysis and its limitations. The semi-structured nature of the interview questions 'gave voice' to those who participated and allowed them a fuller expression of their thoughts in a way that would not be possible if a questionnaire or survey with closed questions was used exclusively. Since these were preliminary interviews the interviewer was not expected to probe extensively behind the questions asked. As a result, we have only been able to provide limited explanations for people's responses.

We cannot help but have a concern for the level of stress recorded in these accounts of farming couples' lives. At the same time these people provide many of their own answers – how they have dealt with stress and taken positive steps to claim their own autonomy over the seemingly endless demands of the farm. Providing support to farmers earlier in their life cycle stage would seem an interesting possibility for any who wish to support and encourage family farming. For example, there may be the possibility of a scheme being set up where retired farmers might come to stay on a property for a week or two to keep an eye on it, allowing a young couple time away. Or, meat companies may offer farmers help to get organised, to plan, or to make farming decisions, so that they can take time off. Also, farmers, like most of us, like to hear that what they do is worthwhile. They appreciate knowing that other people, people qualified to know – the stock agent, people associated with the meat company via the killing sheets etc., the judges in the A&P show competitions, auditors, accountants and so on - think they have produced good stock, or that their farm looks great. For this reason, being part of an auditing scheme may play a part as a positive reinforcement of a farmer's identity as a 'good' farmer, particularly in a time when this identity is perceived to be under challenge in our society. The farming identity as it was perceived in the past is under threat and is changing. As a result, other ways of rewarding and reinforcing it are evolving.

12.5.1 Questions arising

In the process of conducting and analysing these interviews certain issues have arisen which we may pursue in later interviews. Some of these issues are listed below:

1. What makes a 'good' farm and a good farmer?
2. What is a 'family farm'?

3. Animals, birds and insects: this first interview gathered a list of the animal life that participants notice on their farm, but did not explore how they feel about these animals, birds and insects, in any depth. While we have some idea about which animal species are viewed as pests, and which are seen more positively, it would be worthwhile investigating participants' understandings in more detail. The ethical dimensions of these understandings could be particularly relevant as they will impact upon what participants conceive of as appropriate or inappropriate changes to the environment and animal habitat.
4. Industry constraints: what are the participants' responses to the many audit procedures they are subject to and how do they impact on their management practices?
5. How do participants learn and/or change their management practices?
6. Financial aspects of vision: to what extent does a possible greater entrepreneurial drive among Organic and Integrated farmers contribute to their adoption of more 'risky' practices? Do farmers recognise environmental limits to the pursuit of productivity?
7. Social aspects of vision: to what extent are differences between panels' association with place important to their management practice?
8. Ecological aspects of vision: to what extent are the apparent differences in the Organic panel's approach to nature incorporated within management practice and response to industry and market?
9. Personal aspects of vision: do differences in motivation associate more directly with choice of management system? Do these perspectives influence farmers' understandings of what is possible/impossible?
10. Ecological constraints: is there any variation among panels in the perceived impact (and ability to mitigate it) of ecological factors on production? Or, by contrast, is there any variation among panels in the perceived impact of their management on the environment?
11. Local and national governmental constraints: how do the State and local bodies influence management practice, economic activity, etc.?
12. Measures of sustainability: what is the extent to which the differences in response are also reflected in practice - or at least the structure of the farm? (This is a question that requires some form of participant observation, beginning with – but not necessarily limited to – a farm tour.)
13. Financial wellbeing and productivity: to what extent does awareness of costs influence management practice?
14. Is the difference in attention to quality versus quantity predominantly an economic response, or does it involve other aspects of production as well?
15. Identity: how does self-identity relate to management practice?
16. How is farming identity changing in New Zealand both in the public's perception of farmers and in farmers themselves? What are the results of this and how could it be managed positively?
17. Age structure of farming communities: how does the life cycle stage of practitioners impact on them and their farm practices?
18. What do participants think about specific management systems in connection to the impact these systems have on the environment? What differences are there between the panels?
19. Although only mentioned by a small number of farmers, there seems to be a negative connotation associated with the idea of being a 'greenie'. This should be explored

further. If there is a widespread antipathy towards this notion of being a 'greenie', it may need to be taken into consideration in terms of how information about management practices on the farm environments is delivered to farmers.

12.5.2 The wider social research design

The Social Objective of the ARGOS programme's rationale document, 'Social Dimensions of Sustainable Agriculture' (p.73) suggests that the social research done in ARGOS will mainly describe, then may go on to interpret and provide explanations for what is thought to be happening, and finally it will go into a more theoretical mode to consider issues of power. That latter process will address such questions as: Who has the power and capacity to act in a given situation? What are the constraints to this action? What will enable action? This report describes how the participants in ARGOS have answered the questions in the first interview and goes further to interpret through the technique of ideal types how these might be explained in terms of 'the typical farmer' and types relating to each management system under study.

Given the panel design under a BACI study, this first interview starts to tell us something about the three panels. The method of this study rests on the assumption (made, nevertheless, after some acquaintance with the industry and farmers) that Organic, Integrated and Conventional farmers are different in important ways. The panels and clusters were selected on tight environmental and broad economic criteria. To ensure the robustness of the panel design, however, the selection has needed some testing for social characteristics of growers. Consequently, a key finding for the wider method is that an ideal type analysis does find some differences. If the ideal type analysis had not found differences, then there would be little point in continuing a social analysis focusing on panel differences, and the task would then have been the simpler one of characterising the farmers as one group.

The first preliminary interview raises many questions about the practice of sustainable agriculture and horticulture. In this sense it serves the purposes of what was, after all, only a preliminary interview. It revealed to us a broad range of interesting responses to the questions asked. How does what we have found relate to sustainable farming/horticultural practice? Does a farmer whose vision for their farm is dominated by financial returns, producing more or better quality stock, or doing better than other farms, mean that their farm practice is likely to be more sustainable or resilient than the farmer whose vision is of creating a safe and healthy haven for themselves, their family and those around them? Are these visions mutually exclusive? Does working on a farm you own make a difference to the way it is managed?

The development of the typical farmer through the use of ideal types goes some way to demonstrate that the answer to the preceding questions may be given in part by characteristics of the management system to which a farmer is attracted. The strength of the ARGOS programme lies in its transdisciplinarity. As a result, the questions raised in the preliminary interview can be addressed from the perspectives of the Environmental, Economic and Management objectives allowing for fuller descriptions and explanations of sustainable practice, its practitioners and their rationales. The responses of the sheep/beef farmers can also be compared with those of participants in the other sectors in the ARGOS programme to produce more robust and valid theories about sustainable and resilient agricultural practices. Addressing further these important questions is what we can look forward to.

References and Bibliography

- Abercrombie, Nicholas, Hill, Stephen and Turner, Bryan S. (1984). *The penguin dictionary of sociology*. London: Penguin Books.
- Berardi, Gigi. (1998). Application of Participatory Rural Appraisal in Alaska. In *Human Organization*, Vol 57, No 4, pp 438 – 446.
- Blaikie, Norman. (1993). *Approaches to social enquiry*. Cambridge (U.K.): Polity Press.
- Blumer, H. (1969). *Symbolic interactionism: perspective and method*. Berkeley: University of California Press.
- Bryman, Alan (2004). Quantitative and qualitative research, debate about. In, *The Sage encyclopedia of social science research methods* by Michael S. Lewis-Beck, Alan Bryman, Tim Futing Liao (Eds). Thousand Oaks: Sage Publications.
- Fook, Jan (Ed.). (1996). *The reflective researcher: social workers theories of practice research*. St Leonards, Australia: Allen & Unwin.
- Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.
- Gerhardt, U. (2004). Ideal type. In, *The Sage encyclopedia of social science research methods* by Michael S. Lewis-Beck, Alan Bryman, Tim Futing Liao (Eds). Thousand Oaks: Sage Publications.
- Glaser, Barney G.; Strauss, Anselm L. (1967). The discovery of grounded theory: strategies for qualitative research. London: Weidenfeld and Nicolson.
- Hammersley, Martyn. (2004). Reflexivity. In, *The Sage encyclopedia of social science research methods* by Michael S. Lewis-Beck, Alan Bryman, Tim Futing Liao (Eds). Thousand Oaks: Sage Publications.
- Hill, Roberta. (1984). Establishing validity in the social sciences: an empirical illustration. *N.Z. Science Review* 41(4): 59-62.
- Hunt, L.M., Rosin, C., McLeod, C., Read, M., Fairweather, J.R. and Campbell, H. (2005). Understanding approaches to kiwifruit production in New Zealand: report on first qualitative interviews of ARGOS kiwifruit participants. ARGOS Research Report 05/01.
- Jones, Michael Owen. (1988). In search of meaning: using qualitative methods in research and application. In, *Inside organizations: understanding the human dimension* by M.O. Jones; M.D. Moore; R.C. Snyder (Eds). Newbury Park: Sage Publications.
- Jones, Owain and Cloke, Paul. (2002). *Tree cultures: the place of trees and trees in their place*. Oxford: Berg.
- Marsden, T., Murdoch, J. and Abram, S. (1997). Rural sustainability in Britain: the social bases of sustainability. In, *The international handbook of environmental sociology* by Michael Redclift and Graham Woodgate (Eds). Cheltenham, U.K.: Edward Elgar Publishing Ltd.
- Massé, Raymond. (2000). Qualitative and quantitative analyses of psychological distress: methodological complementarity and ontological incommensurability. *Qualitative Health Research* 10(3); 411-423.
- Nord, W.R. and Jermier, J.M. (1994). Overcoming resistance to resistance: insights from a study of the shadows. *Public Administration Quarterly*, 17(4).
- Perkins, Harvey C. (1988). Bulldozers in the southern part of heaven: defending place against rapid growth. Part 1: local residents' interpretations of rapid urban growth in a free-standing service-class town. *Environment and Planning A* 20: 285-308.
- Read, M., Hunt, L. and Fairweather, J. (2005). Sketch maps: features and issues important for the management of ARGOS farms. ARGOS Report 05/3.
- Rose, Gillian. (2001). *Visual Methodologies*. Sage Publications: London.
- Rose, Michael. (1978). *Industrial behaviour: theoretical development since Taylor*. Middlesex, England: Penguin Books.
- Sandelowski, Margarete. (2004). Qualitative research. In, *The Sage encyclopedia of social science research methods* by Michael S. Lewis-Beck, Alan Bryman, Tim Futing Liao (Eds). Thousand Oaks: Sage Publications.

- Sarantakos, S. (1993). *Social research*. Melbourne: Macmillan Education.
- Shucksmith, M. (1999). Structural changes in British agriculture beyond 2000. *Roots 99: The proceedings of the RICS Rural Research Conference*, held at Harper-Adams University College 20-21 April, 1999.
- Tolich, Martin and Davidson, Carl. (1999). *Starting fieldwork: an introduction to qualitative research in New Zealand*. Oxford: Oxford University Press.

Appendix 1: Interview Schedule

Guiding Questions for First Social Science Visit to Orchards and Farms

Check out that person is OK with taping this interview. Say that the interview tape and transcription will be kept confidential to the ARGOS team.

First of all I am interested in what you call yourself. When you are out and someone says, "What do you do?" what do you say?

Could you tell me about what your work involves?

What is your vision for your future? (What do you want to be doing in 5 years time?)

How could this be achieved?

What do you think are the most important constraints or problems that might prevent you achieving this vision?

What do you think could be done to address these constraints or problems?

What is your vision for the future of your orchard/farm?

What ideas have driven this vision? (Where have they come from?)

How could this vision be achieved?

What are the main constraints to achieving this vision?

What do you think could be done to address these constraints or problems?

Could you draw me a mind map/diagram/sketch of your orchard/farm? It doesn't need to be geographically exact. It should contain all the things/features/elements/parts that are important to you and the orchard/farm, and impact on your management of the orchard/farm.

Answers to the following questions may also be indicated on the map in some way.

The ARGOS team consists of many researchers who have ideas about what needs to be measured on your orchard/farm. But first we want to hear from you about what you think is important and what should be measured.

Thinking about your orchard/farm, what things are important to you and to the management of your orchard/farm, now and in the future?

(For each thing)

Why?

What could be measured to record that?

1. What tells you how productive your orchard/farm is?
How do you know that financially all is going well?
2. What tells you that you are looking after the environment on your orchard/farm?
(Is there anything in particular that you notice – see, hear, smell, taste, feel – that tells you everything's OK?)

Can you tell me about the animals – including insects and apart from the orchard/farm animals – that you notice on your orchard/farm?

(Prompt for a full list of animals present at any time of year.)

Can you tell me about the birds on your orchard/farm?

What tells you that your soil is healthy?
Do you do any soil monitoring?

3. How does your orchard/farm contribute to your own wellbeing? What is it about orcharding/farming that makes you happy?
How does your orchard/farm contribute to the wellbeing of your family?
How does your orchard/farm contribute to the wellbeing of your community?

What are you managing well?
What is hard to manage?

What do you most hope to get out of your involvement in ARGOS?
Do you have any concerns about being involved in ARGOS?
(If concerns are raised) How can we best manage these concerns?

Now I would like to ask you some operational questions to help Dave and others in the ARGOS team.

- a. From time to time the ARGOS team would like to visit your orchard/farm for monitoring. How much access to your orchard/farm by the ARGOS team seems reasonable?
What process would you like them to follow when visiting your orchard/farm?
- b. How much time might ARGOS reasonably take of you?
- c. How would you feel about having Artificial Cover Objects placed in your orchard/farm?
(*Show picture.*)
- d. How would you feel about researchers driving around your orchard/farm at night to sweep out air to catch flying insects?
- e. How would you feel about researchers walking around at night for surveys?
- f. Do you do an annual soil test? If so, and if we were to institute a regular soil sampling programme on your orchard/farm as part of ARGOS, would you keep doing your own one?